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**Introduction**

In response to the July 21, 2010, U.S. District Court for the District of Alaska remand, BOEMRE has produced a Supplemental EIS (SEIS) that provides a robust analysis of potential environmental impacts of natural gas development and production from Lease Sale 193 and conducts a thorough review of incomplete information under 40 CFR 1502.22 (“1502.22”) identified in the Sale 193 Final EIS (Sale 193 FEIS). Availability of the Draft SEIS was announced on October 15, 2010 (75 FR 63504) and a 45-day public review and comment period commenced. During this period, BOEMRE held six public hearings and received more than 150,000 comments. Many of these comments requested that BOEMRE perform an analysis that takes into account the possibility of a blowout during exploration activities, in view of the Deepwater Horizon event. Accordingly, in March 2011, BOEMRE announced that it would incorporate a VLOS (Very Large Oil Spill) analysis into its ongoing SEIS process. Availability of the Revised Draft SEIS was announced on May 27, 2011 and another 45-day public review and comment period commenced. During this period, BOEMRE held seven public hearings and received more than 360,000 comments. Additional information regarding the review process for the Draft SEIS and Revised Draft SEIS, the public hearings, and the Government-to-Government meetings is provided in Section VI.B of this Final SEIS.

During both public comment periods, various government agencies, organizations, and individuals provided comments either through oral testimony, in writing, or electronically. Appendix E, combined with specific revisions to the SEIS itself, provides a comprehensive response to these public comments. In responding to comments, BOEMRE conducted a thorough review of the oral testimony received at public hearings and each written or electronic comment received. All relevant, substantive comments were grouped according to particular issue categories identified during the review. Relevant comments were identified as those pertaining to specific impacts to resource areas that could result from natural gas development and production or the Very Large Oil Spill (VLOS) scenario, and those pertaining to specific portions of the 1502.22 analysis. For each issue category, the following are provided:

- **Summary of Comments:** A definition and summary of the issue based on the comments received in a particular issue category.
- **Source of Comments:** A list of the types of governments, tribes, organizations, or other groups that produced comments in the particular issue category. Individual comments from the general public are indicated under a collective heading for General Public—these include form letters facilitated by non-governmental organizations that focus on environmental or economic issues.
- **Response to Comments:** A collective response by BOEMRE to the comments constituting the particular issue.

A great number of comments received via e-mail or compact disk were identical form letters or slight variations of the form letters. Again, specific responses are provided for relevant and substantive comments. Responses are not always provided in instances where a submittal does not comment on the content of the SEIS or the 1502.22 analysis, but instead offers a general opinion or simply recommends a specific decision that is not delegated to the Bureau. However, BOEMRE does provide responses to some recurring issues—even when not directly relevant—to better communicate the nature of the OCS Program and the NEPA process to the public.

BOEMRE also received and considered many comments of an editorial nature; for example: suggested word changes and corrections, requests for clarification, questions regarding citations, etc. Where appropriate, BOEMRE made the suggested revisions to the Final SEIS—these revisions constitute BOEMRE’s response to editorial comments.
All substantive comments received during the comment period have been included within this volume of the Final SEIS. All comments received are part of the public record, and are available to the decision maker during the deliberation process for deciding between the lease sale alternatives analyzed in the Sale 193 FEIS and the Sale 193 Final SEIS.

**Issue 1. Sound science and science-based decision making.**

**Summary of Comments**

The majority of comments stressed the need to incorporate sound science into OCS decision-making, as follows:

- BOEMRE should ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science, adequate analysis, and a basic respect for Arctic wildlife.
- The agency must identify critical missing information and develop an approach for gathering and synthesizing that information before it proceeds with a leasing decision.
- The SEIS undercuts sound environmental stewardship and decision making for our oceans.
- The decision to release the SEIS goes against the Obama administration’s commitment to science-based decision-making; against President-elect Obama’s comments from December 17, 2008, regarding science-based decision-making; against Secretary Salazar’s commitment to scientific integrity as reflected in the recently issued Order 3305–Ensuring Scientific Integrity within the Department of Interior; and against Secretary Salazar’s September statement that “we must be thoughtful and responsible in developing...[Alaska’s] resources so that we protect Alaska’s fisheries, wildlife, and remarkable beauty for generations to come...In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward.”
- BOEMRE should take heed of the Presidential National Ocean Policy Task Force statement regarding the need for “[i]mprovement of the scientific understanding of the Arctic system and how it is changing in response to climate-induced and other changes”
- One comment called agency scientists liars, and suggested they would be fired if they told the truth.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

**Response to Comments**

**Sound Science.** BOEMRE uses sound science in fulfilling its mandate under the OCS Lands Act to protect the environment, including Arctic wildlife. Much of the information used in BOEMRE’s analyses is derived from the BOEMRE Environmental Studies Program (ESP), a robust program which identifies and obtains information regarding a variety of pertinent environmental issues. Since 1975, over $340 million have been commissioned through the ESP alone, for studies of the Alaska OCS region. These studies have yielded more than 400 study reports and more than 300 articles published in peer-reviewed scientific journals. Parties interested in learning more about past, present, and future research in the Alaska OCS region, and those wishing to obtain specific studies, are encouraged to visit the Alaska Regions ESP website: http://alaska.boemre.gov/ess/index.htm. An
additional source of studies information is the Environmental Studies Program Information system (ESPIS) located at http://www.gomr.boemre.gov/homepg/espis/espismaster.asp?appid+1

Additional responses to comments regarding “the need to collect missing science” and the adequacy of BOEMRE’s impacts evaluation are provided elsewhere in this Appendix, where these issues are discussed in detail.

Environmental Stewardship and Science-Based Decision Making. BOEMRE takes its environmental stewardship obligation and commitment to science-based decision-making very seriously. BOEMRE also embraces the Secretary’s statement concerning environmental stewardship. In fulfilling its NEPA obligations, BOEMRE carefully analyzed each potentially affected environmental resource in and around the proposed action area, with due consideration for climate change and Alaska’s unique environmental characteristics. The BOEMRE team of analysts includes experts in relevant disciplines, including, but not limited to, oceanography, marine biology, cultural anthropology, geology, and economics. These analysts provided focused technical analysis of all reasonably foreseeable environmental impacts associated with natural gas development and production, as well as the potential effects of a hypothetical very large oil spill. The 40 CFR 1502.22 analysis within Appendix A is also based on careful review of each individual item of incomplete or missing information by BOEMRE technical analysts. The goal of this process is to provide the decision maker, in this case the Secretary of the Interior, with the relevant environmental, social, and economic information he needs to make an informed choice as to whether to reaffirm Lease Sale 193.

Scientific Integrity. BOEMRE embraces the Department of the Interior February 2011 policy on integrity of scientific and scholarly activities to inform management and public policy decisions. The Department of the Interior which includes BOEMRE supports a culture of scientific and scholarly integrity. One of the policy elements ensures that “the public communications policies provide procedures by which scientists and scholars may speak to the media and the public about scientific and scholarly matters based on their official work and areas of expertise. In no circumstance may public affairs officers ask or direct Federal scientists to alter scientific findings.” For information is at: http://www.doi.gov/news/pressreleases/Salazar-Announces-New-Scientific-Integrity-Policy-and-Designation-of-Departmental-Science-Integrity-Officer.cfm.

Issue 2. Public review and comment process.

Summary of Comments

Various comments took issue with the public review and comment period provided for the Draft SEIS and Revised Draft SEIS. There were several requests that the commenting deadline be extended to give more time for community input and for additional scientific studies to be completed. Also, several comments asserted that BOEMRE’s efforts to notify the public of its Draft SEIS, Revised Draft SEIS, or public meetings were inadequate. Specific concerns included the following:

- BOEMRE should respect the calendar and time of year when scheduling meetings in each village.
- BOEMRE failed to adequately advertise the public meetings.
- The document was seen for the first time on the day of the public meeting.
- Public meetings lose meaning and/or effectiveness if participants aren’t familiar with the particular documents under discussion.
- It is difficult to find the time to read an entire EIS.
- The language barrier makes it difficult to read and comment on EISs. It would be nice to get assistance from a lawyer but that costs too much money.
• Information provided by community members does not reach Congress or receive proper consideration by decision makers.
• The agency should provide communities with feedback on how their comments were considered, and what decisions were made.
• Whaling captains should be notified of public meetings by phone or e-mail.
• The Point Hope hearing on the Draft SEIS was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.
• BOEMRE should meet its government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. No government-to-government meeting was held for the Draft SEIS after Point Hope had to cancel an initial meeting due to conflicts; Native Village of Point Hope requests that BOEMRE reschedule the missed government-to-government meeting.
• In Barrow, BOEMRE held the public hearing on the Draft SEIS at the same time as the government-to-government meeting with the Iñupiat Community of the Arctic Slope (ICAS), causing board members to have to choose between the two meetings.
• Regarding the November 9 public meeting in Anchorage: the room was too small and many people were forced to stand; there was no microphone, which made it very difficult to hear those testifying; BOEMRE did not allow adequate time among those who testified; some speakers were permitted more than their allotted two minutes while others were cut off after that time; BOEMRE did not provide all those who signed up an opportunity to speak because the meeting shut down at exactly 10:00 p.m.
• There was ambiguity regarding the date of closure for the Draft SEIS comment period.
• Several parties inquired about the reference to NOAA as a Cooperating Agency that appeared on the Draft SEIS Title Page.

Comments specific to the Revised Draft SEIS process included:
• With the exception of the Native Village of Kotzebue, BOEMRE did not consult with the Northwest Arctic Borough’s six coastal villages (Noatak, Kivalina, Deering, Buckland, Selawik, and Noorvik) that could potentially be impacted by the proposed action. In light of EO 13175, BOEMRE should have met with the leadership of these villages to describe the scope of the Revised Draft SEIS and criteria for commenting. Another comment also asserted the need to consult with Savoonga, Gambell, Kivalina, and Nome.
• BOEMRE should advertise the project and meeting information on KOTZ to increase public awareness and knowledge.
• After the reorganization, the safety and enforcement component of the Bureau should visit North Slope villages to discuss how they will regulate offshore activities.

Other comments spoke to a variety of broader concerns with respect to the public review and comment process:
• Tribal and regional governments need more money from the federal government to sufficiently represent their constituencies in the NEPA process.
• The agency should provide the full public comment letters with annotations by BOEMRE indicated right on them for response to comments.
• The agency should provide the entire transcripts from each public meeting.
• Transparency requires the agency to post hearing transcripts on their website.
• The SEIS should include Native points of view, as well pictures of Native people.
- Communities would benefit if BOEMRE shared the findings of more of its scientific studies, especially those describing animal populations and distributions the sea.

Several comments commended BOEMRE for improvements to its public hearing process for the Revised Draft SEIS, including the following:

- BOEMRE improved by providing more materials and explanation at the meetings, attentive listening, more effective advertising, and flexibility in rescheduling meetings.
- The format of the public meeting was described as “pleasing and refreshing,” and this was also described as a big step in improving communication.

Another comment, however, described a “troubling event” at one public meeting for the Revised Draft SEIS, where a member of the audience asked a question, and “an oil company employee offered an answer to a technical issue that was incorrect.” According to the commenter, the misleading statement was not corrected by BOEMRE staff.

A final comment suggested that Native communities have been saying “No” for years, but the government still comes back again and again, wanting the same thing.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

**Response to Comments**

Information about BOEMRE’s extensive outreach efforts during the Sale 193 SEIS process is provided in Section IV.B of the SEIS.

**Extended Time to Comment.** Extension of the public comment period was unnecessary given the limited scope of the supplemental analysis. Comments asserting the need for additional studies are addressed within Issue Category 7.

**Availability and Efforts to Notify.** BOEMRE took deliberate steps to announce the availability of the Draft SEIS, to disseminate the Draft SEIS, to meet with interested parties, and to publicize the series of meetings scheduled specifically for this process. These efforts included the following:

- Publishing a Notice of Intent to Prepare the SEIS as well as a Notice of Availability in the Federal Register on October 15 (75 FR 63504).
- Updating the BOEMRE website and providing a link to the Draft SEIS (link added on October 8, 2010).
- Mailing hard copies of the Draft SEIS to Tribal and local governments, local libraries, and other parties who expressed interest in BOEMRE NEPA documents in the past (Mailed on October 14, 2010).
- Scheduling a series of meetings with both Tribal and local governments in five potentially affected villages as well as Anchorage: November 1-5 and November 9, respectively.
- Placing large newspaper ads to appear in two editions each of the Arctic Sounder, Fairbanks News-Miner, and Anchorage Daily News.
- Running public service messages on the two public radio stations serving the North Slope—KBRW in Barrow and KOTZ in Kotzebue—and, providing the same messages to commercial radio station KBYR (which is heard in several communities of the North Slope).
- Providing our community advisories to news media assignment editors from at least two dozen radio and television stations and newspapers in the North Slope, Northwest, Anchorage, Fairbanks and Southeast (including the Alaska Public Radio Network), and thereby encouraging their possible follow up with additional announcements or stories.

BOEMRE also took deliberate steps to announce the availability of the Revised Draft SEIS, to disseminate the Revised Draft SEIS, to meet with interested parties, and to publicize the series of meetings scheduled specifically for this process. These efforts included the following:

- Publishing the Notice of Availability of the Revised Draft SEIS in the Federal Register and posting the Revised Draft SEIS on the BOEMRE website on May 27, 2011 (76 FR 30956).
- Mailing hard copies of the Revised Draft SEIS to Tribal and local governments, local libraries, and other parties who had expressed interest in BOEMRE NEPA documents in the past (Mailed on May 19, 2011).
- Scheduling a series of meetings with both Tribal and local governments in five potentially affected villages as well as Anchorage: June 21 through June 30.
- Placing large newspaper ads to appear in two editions each of the Arctic Sounder, Fairbanks Newsminer, and Anchorage Daily News.
- Running public service messages on the two public radio stations serving the North Slope—KBRW in Barrow and KOTZ in Kotzebue—and, providing the same messages to commercial radio station KBYR (which is heard in several communities of the North Slope).
- Providing news media assignment editors with our community advisories and, thereby, the opportunity to follow up with additional announcements or stories.

Examples of special accommodations made by BOEMRE in this process include adding Fairbanks to the list of meeting venues and rescheduling meetings in Wainwright at the request of that community.

**Improving our Process.** While the Bureau feels these combined efforts were more than adequate to satisfy its NEPA obligations, we remain committed to improving our public outreach efforts. In coming months, our BOEMRE Alaska OCS Region Community Liaison will update our current operational plan to improve public communication with potentially affected communities.

Several ideas are already under active consideration:

- Adding the Nome Nugget, Petroleum News, and Alaska Journal of Commerce to our published notices list.
- Ensuring notices of meetings are provided for community CB radio outreach.
- Ensuring community calendars are provided (with our schedule of meetings) for tribal and community organizations, schools, churches, media, and other stakeholders.
- Providing community advisories prior to or upon arriving in a village that allow for the scheduling of interview opportunities with BOEMRE team members who will be or are visiting the communities.
- Ensuring community calendars (with our schedule of meetings) are provided for tribal and community organizations, schools, churches, media, and other stakeholders.
- Providing flyers to the Northwest Arctic and North Slope school districts, so the children of potentially affected communities can take them home to share with their parents and elders.
- Sending postal notification to each box holder within the appropriate community.
• Seeking opportunities for public communication that coincide with cultural activities within potentially affected communities.
• Creating a local liaison position to help announce and explain BOEMRE’s activities to community members.

Additional Accommodations Made. The BOEMRE Alaska OCS Region sends notification of all new NEPA documents to all persons who have signed up for its distribution list. All interested parties, including whaling captains, are encouraged to join the BOEMRE distribution list and specify whether they would prefer regular mail or e-mail notification. Individuals may sign up for the distribution list by calling BOEMRE Alaska OCS Region directly at (907) 334-5200.

For the Draft SEIS, BOEMRE offered through e-mail and phone calls to reschedule the Native Village of Point Hope consultation by teleconference at the Village’s earliest convenience. The necessity of scheduling the Point Hope public hearing on Election Day was a result of the logistical issues inherent to holding meetings in five potentially affected villages during the course of a week. While BOEMRE regrets any inconvenience this may have caused, the agency appreciates and thanks the community members who were able to share their concerns, as well as those who assisted several BOEMRE employees with submitting absentee ballots that day.

The government-to-government consultation with ICAS in Barrow took place at 6:30 pm, a time which ICAS selected. BOEMRE’s offer to consult with ICAS earlier in the day was not accepted—so the BOEMRE team was split such that two representatives attended the ICAS consultation. Special thanks are due to those ICAS members who, after attending the consultation, were able to take part in the public hearing that had only been underway since 7 pm (the hearing ended at 10 pm).

At the Barrow public meeting it was noted that most of the materials announcing the Draft SEIS and publicizing public meetings listed November 29, 2010, as the last day of the comment period; however, at least one BOEMRE document listed November 30 as the final day. In response, the Deputy Regional Director of BOEMRE’s Alaska OCS Region stated that comments would be accepted through November 30. BOEMRE did, in fact, accept public comments received through November 30, 2010.

NWAB Villages. During the Revised Draft SEIS comment period, commenters suggested that BOEMRE contact other tribal governments. BOEMRE has invited government-to-government consultations with the Native Village of Selawik, Native Village of Noatak, Noorvik Native Communities, Native Village of Kivalina, Native Village of Buckland, and Native Village of Deering. However, the tribal governments were unable to meet with BOEMRE.

Role of NOAA in the SEIS Process. NOAA was a cooperating agency on the Sale 193 FEIS. On October 5, 2010, the BOEMRE published in the Federal Register a Notice of Intent to Prepare a Supplemental Environmental Impact Statement: Outer Continental Shelf, Alaska OCS Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193. This document invited other Federal agencies, and State, Tribal, and local governments to consider becoming cooperating agencies in the preparation of this SEIS. NOAA and the other governmental entities did not accept this invitation to act as cooperating agencies. The Draft SEIS [BOEMRE, 2010] incorrectly listed NOAA as a cooperating agency. Although not a cooperating agency for the Sale 193 SEIS, NOAA and BOEMRE collaborated on the Revised Draft SEIS. The SEIS recognizes the collaboration and review by NOAA offices at Section VI.D.

Accuracy of Testimony. BOEMRE staff endeavor to allow members of the public to speak at public hearings and do not always correct speakers that may appear to provide an incorrect, or misleading statement. BOEMRE staffs at the meeting typically do not have the technical expertise to respond to every issue that may arise. BOEMRE staff do review the comments made at these public hearings and ensure that the Final document contains accurate information regarding all points at issue.
**Improvements.** The BOEMRE appreciates the comment on the June 2011 public hearing process. BOEMRE implemented many suggestions and constructive critiques from the November 2010 public hearing process. BOEMRE continues to strive to make the public hearing process both informative to the participants, as well as a forum to engage the participants in providing public comments to the agency.

**Including Public Comments.** BOEMRE has considered the suggestion to annotate the comments to indicate those parts to which responses were made. The Council on Environmental Quality regulations gives deference to an agency as to the format to respond to substantive comments (40 CFR 1503.4). Due to the exceptionally voluminous response, BOEMRE has prepared the Response to Public Comment section in a summary format.

**Transcripts.** When BOEMRE holds public hearings for environmental reviews, the hearing results in a hearing transcript. Sometimes those transcripts are included in the Final EIS in their entirety. The agency’s reason stated in past EIS documents for not including the hearing transcript in entirety was because of the length of the transcripts. The public hearing transcripts on the Draft SEIS and Revised Draft SEIS for Sale 193 will be included in the Final SEIS. Public hearing transcripts are posted on BOEMRE Alaska Region website at: http://alaska.boemre.gov/ref/Hearings1.htm. If there is a hearing transcript that the commenter is interested in and this transcript does not appear on the website, BOEMRE Alaska Region encourages the commenter to contact them. In addition, the BOEMRE, Alaska Region Final EIS documents can be accessed at: http://www.alaska.boemre.gov/ref/eis_ea.htm.

**Obligation to Seek Comments.** Even when a community has objected to the prospect of OCS leasing, exploration, or development in the past, BOEMRE must carry out its responsibilities under NEPA and the OCSLA. BOEMRE must solicit and gather public input at each stage of the OCSLA process, and during preparation of every EIS.

**Community Calendars.** BOEMRE strives to work with community and tribal leaders when setting up meetings in Alaska communities. Specifically, BOEMRE Alaska OCS Region’s Community Liaison works closely with the Alaska communities on the timing of these meetings. For example, BOEMRE scheduled the public hearing on the Revised Draft SEIS in each village to avoid conflicts with Nalukataq (annual whaling festival). BOEMRE recognizes many communities live a subsistence lifestyle and that there needs to be flexibility when subsistence activities are ongoing in the community.

**Feedback Regarding the Decision.** BOEMRE Alaska Region is considering when to return to the communities to meet with community leaders, tribal leaders, and residents to explain how comments were incorporated in the Final SEIS, and to explain the decision of the Secretary of the Interior. The Secretary of the Interior is expected to make his decision no later than October 3, 2011. BOEMRE staff will contact key community and tribal leaders to discuss their interest in BOEMRE returning to the communities for meetings. BOEMRE is also prepared to share information regarding its reorganization.

**Native Views and Pictures.** BOEMRE analysis in the 193 FEIS and Final SEIS incorporates information on subsistence lifestyles and traditional local knowledge as expressed by the Alaska Native people in the local communities. BOEMRE also incorporates the view of tribal leaders with the government-to-government consultations. During our public hearing process we were able to meet and individually speak with many Alaska Natives in the communities. Additional quotations from members of the coastal communities are integrated into the text of the Final SEIS, in response to public comment. The Final SEIS also includes pictures to further tell the story of living a subsistence lifestyle.
**Encouraging Participation in the NEPA Process.** BOEMRE response to comments requesting funding, etc to assist people with reading and commenting on EISs is limited. Assistance from a lawyer to read any environmental document from the agency is not within scope of the agency authority to provide to an individual. However, BOEMRE endeavors to assist in explaining the agency environmental documents and responding to any questions during the review period. BOEMRE is open to exploring this issue at future community meetings.

**Sharing BOEMRE’s Science.** BOEMRE shares the findings from its scientific studies in a number of ways, including technical reports, peer-reviewed journal articles, annual public conferences, periodic workshops, website dissemination, and occasional project specific community meetings. The BOEMRE also publishes Ocean Science, which can viewed at http://www.gomr.boemre.gov/homepg/regulate/environ/ocean_science/. The environmental documents that BOEMRE prepares include the findings of BOEMRE scientific studies, as well as relevant studies from other organizations. The web portal for agency information about environmental studies is posted at: http://alaska.boemre.gov/ess/index.HTM.

**Advertizing on KOTZ.** BOEMRE appreciates the suggestion to advertize on KOTZ as a way of increasing community awareness and participation. BOEMRE continues to make extensive community outreach efforts on projects and welcomes suggestions on improving the sharing of information.

**Issue 3. Range of alternatives is insufficient.**

**Summary of Comments**

Several comments state that the range of alternatives analyzed in the SEIS is inadequate for the following reasons:

- The SEIS alternatives are inadequate due to a lack of connection to baseline science, differing levels of impacts, and lack of a clear basis for choice among the alternatives.
- The agency should explore alternatives that allow it to maintain the status quo on Lease Sale 193 leases while it obtains essential missing information, e.g. continuing the suspension of leases pending further research and analysis to inform future decisions about whether, where, and how to implement the leases.
- Lease Sale Alternatives, which are based on distances of activities from shore, ignore the reliance of residents on migratory marine resources, as well as the importance of certain habitat.
- The SEIS should be revised to include alternatives that incorporate protections of subsistence and marine resources; specifically, time and area restrictions, other measures developed through the Conflict Avoidance Agreement (CAA) negotiation process, and requirements for ongoing negotiated measures should be incorporated.
- A modified alternative that protects important ecological areas, including the sixty-mile coastal corridor and Hanna Shoal, should be developed. Norway’s approach to protecting ecologically important areas could serve as an example.
- The SEIS should include an alternative that incorporates provisions of 2011 CAA and any other measures that might be necessary in light of changed operational, hunting, or environmental conditions (as identified in direct negotiations with Alaska Eskimo Whaling Commission).
- While it is true that coastal deferrals would minimize many impacts from a VLOS, not all adverse impacts are correlated with SEIS alternatives. By only looking at the lease sale alternatives, the VLOS analysis is insufficient. For example, a VLOS in an offshore area...
utilized by cetaceans may have very significant feeding implications depending on the location, size, timing and duration of the spill.

- Missing information precludes the formulation of an adequate range of alternatives. The suggestion was made that BOEMRE reframe the alternatives and incorporate a conservative precautionary approach designed to avoid adverse impacts, where they cannot be reliably quantified or qualified due to lack of available information.

- The similarity in potential impacts among the SEIS action alternatives is evidence that BOEMRE did not analyze an adequate range of alternatives. One commenter specifically suggested that BOEMRE consider alternatives that include time and area restrictions to protect migrating bowhead whales.

- If all alternatives result in the same or similar effects, then the range of alternatives for lease sale analysis may be insufficient and require amendment.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations

**Response to Comments**

BOEMRE has retained for analysis within this Final SEIS the same alternatives analyzed in the Sale 193 FEIS (USDOI, MMS, 2007), which the SEIS supplements. A full discussion of alternatives considered for Lease Sale 193, including those alternatives considered but not carried forward for analysis, was provided in Section II.B.2 of the Sale 193 FEIS. The analyses and conclusions in the Sale 193 FEIS are incorporated into the SEIS by reference and will inform the Secretary’s decision on whether to affirm, modify, or cancel Lease Sale 193.

**Purpose of the SEIS.** The District Court remanded Lease Sale 193 to BOEMRE to satisfy its obligations under NEPA in accordance with the Court’s opinion. BOEMRE was instructed to address three concerns, as follows:

1. Analyze the environmental impact of natural gas development.
2. Determine whether missing information identified by BOEMRE in the 193 FEIS was essential or relevant under 40 CFR 1502.22.
3. Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

**Protecting Migratory Species and Subsistence.** The Alternatives considered in the Sale 193 FEIS and SEIS include consideration of coastal deferral corridors intended to provide additional protection of migratory pathways, which in turn would help protect subsistence. Additional mitigation measures such as time and area restrictions would receive further consideration upon proposal of a specific activity, e.g., an exploration plan or ancillary activity. Additionally, the local communities and oil exploration companies have in the past been able to negotiate private agreements which tend to further reduce potential impacts.

**Additional Analysis.** To address the District Court’s first concern, the Final SEIS provides additional analysis of the potential effects of natural gas development and production. To address the District Court’s second and third concerns, BOEMRE undertakes a thorough analysis of all items of incomplete information referenced in the Sale 193 FEIS. This analysis is contained within Appendix A of the SEIS. Going beyond the court’s remand, BOEMRE also elected to include a hypothetical very large oil spill scenario and analysis. These analyses will provide the decision maker with additional information to affirm, modify, or cancel Lease Sale 193.
New or Revised Alternatives. In preparing this SEIS, BOEMRE found no reason to reformulate the range of alternatives. Neither the District Court’s remand nor the language of 40 CFR 1502.22 require formulation of new alternatives, and there is nothing in BOEMRE’s present analysis to suggest such action would be appropriate. In addition, no new information has come to light subsequent to the Sale 193 FEIS that would empirically support the development of new alternatives. Recently released studies tracking the migrations of bowhead whales, for example, merely confirm the understanding that these animals exhibit highly variable use of all portions of the proposed lease sale area. Established mitigation measures under the Marine Mammal Protection Act (MMPA) restrict certain activities during the more predictable spring (as opposed to the more variable fall) migration of bowhead whales. These remain sufficient to protect this resource. The reformulation or addition of alternatives would fail to strengthen the natural gas analysis or the VLOS analysis and could only unnecessarily complicate the relatively straightforward task set out under the District Court’s remand order.

It is true that various portions of the SEIS conclude that the potential effects of natural gas development and production would be similar under each action alternative. Such conclusions are attributable to the more limited scope of the natural gas scenario (i.e., no additional exploration seismic surveying, exploration drilling, platform emplacement, or development drilling) and the inherent uncertainty at the lease sale stage regarding the exact location of future development and production activities. Notable differences in potential impacts between alternatives do exist in terms of possible development and production locations. For example, selecting an alternative that incorporates a larger deferral area could increase the minimum potential distance between a platform and the shoreline, thereby reducing the potential for conflict with near-shore species and cultural activities, but also increasing the length of the gas pipeline and its associated effects. These differences are noted in relevant portions of Chapter IV of the SEIS analysis. The types of effects that could occur during a VLOS are also similar between alternatives due to the large areas that would be impacted regardless of the location of the spill’s source. Additional responses regarding the VLOS scenario and analysis (including commentary on the similarities and differences between alternatives) are provided in later Issue Categories.

Issue 4. Preferred Alternative

Summary of Comments

Most of the comments receive on the Revised Draft SEIS expressed a preference as to which lease sale alternative should be selected. A few comments asked for clarification as to which lease sale Alternative is BOEMRE’s Preferred Alternative.

The National Marine Fisheries Service provided comments in a letter dated February 28, 2011, regarding the Draft SEIS. NMFS had recommended Alternative III prior to Lease Sale 193 and continues to recommend Alternative III in this supplemental process. NMFS states: “Alternative III would protect nearshore marine resources and reduces the potential for a catastrophic event to impact benthic habitats, migratory current corridors, and nearshore estuarine habitats. It would also increase the distance between sensitive nearshore areas and any discharges, emissions, and noise associated with drilling and platform installation and operations.” NMFS concludes that the Alternative III recommendation for a larger deferral area “offers a precautionary approach to afford protection of marine resources in a data limited environment.”

Source of Comments

- Federal Government (National Marine Fisheries Service)
- Tribal Governments and Alaska Native Organizations
• State Government
• Environmental Organizations
• Corporations and Industry Groups
• General Public

Response to Comments

Opinions and Recommendations. Comments that express general opinions or recommend specific decisions to be made by the Secretary of the Interior will be incorporated into the administrative record and available to the decision maker during the deliberative process for Lease Sale 193. BOEMRE will not provide specific responses to such comments.

BOEMRE incorporated NMFS’ concerns in the Revised Draft SEIS and further addresses similar comments in the Final SEIS.

Agency’s Preferred Alternative. Under NEPA, an agency’s preferred alternative frequently takes into account factors beyond the environmental effects analysis contained within the document itself. Departmental regulations at 43 C.F.R. 46.420(d), which implement CEQ regulations at 40 C.F.R. 1502.14(e), describe the agency’s preferred alternative as “the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors. The concept of ‘agency’s preferred alternative’ is different from the ‘environmentally preferable alternative,’ although in some cases one alternative may be both.”

Here, BOEMRE has determined that Alternative IV best fulfills its statutory mission and responsibilities, given all relevant economic, environmental, and technical factors. Chapter II, Section II.B.I has been revised to state BOEMRE’s preferred alternative for the Sale 193 Final SEIS.

Issue 5. Suggested Mitigation

Summary of Comments

Some comments proposed new mitigation measures, changes to the way that BOEMRE handles mitigation, or changes to how BOEMRE regulates offshore oil and gas activities generally:

• BOEMRE should improve upon the mitigation measures identified in the Sale 193 FEIS because natural gas development and production will have impacts on the environment, natural resources, and subsistence lifestyle in addition to and different from those related to oil and gas development. Specifically, the SEIS lacks enforceable protections for subsistence and other resources in the Chukchi Sea.
• Once an oil company touches a place, they should be responsible indefinitely.
• Existing leases should be suspended until important subsistence areas are better protected.
• New policies should be put in place before drilling is allowed to go forward.
• Oil and gas activities should not occur when ice movements and/or conditions may pose safety issues.
• BOEMRE should investigate alternate oil spill cleanup techniques, especially bioremediation.
• BOEMRE should require lessees to adhere to the Open Water Season Conflict Avoidance Agreement.
• The SEIS should mandate or at least include discussion of relief funding for coastal villages in the event of environmental damage.
- Federal sale and royalty money should be used to fund revenue sharing programs for impacted communities.
- An oil spill relief fund should be established before the production phase.
- BOEMRE should apply the more stringent safeguards that have been incorporated into federal coal permitting.
- Inspection of operations in the Arctic should include persons knowledgeable in subsistence activities, with appropriate authority to regulate.
- Given the importance of government accountability and transparency, BOEMRE in future years should post user-friendly and extensive information on inspections, releases, etc.
- Adherence to the Final Recommendations of The Interagency Ocean Policy Task Force (in particular No. 2-Coastal and Marine Spatial Planning and No. 8-Changing Conditions in the Arctic) are a necessary first step in addressing deficiencies in ocean planning.
- Arctic National Wildlife Refuge should be permanently protected.
- BOEMRE’s NEPA processes should follow guidelines set out in the 2011 Expert Review Panel report on how to properly construct and report mitigation data.
- If significant impacts may result from the proposed action, it is essential that the SEIS disclose how mitigation measures will be carried out and enforced so that oil and gas companies can abide by them in the future.
- BOEMRE needs to provide specific mitigation measures that address the cumulative threat to bowheads from increased shipping, pollution and noise.
- Air and water permits for recent exploration plans have contemplated significant air, water, and noise pollution. In ensuring the use of “best available and safest technology,” BOEMRE should consider technologies undertaken elsewhere in the Arctic.
- BOEMRE should work with Alaska Native co-management committees to avoid impacts to marine mammals and ensure their availability to subsistence users. Also, MMPA requirements should be incorporated in BOEMRE’s NEPA review.
- BOEMRE should ensure “best available technology in the OCS, including zero discharge technology.” As Shell has agreed to this standard for activities in Camden Bay, BOEMRE should apply same standard in Chukchi.
- To avoid impacts to the beluga hunt, vessels should not transit in the Chukchi Sea until July 5 or the end of the beluga hunt, whichever occurs later. Another comment suggested there should be no industrial activity in the Chukchi until July 15 or until the beluga hunt has occurred.
- There should be more mitigation for the bowhead whales that migrate through the lease sale area in the fall.
- There must be a 60-mile buffer zone.
- There must be stipulations requiring vessels to use ultra low sulfur fuels.
- There should not be more than one drilling operation at any time (in the Chukchi Sea).
- A zero discharge standard should be applied to drilling. Mud tailings should not be discharged into our ocean.
- Mitigation measures need to be in place to ensure that walrus are not disturbed due to aircraft or helicopter traffic.
• Mitigation measures ensuring that walrus don’t stampede should be developed and incorporated.
• Mitigation measures to avoid bird strikes should be developed and incorporated. Vessels should use appropriate lighting to protect birds from collisions.
• As several communities now hunt for bowhead whales in the fall, there should be a fall shutdown of oil and gas activities to avoid disturbing subsistence activities.
• BOEMRE should require industry to provide its environmental data available to the public. This would improve conversations regarding the relative success of mitigation measures.
• The SEIS must include specific mitigation measures to protect subsistence, i.e. mandatory CAA and/or lease sale stipulations. Also, there should be a lease sale stipulation requiring an oil spill mitigation agreement that would provide immediate access to alternative hunting opportunities in the event of a spill.
• The government should consider having homes ready for displaced people, in case there is a very large oil spill.
• BOEMRE needs to establish specific requirements to allow for prompt recovery action in the event of a VLOS. It must also ensure adequate containment of a spill and require a same-season relief well (or cessation of drilling should a same season relief well becomes infeasible) to promote quick recovery and reduce risks to the spring lead system.
• There would need to be a strong commitment to funding and increasing the capacity of the Federal government to effectively manage Arctic OCS development. Congress needs to fully fund federal agencies (including the USCG and NOAA) so they can function as partners in preventing and responding to any incidents.
• Alaska Natives who may be affected by development should be provided employment opportunities to help mitigate disruptions to their subsistence culture.
• Companies exploring in the Arctic should hire Alaskans, because Alaskans have a stake in protecting the Alaskan environment.
• The Inupiat people should be trained for high level jobs in the oil industry (e.g., ship captain), so we can ensure for our people that things are done correctly.
• Each village is different, and relies on different resources. If there is development, each affected village should have authority to regulate and manage their own resources, to protect their particular harvest.

Several comments suggested mitigation specific to a particular area, such as Hanna Shoal:
• Important ecological areas such as Hanna Shoal should be protected from degradation. Protections should also encompass those areas where activities would affect the ecosystem.
• Areas that are especially important to wildlife or subsistence harvesting, including the 60-mile corridor and Hanna Shoal, should be better protected.
• Hanna Shoal possesses unique characteristics, such as greater persistence of ice flows in summer months, that argue for its exclusion from the lease sale.
• BOEMRE should perform a site-specific EIS for any proposed exploration drilling. These EISs should include trajectory models and analysis of potential blowouts.

Source of Comments
• Tribal governments and Alaska Native Organizations
• Local Governments
Response to Comments

The lease stipulations and other mitigation measures discussed in the Sale 193 FEIS are incorporated in the SEIS by reference. BOEMRE finds these mitigation measures sufficient and did not identify any necessary new mitigation measures during this supplemental process. Proposed mitigations concerning later stages of the OCSLA process will be taken under advisement. Responses to issues out of the scope of the present analysis are provided to the extent practicable below.

Current Regulations and Potential Effects. Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Aspects of gas development and production that may affect the human environment include: the presence of infrastructure (offshore platform, offshore and onshore pipelines, and shore base); noise and other disturbance from development activities; vessel, air, and ground transportation; emissions and discharges; and accidental events.

As discussed in the SEIS, these aspects of natural gas development and production are expected to be highly similar to, or simply a continuation of, the equivalent aspects of oil development and production. There are many similarities between the potential impacts of natural gas development and production analyzed in the SEIS and the potential impacts of oil development and production analyzed in the Sale 193 FEIS. This is due to the similarity of activities that would occur under each scenario. For instance, there is little difference in potential impacts between installing an oil pipeline and installing a parallel gas pipeline within the same corridor, whether offshore or onshore. This is not to say that impacts would be identical; the SEIS carefully notes several instances where potential impacts would vary.

Regulatory Safeguards. BOEMRE would review specific exploration and development and production plans while considering whether to approve any drilling. This allows BOEMRE to respond to new information and put additional requirements in place before any new drilling occurs in the Alaska OCS. Lessons learned from the Deepwater Horizon event have led to requirements that will take effect before drilling occurs, as described in Section IV.D.1 under the subheading Rule Changes Following the Deepwater Horizon Event. Operators are required to comply with the Increased Safety Measures for Energy Development on the Outer Continental Shelf rulemaking (75 FR 63346 [2010-10-14]). Also, BOEMRE issued NTL No. 2010-N06, which requires operators to do the following: provide a scenario for the potential blowout of the proposed well expected to have the highest volume of liquid hydrocarbons, and also describe the measures they propose that would enhance the ability to prevent a blowout, reduce the likelihood of a blowout, and conduct effective and early intervention in the event of a blowout. The latter will include arrangements for drilling relief wells and any other measures the operators propose. As described in NTL No. 2010-N10, BOEMRE is evaluating whether each operator has provided adequate information in its current Oil Spill Response Plan describing the types and quantities of subsurface and surface containment equipment the operator can access in the event of a spill or threat of a spill, and the deployment time of each.

Ice and Weather. BOEMRE will give due consideration to ice conditions and safety conditions of any proposals for exploration or development and production. OCS operating regulations require operators to develop and submit a Critical Operations and Curtailment Procedure (COCP) with an exploration or development and production plan. The COCP addresses the methods by which an operator will cease, limit, or not initiate specific critical operations because of environmental
conditions that may be encountered at the site. The most probable factors that could result in the curtailment of critical operations in the Arctic OCS are heavy weather, sea ice, and structural icing. Before any plan approval, BOEMRE conducts a thorough technical review of the COCP.

**TAR - Technology Assessment and Research Program.** BOEMRE’s Technology Assessment and Research (TAR) Program supports research associated with operational safety and pollution prevention as well as oil spill response and cleanup capabilities. The TAR Program was established in the 1970’s to ensure that industry operations on the Outer Continental Shelf incorporated the use of the Best Available and Safest Technologies, which were subsequently required through the 1978 OCS Lands Act amendments and Energy Policy Act of 2005. Information on Oil Spill Response Research can be found at: http://www.boemre.gov/tarprojectcategories/MasterListofOSRRProjects.htm.

**OSRR - Oil Spill Response Research Program.** BOEMRE is the principal Federal agency that funds oil spill response research (through the Oil Spill Response Research [OSSR] Program). For more than 25 years, the Bureau has maintained a comprehensive, long-term research program to improve oil spill response technologies. The major focus of the program is to improve the knowledge and technologies used for detection, containment, and cleanup of oil spills that may occur on the U. S. Outer Continental Shelf.

The BOEMRE OSRR program is an openly-cooperative effort bringing together funding and expertise from research partners in government agencies, industry, and the international community for the sole purpose of participating in research and development (R&D) projects. Many of these projects are Joint Industry Projects, where the Bureau partners with other stakeholders to maximize research dollars. The Bureau has cooperated in the exchange of technological information with Canada, France, Germany, Japan, Norway, and the United Kingdom through informal contacts, workshops, and technical meetings such as the International Oil Spill Conference. Most procurements of R&D projects are competitive.

Funds for the OSRR program and operation of Ohmsett (the National Oil Spill Response Test Facility) are appropriated from the Oil Spill Liability Trust Fund (OSLTF). The OSLTF received funds from a $0.05 tax on each barrel of oil produced or imported into or exported out of the United States. This tax was suspended when the fund reached $1 billion dollars. Currently, funds for the OSLTF are derived from interest on the fund, cost recovery from responsible parties, and penalties. The tax can be re-implemented if the fund falls below the one billion dollar level. As intended by the Oil Pollution Act of 1990, potential polluters (companies that produce and transport oil) are supporting research to improve oil spill response capabilities.

The current OSRR projects cover a wide spectrum of oil spill response issues and include laboratory, meso-scale, and full-scale field experiments. Major topic areas include the following:

- Remote sensing and detection
- Physical and chemical properties of crude oil
- Mechanical containment and recovery
- Chemical treating agents and dispersants
- In situ burning
- Deepwater operations
- Operation of Ohmsett – The National Oil Spill Response Test Facility

**Protection of Subsistence.** Mitigation measures concerning subsistence are brought forward from the Sale 193 FEIS and considered in the SEIS. Regulatory authority over MMPA standards concerning impacts to subsistence belongs to NMFS and FWS. That said, BOEMRE does not authorize any activities that violate applicable law, to include MMPA provisions protecting subsistence. If BOEMRE inspectors were to observe apparent violations of the MMPA, BOEMRE
would report these circumstances to NMFS. Though not responsible for managing subsistence resources, BOEMRE is amenable to working with Alaska Native co-management committees to further avoid impacts to marine mammals and ensure their availability to subsistence users.

**Open Water Season Conflict.** Regarding Open Water Season Conflict Avoidance Agreements, current operating regulations require mitigation of multiple-use conflicts. The regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. The regulations at 30 CFR 250.252(b) and 30 CFR 250.254 require lease owners/operators to describe in their development plans how they will mitigate the potential for incidental takes to occur, monitor for potential takes, and report takes if they occur. The regulations at 30 CFR 250.261 require lease owners/operators to provide information in their development plans on how they will conduct their proposed activities in a manner consistent with the provisions of the MMPA and ESA.

BOEMRE cannot require agreements between third parties; however, nothing in the OCS operating regulations prevents operators from entering into a conflict avoidance agreement. Conflict Avoidance Agreements are third party agreements and failure of any party to meet the provisions will not be enforceable by the Federal government.

**Relief Funding.** Section 384 of the Energy Policy Act of 2005 (Public Law 109-58) established the Coastal Impact Assistance Program (CIAP) and authorized funds to be distributed to OCS oil and gas producing states to mitigate the impacts of OCS oil and gas activities. Currently, BOEMRE administers the Program; however, beginning on October 1, 2011, the program will be administered by the FWS.

Under the CIAP, the Secretary of the Interior is authorized to distribute to producing states and coastal political subdivisions $250 million for each of the Federal fiscal years (FY) 2007 through 2010. This money is allocated to each producing state (Alabama, Alaska, California, Louisiana, Mississippi, and Texas) and coastal political subdivision based upon allocation formulas prescribed by the Act.

The Act required a minimum annual allocation of 1 percent to each state. For FY 2007 and FY 2008, Alaska received the minimum 1 percent allocation of $2,425,000 for each funding allocation year. Because of the increase in Alaska OCS oil and gas revenues resulting from the Chukchi Sea Lease Sale 193, Alaska FY 2009 and FY 2010 allocation increased to 15.45% of total CIAP funds available for a distribution of $37,471,876.48 for each allocation year.

On November 13, 2009, BOEMRE notified the State of Alaska that their allocation for FY 2010 was reduced by 1% to cover BOEMRE administrative costs, reducing the overall total of CIAP funds to Alaska to $79,407,444.96.

**Revenue Sharing.** Mechanisms for revenue sharing could only be established through an act of Congress.

**Coal.** BOEMRE has applied stringent safeguards relevant to OCS oil and gas development and is not aware of any further safeguards that it should incorporate from federal coal permitting standards.

**Inspectors.** BOEMRE inspectors are highly knowledgeable about the offshore operations they inspect. In the Alaska Region, inspectors receive training (typically in the form of videos or PowerPoint presentations developed with input from BOEMRE subsistence and cultural resource analysts) on subsistence activities and cultural values of the North Slope communities. As BOEMRE implements new requirements for inspector training, the suggestion to include sociocultural expertise in the inspection team has been specifically identified for managerial consideration.
Accountability and Transparency. BOEMRE posts statistical information on Potential Incidents of Non-Compliance and reports Incidents of Non-Compliance on the BOEMRE website. Various reports, Environmental Studies, NEPA documents, overview of OCS programs, and notices of current events are also posted to the website. BOEMRE is continually working to make the website more user-friendly and the information more accessible and usable.

Interagency Planning. In compliance with the President’s goals and objectives, both USDOI and BOEMRE are participating in the interagency Coastal and Marine Spatial Planning work group. The work group is investigating and developing ways to better utilize information from multiple agencies. As BOEMRE gets better information through these efforts, we will use this new information in the evaluation of potential environmental effects for proposed exploration and development/production plans. At this time, BOEMRE is unaware of any information available through this process that we have not already considered in the Lease Sale 193 analyses.

PEW Report. BOEMRE has reviewed the Pew Environmental Group November 10, 2010 study “Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unexamined Risks, Unacceptable Consequences” and took this information into consideration while developing the VLOS analysis.

ANWR. Operations in the Chukchi Sea OCS and related onshore support activities are not expected to have any effects on ANWR.

Incidental Take Authorizations. The referenced report recommends monitoring requirements for Incidental Take Authorizations. The expert agencies charged with administering the incidental take provisions of the MMPA are NMFS and FWS. These issues are outside the scope of the SEIS.

Significant Impacts from natural gas development. The mitigation measures developed and analyzed in the Sale 193 FEIS are carried forward and analyzed within the Final SEIS.

Shipping. BOEMRE would analyze each specific proposal for oil and gas activities on the Alaska OCS at the time they are submitted, and provide any appropriate mitigation measures at that time.

Bowhead Migration. BOEMRE is aware that the majority of the Western Arctic bowhead whale population migrates westerly through or adjacent to the Lease Sale 193 area in the fall of each year. It is well established that bowhead whales may display avoidance or adjust migratory travel routes around oil and natural gas related seismic surveys, vessel traffic, drilling, and production activities. We have thoroughly reviewed the literature and have found no indication of measurable population level or individual level effects upon bowhead whales resulting from the added stress or energy expenditure required by alterations in migration path performed through the fall migration within the U.S. Beaufort and Chukchi Seas. Mitigation measures have been developed and are implemented as a result of recognized potential effects using practical application of science, traditional knowledge and common sense approaches to minimize potential effects to bowheads. BOEMRE will further analyze specific proposals for exploration, development and production plans as these become available and formulate further mitigation measures as new science, technology, and traditional knowledge indicate.

BOEMRE is committed to protecting subsistence activities. In response to comments, BOEMRE Alaska OCS Region has clarified its NEPA significance threshold for subsistence to better reflect its policy of protecting subsistence (see Issue 13 and Final SEIS Section IV.A.1). This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities for several decades. The predominate attribute of this regulatory policy makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest of resource can be minimized in such a manner that the disruption is short term and as a result of incidental or accidental encounters.
Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and the BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233).

Under the proposed action, these encounters will come primarily from vessel traffic and aircraft traffic associated with the project. Every proposed action that will tier from the Sale 193 FEIS or Final SEIS involving seismic, exploration or development will require a separate NEPA analysis to identify environmental effects, including those on the human environment.

**Best Technology.** BOEMRE has devoted considerable effort over the past year to putting in place a new—and necessary-set of rigorous standards for safety and responsibility in our offshore development program. Our aggressive reforms to offshore oil and gas regulation and oversight are the most extensive in U.S. history. Please refer to Section IV.D.1 in the Final SEIS.

On January 19, 2011, the Secretary of the Interior and the Director of BOEMRE announced the formation of the Ocean Energy Safety Advisory Committee (OESC). The OESC is a 15 member public federal advisory body composed of the nation’s leading scientific, engineering and technical experts. The OESC is comprised of representatives from federal agencies—including BOEMRE, the Department of Energy, the National Ocean and Atmospheric Administration, the United States Geological Survey, the Environmental Protection Agency, and the United States Coast Guard—as well as the offshore oil and gas industry, academic institutions, and other non-governmental organizations. The group advises the Secretary, through the BOEMRE Director, on matters and actions relating to offshore energy safety, including drilling and workplace safety, blowout containment and spill response. The OESC will be a center of excellence charged with driving research and development and technical innovation across government and industry in the areas of drilling safety, well control and subsea containment, and oil spill response. The OESC is the first step toward establishing the proposed Ocean Energy Safety Institute, which would facilitate collaborative research and development, training and execution in these and other areas relating to offshore energy safety going forward. The OESC will provide advice on how best to stand up the Institute, and on what role OESC should play in the Institute. Further information about OESC is at: http://www.boemre.gov/mmab/EnergySafety.htm.

**Ultra Low Sulfur Fuel.** Air quality permitting is the responsibility of the USEPA, which would review proposals for activities on the OCS on a case-by-case basis. It is worth noting that two recent air quality operating permits for proposed activities in the Beaufort Sea are predicated on the use of ultra low sulfur diesel.

**National Commission Report on DWH event.** On January 11, 2011, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore (Commission) issued its final report. Prior to the Commission’s report, BOEMRE had been working to address many of the issues identified by the Commission. BOEMRE has undertaken the most aggressive and comprehensive reform of offshore oil and gas regulation and oversight in U.S. history. This includes the development and implementation of heightened standards for drilling practices, safety equipment, and environmental safeguards. These new rules set forth prescriptive standards that industry must meet. Further, for the first time in the U.S. offshore regulatory system, performance-based standards focused on the identification and mitigation of specific risks associated with offshore operations. These changes are substantial, and substantial work is being done to ensure that these changes are both lasting and effective. The ultimate goal is to establish an industry-wide culture of safety, and to have well-equipped and professional regulators. Both elements are necessary to keep pace with the challenges
and risks of offshore drilling, particularly as those operations push into new frontiers and face increased technical challenges. As we continue moving forward, we will continue to take into account the Commission’s recommendations.


**Full Funding.** Comments on agency funding are beyond the scope of the SEIS. The scope of this SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193.

**Continued Environmental Stewardship.** BOEMRE has oversight responsibility from the beginning to the end of oil and gas activities within the OCS. This oversight responsibility means BOEMRE enforces statutory and regulatory provisions on a company from the initial applications for oil and gas activities until the company concludes oil and gas activities, including the decommissioning of offshore oil and gas facilities and pipelines.

**60 Mile Buffer.** The commenter reference to a 60-mile buffer zone is relative to Alternative III described in the Revised Draft SEIS. BOEMRE includes this Alternative in the Final SEIS. The Secretary of the Interior will make a decision based on the alternatives in the Final SEIS.

**Multiple Drilling Operations.** If the Secretary of the Interior reaffirms any part of the lease sale decision, the leases that were issued would still have the mitigation measures. BOEMRE placed seven stipulations as a condition to the leases (Stipulation 1, Protection of Biological Resources; Stipulation 2, Orientation Program; Stipulation 3, Transportation of Hydrocarbons; Stipulation 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources; Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence-Harvesting Activities; Stipulation 6, Pre-Booming Requirements for Fuel Transfers; and Stipulation 7, Measures to Minimize Effects of Spectacled and Steller’s Eiders During Exploration Activities.)

BOEMRE conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

**Relocation in the Event of a Spill.** BOEMRE understands the concern regarding potentially devastating effects of a catastrophic oil spill. BOEMRE response is limited because the agency is not in a position to respond to comments on the potential relocation of communities in the event of a very large oil spill.

The intent of this Final SEIS is to inform the decision maker (the Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193. No decision on drilling will be made during this SEIS process. Exploration activities in the Chukchi Sea are solely dependent on the Secretary’s decision on the lease sale and if that decision results in leases.

**Blackout Dates for Beluga Hunt.** If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have stipulations in place to address concerns about the transit of vessels during the beluga subsistence hunt. Specifically, Stipulation 1, Protection of Biological Resources and Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine
Mammal Subsistence-Harvesting Activities were written to ensure that activities do not cause undue harm to the subsistence hunt, including the subsistence hunt on beluga whales.

Additionally, BOEMRE conducts extensive regulatory, technical, and environmental reviews of all energy exploration, development, production, shutdown and abandonment operations concerning each OCS lease. The agency has authority and ability to impose additional conditions and requirements for such lease operations if there are conflicts with subsistence.

**Measures to Protect Walrus.** If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources in place to protect walrus.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

**Vessel Lighting.** If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources, and Stipulation 7, Measures to Minimize Effects to Spectacled and Steller’s Eiders During Exploration Activities, in place to protect birds during operations.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

**Fall Shutdown for Bowhead Hunt.** If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources, and Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvesting Activities, in place to protect the bowhead hunt.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

**Release of Corporate Information.** When BOEMRE requires the monitoring of environmental resources because of oil and gas activities, that information will be available to the public barring any Federal law that prohibits the release of certain types of related information.

**Regulation of Subsistence Resources.** BOEMRE does not have jurisdiction over managing and regulating the subsistence harvest resources. The Federal agencies with authority are the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (walrus and polar bear).

**Distribution of Documents.** Additional information about BOEMRE’s efforts to distribute the Draft SEIS and Revised Draft SEIS is provided in Issue Category 2.

**Funding Local Participation in NEPA Processes.** The purpose of the Final SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed decision as to whether to reaffirm, modify, or cancel Lease Sale 193. Therefore, BOEMRE’s response to comments regarding tribal and regional government funding is limited.

BOEMRE is open to discussing this issue at future government-to-government consultations with tribal leaders.

**Analysis of Exploration Plans.** BOEMRE strives to conduct its environmental review of proposed Exploration Plans within the 30-day time period prescribed by the OCSLA. BOEMRE Alaska Region typically conducts these reviews via site- and project-specific Environmental Assessments that tier from lease sale EISs. Should such an environmental assessment find that previously
unanalyzed significant adverse effects would occur as a result of proposed exploration activities, BOEMRE could require a modification of the exploration plan or commence preparation of an EIS.

**Issue 6. Global climate change challenges.**

**Summary of Comments**

Various comments referred to global climate change and the challenges presented by a warming Arctic. Several comments noted that the effects of climate change are already beginning. For instance, they suggested there was a noticeable lack of sea ice this fall and ocean acidification (connected with climate change) has been documented. Many comments made general reference to an Arctic already weakened and fragile due to warming climate, implying that animal populations will be more sensitive. Some specific suggestions or criticisms included:

- The SEIS should incorporate two additional concepts into its cumulative effects analysis: the interaction of climate change and industrial activity, and the contribution of natural gas development to black carbon emissions.
- The cumulative effects analysis in the SEIS (and in the Sale 193 FEIS before it) is flawed because it analyzes the proposed action against a static baseline and ignores likely changes in the Arctic climate and environment. These documents should analyze effects to Arctic species (including marine mammals, polar bears, walrus, terrestrial mammals, and birds) while accounting for factors like diminished habitat, food resources, or population levels, and increased competition from species expanding their ranges into the Arctic.
- BOEMRE should analyze contributions to climate change from increased natural gas and oil consumption resulting from the proposed action.
- Climate change and the shrinking polar ice caps will affect weather and sea ice patterns and open new shipping lanes, complicating migratory and feeding patterns of marine and sea bird life across the action area.
- The SEIS fails to address how increasingly dynamic ice conditions may affect operations via pileups, pressure ridging, ice movements, ice gouging, strudel scouring, etc.
- The SEIS should address potential cumulative effects associated with ocean acidification.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

**Response to Comments**

BOEMRE shares concerns regarding Arctic warming and the many unique challenges operating in the Arctic. The effects of climate change, including reduced sea ice and increased shipping, are analyzed in the Cumulative Effects chapters of both the Sale 193 FEIS and the Final SEIS. In light of heightened interest and concerns regarding Arctic warming, BOEMRE analysts reviewed the most current information on sea-ice extent and updated the Final SEIS to reflect these changes.

**Analysis in the SEIS.** As stated in Section V.A.1. of the Final SEIS, BOEMRE analysts “…also considered Arctic warming, which could contribute to cumulative effects through, among other things:

- increased noise and disturbance related to increased shipping;
• decreases in ice cover with the potential for resultant changes in prey-species concentrations and distribution with related changes in species distributions;
• changes in subsistence-hunting practices; and
• northern expansion of species.”

These themes were considered in BOEMRE’s evaluation of potential cumulative effects for each resource area. Specific language is provided in the document wherever potential impacts are reasonably foreseeable. For example:

• Section IV.C.2 of the SEIS contains analysis of potential air quality impacts associated with natural gas development. This analysis references a variety of potential emissions and notes that best available control technology (BACT) would be required for any project that would need an EPA or ADEC (Alaska Department of Environmental Conservation) air permit. Meanwhile, Section V.B.2 addresses “Arctic haze resulting from elevated concentrations of fine particulate matter” mostly attributable to “combustion sources in Europe and Asia.” Additional text referencing the possibility that natural gas development activities could potentially contribute to black carbon levels in the region—and, therefore, contribute to Arctic warming—has been inserted into the Final SEIS.

• Section V.B.6., which analyzes potential cumulative impacts to threatened and endangered species, explains how “the ice-associated bowhead may be particularly susceptible to any diminishment or variation in sea ice cover associated with climate change. Potential impacts may result from an increase in vessel traffic, an increase in killer whale predation, changes to hunting dynamics, and other factors.”

• Section V.B.6., here addressing potential cumulative impacts to polar bears, lists climate change as a “main impacting factor of concern to polar bears”. The analysis goes on to state that “[l]eads and polynas are critical habitat for polar bears, especially during the winter and spring, and increasing shipping traffic could disturb polar bears during these critical times. Changes in the extent and concentration of sea ice may alter the distributions, ranges, nutritional status, reproductive success, and ultimately the abundance and stock structure of polar bears.”

• Section V.B.8., analyzes potential cumulative effects to other marine mammals and states: “For marine mammals adapted to life with sea ice, the effects of reductions in sea ice are likely to be reflected initially by shifts in range and abundance (Tynan and DeMaster, 1997), particularly for seals, gray whales, and walrus. Changes in the extent and concentration of sea ice may alter the seasonal distributions, geographic ranges, patterns of migration, nutritional status, reproductive success, and ultimately the abundance and stock structure of some species.”

• Sections V.B.7 and V.B.9., which address potential cumulative effects to marine and coastal birds and to terrestrial mammals, respectively, both note that environmental changes associated with Arctic climate change have the potential to affect these resources to varying degrees.

Avoiding Speculation. BOEMRE’s cumulative analysis of natural gas development impacts accounts for all reasonably foreseeable changes to background conditions, including several changes associated with climate change (see discussion of Arctic warming components, above). While potential impacts associated with climate change in the Arctic are of grave concern, it is often difficult to quantify additive and synergistic impacts from activities that may occur several decades from the present time. To ensure that the decision maker is cognizant of these concerns, however, new text regarding potential adverse impacts on Arctic species that could occur due to Arctic warming (including consideration of depleted population levels and/or increased sensitivity of Arctic
species) was incorporated into the Final SEIS. Additional analysis has also been added to address potential cumulative impacts associated with ocean acidification. Of course, if a proposal for natural gas development and production does emerge several decades from now, BOEMRE would undertake an obligatory review of required exploration and development plans based on the most current environmental information and specific project details. BOEMRE will also continue to work with NMFS and FWS to stay current on issues which may affect protected species.

**Black Carbon.** Additional clarification and analysis regarding potential black carbon emissions and impacts has been incorporated into the Final SEIS.

**Impacts from GHG Emissions from Natural Gas.** Impacts of greenhouse gas emissions from the consumption of additional natural gas was considered for analysis, but was not analyzed in this SEIS process. A full explanation of this decision is provided in Section II.C.3.

**Ocean Acidification.** BOEMRE has incorporated additional information on ocean acidification into several portions of the Final SEIS. This includes background information on the nature of the ocean acidification issue; the addition of an ocean acidification component to the Arctic warming scenario in the cumulative effects analysis; and environmental effects analyses where appropriate.

**Hanna Shoal.** The importance of Hanna Shoal to various environmental resources is identified and analyzed in numerous portions of the Sale 193 FEIS and the Final SEIS. Hanna Shoal was not specifically excluded from Lease Sale 193 and no new information or additional analysis in this Final SEIS suggested altering that decision.

**Issue 7. Including all relevant and available information**

**Summary of Comments**

Many comments identify studies or specific pieces of information that should be analyzed in the SEIS. The following is a list of identified information:

- All of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska.
- Additional information published subsequent to the release of the Final EIS.
- A July 2010 Alaska Department of Fish & Game Study of bowhead whale migratory patterns in the Chukchi Sea. Some comments called for new information from this study to be incorporated into the SEIS, while others stated that new information requires a new NEPA document considering alternatives based on the extensive use of the lease sale area by bowhead whales during fall migration.
- Recent walrus tagging data from the USGS.
- The NMFS 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas.
- Information from the President's Spill Commission.
- The recent USGS study that will provide additional information on Arctic science, including issues pertinent to potential oil and gas exploration and development activities.
- Forthcoming information from the Native Village of Kotzebue’s 6–year study of ice seals and their habitat.
- Knowledge of which specific areas have been leased, which would make it more feasible to fill information gaps for this lease sale.
- Traditional knowledge that will enable BOEMRE to fill some of the data gaps in the 193 FEIS and SEIS.
• The new circumstances and information pertaining to oil spills and blowouts from the Gulf of Mexico, which raise substantial questions about the efficacy of BOEMRE’s prior analyses of oil spills in the OCS and require review in the SEIS.

• It should be noted in Section I.F.3 that State of Alaska standards/regulations come into play when OCS pipelines tie into on-shore facilities, pump stations, or pipelines.

• The SEIS should include BOEMRE’s own COMIDA (Chukchi Offshore Monitoring in Drilling Area) effort.

• Section IV.E.2 should note that the NPDES Arctic General Permit for Oil and Gas Exploration is undergoing renewal and in the future there will be separate permits for the Chukchi and Beaufort Seas.

• Appendix D, page 1 should include information on NTL No. 2010-N06, which requires an application for permit to drill (APD) to contain information on availability of a rig to drill a relief well and rig package constraints. Also note that this NTL requires applicants to specify as accurately as possible the time it would take to contract for a rig, move it onsite, and drill a relief well.

• Section IV.D.1 discusses regulatory changes that followed the DWH event, but does not discuss the anticipated safety impacts of these regulatory changes and the consequent decrease in the probability of a VLOS. Providing this information would provide a more accurate prediction of likelihood of a VLOS to the public.

• There are many new studies and data collection efforts currently underway that would be helpful to the Natural Resource Damage Assessment process.

• None of the information that scientists have collected in the past five years under the Annual Studies plan was found to be relevant to the analysis in the SEIS. This is a blatant disregard of science and a waste of taxpayer’s money.

• The SEIS should include more LTK (Local Traditional Knowledge) in order to understand the delicate nature of local resources in conjunction with traditional scientific research. This would let the agency synthesize static research with human observation, and would result in better info and more informed decisions.

Several comments stated that once BOEMRE collects additional information and collaborates with other agencies such as USGS and NOAA, it should then undertake a comprehensive, coordinated, and integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.

Similarly, one comment suggested that several NGOs are working with a group of scientists to review the USGS report (addressed in Issue Category 36) and to identify priorities for research and monitoring. The contention made was that these efforts will be relevant to the Lease Sale 193 decision.

One comment made the general point that the Draft SEIS is dated September 2010, only a few weeks after the District Court’s decision, so it appears that little new analysis was performed by BOEMRE despite the Court’s mandate.

Source of Comments

• Tribal governments and Alaska Native Organizations
• State Government
• Local Governments
• Environmental Organizations
• General Public
Response to Comments

The environmental analysis in the Sale 193 FEIS is based on comprehensive review of a variety of relevant scientific studies and includes information collected from the Environmental Studies Program (ESP) in Alaska. In developing this SEIS, BOEMRE analysts again reviewed all relevant and related ESP information and also considered new information (i.e., published subsequent to the Sale 193 FEIS) relevant to understanding the potential environmental impacts of the natural gas development and production scenario. This information is specifically identified and utilized in various portions of the Final SEIS. Where, for a particular resource area, no new information was identified as relevant to an understanding of potential impacts, language to this effect was added in the text. In preparing the Final SEIS, BOEMRE analysts also reviewed a “[l]ist of recent studies that should be considered in the SEIS,” as submitted in a notable comment. This list contained over one hundred studies covering a variety of topics. In some cases, BOEMRE analysts found this information useful in more fully describing the affected environment or potential impacts, or in supporting the analysis with more recent information. These studies are now referenced in the SEIS, and they included the following resource areas: lower trophic organisms, fish resources, Threatened and Endangered marine mammals, other marine mammals, and subsistence-harvest patterns. Explanatory text was added to the Final SEIS, where appropriate. Most references provided by the public comment, however, failed to provide new and relevant information; these studies were reviewed but are not referenced. None of the listed studies controvert the conclusions of the Final SEIS.

Additionally, it was not necessary to evaluate “new” information (again used here to mean information published subsequent to the Sale 193 FEIS) in the 1502.22 analysis. The analysis in Appendix A was completed to determine whether missing information identified by BOEMRE in the Sale 193 FEIS was essential or relevant under 40 CFR 1502.22 to BOEMRE’s analysis, and whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. As demonstrated in Appendix A, BOEMRE was not missing any information that was essential to a reasoned choice amongst the alternatives at the time of Lease Sale 193 (February 2008).

Regulating Pipelines. Additional language regarding the role of state standards and regulations concerning pipelines has been added to the Final SEIS.

Traditional Knowledge. BOEMRE holds a deep respect for the accumulated wisdom and insight offered by traditional knowledge, and makes affirmative efforts to incorporate traditional knowledge into NEPA documents. The BOEMRE Environmental Studies Program has developed studies that will gather additional traditional knowledge resources for use in future NEPA documents.

US Geological Survey (USGS) Report. A comprehensive response to comments regarding the recent USGS report is provided within Issue Category 36.

Deepwater Horizon Event. Information from the Deepwater Horizon event and its implications are discussed in greater detail within Section IV.D.1 and Appendix D of the Final SEIS.

NTL No. 2010-N06. Information concerning this Notice to Lessees is provided in the body of the document, within Section IV.D.1. NTL No. 2010-N06 is also referenced in Section IV.D.2.

NPDES. The current Arctic National Pollutant Discharge Elimination System (NPDES) General Permit for wastewater discharges from Arctic oil and gas exploration expired on June 26, 2011. EPA will reissue separate NPDES exploration General Permits for the Beaufort Sea and the Chukchi Sea prior to the 2012 drilling season. EPA expects that tribal consultation and public comment on the new proposed Arctic oil and gas exploration permits would occur in the Fall 2011.

COMIDA. The COMIDA effort at BOEMRE has gathered information on several environmental resource areas, including benthic organisms, whales, and social issues. Data from the COMIDA
programs is shared publicly (via the agency’s website, public presentations, etc.) and is made available to BOEMRE analysts for use in environmental impacts analyses. As a supplemental document, the Final SEIS references new information useful to understanding the environmental impacts of natural gas development and production. Where no new information alters the conclusion of the Sale 193 FEIS or sheds light on the specific impacts of natural gas development and production, no new information need be cited. Lack of a specific citation does not indicate that data was not considered.

**Priorities for Research and Monitoring.** In preparing this Final SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the Final SEIS analysis. BOEMRE analysts examined the USGS report for new information relevant to understanding the potential environmental impacts of each lease sale alternative. Many of the data gaps expressed in the USGS Report were identical or substantially similar to those already addressed as part of the SEIS process. In other instances—as appropriately noted by USGS—there exist information gaps that should be addressed before future planning of development and production activities on the OCS, but do not need to be addressed at the leasing and exploration stage of the OCS oil and gas process. The OCS Lands Act provides for a four-stage process for oil and gas development. This four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” (*Sierra Club v. Morton*, 510 F.2d 813, 828 [5th Cir. 1975]). BOEMRE uses best-available scientific information. The BOEMRE does not “defer” gathering of information to later stages of OCS activities. Rather, BOEMRE analyzes more and more specific information at each stage of OCS activities as the location, time, and intensity of the activities are better understood. When subsequent scientific information becomes available, BOEMRE will consider that information in its decision making process.

**Issue 8. Not enough information for adequate analysis.**

**Summary of Comments**

Many comments expressed opinions as to whether enough information exists to support an adequate analysis. Comments asserting the negative addressed one or more of the following themes:

- The Arctic Ocean is one of the least studied and poorly understood ecosystems in the world.
- There remains a widespread lack of critical baseline environmental information—information that is essential and relevant to the decisions which the agency is charged with making at this lease sale phase.
- There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, fish, and lower trophic organisms.
- There should be longer-term studies that provide an understanding of the variability of species over time.
- There needs to be a comprehensive research and monitoring program that would provide a fundamental understanding of the marine ecosystem—it should include guidance and input from local communities.
At this point in time, there are biological, ecological, weather, oceanographic, and climate change data and considerations that have not been sufficiently addressed and analyzed in order to make responsible decisions on oil and gas exploration and development in the Beaufort and Chukchi Seas.

Additional information is required to identify important ecological areas within the lease sale area. To avoid harm to ecosystem health, this information must be gathered prior to a decision on leasing.

Further studies are needed to delineate the importance of Hanna Shoal and surrounding areas to the health of the Chukchi Sea.

Lack of baseline information makes it difficult to know what impacts from exploration actually occur, may occur, or whether mitigation plans put in place are effective.

Lack of understanding of ecological processes makes accurate assessment of natural gas development and production, as well as determining what information is essential or relevant, very difficult.

More baseline scientific research and monitoring is needed to provide an understanding of the Arctic ecosystem before making these decisions.

A comprehensive, integrated research and monitoring plan is required that defines existing information and research plans.

The piecemeal approach to science in the BOEMRE Environmental Studies Program Annual Study Plan is inadequate; a more holistic approach to satisfying informational needs is required.

BOEMRE should develop a comprehensive interagency research plan.

A new, comprehensive program in the mold of the OCS Environmental Assessment Program (OCSEAP) program should be developed, and this time it should incorporate traditional knowledge.

BOEMRE should work with other agencies, industry, conservation organizations, and other stakeholders to develop standards and seek resources for baseline research and monitoring in areas under consideration for oil and gas development.

Efforts to gather additional information on the affected environments and communities should include opportunities for communities along the Chukchi Sea to undertake research.

Additional baseline information is essential if the government is to comply with OCSLA, NEPA, the ESA, and the MMPA.

The COMIDA studies plan was hastily designed, highly focused on drilling areas started prior to the leasing decision or prior to post-leasing seismic survey, and did not address the comprehensive information needed to provide adequate pre-leasing and post-leasing information that OCSLA requires.

Other comments asserted that enough information does exist to support a decision. These comments introduce the following themes:

- The very substantial existing body of data regarding baseline conditions and the impacts of oil and gas activities in the Chukchi Sea should be acknowledged.
- There exists a large and diverse body of reliable information on Arctic ecosystems that provides significant support for sound scientific judgments.
• Alaska’s North Slope and OCS are very likely the most studied energy basins in the United States. In just that past 10 years, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi seas.

• There will always be project opponents who feel there is not enough data to be deemed sufficient in any analysis.

• Affirming the lease sale is consistent with continuing to collect data.

• The ongoing nature of studies (some of which are likely to continue for decades) does not constrain the agency’s ability to determine that it currently has enough information to make a reasoned choice among alternatives.

• The recently released USGS report indicates that not enough information is known to support oil and gas decisions in the Arctic.

Source of Comments

• Tribal Governments and Alaska Native Organizations

• Local Governments

• Environmental Organizations

• Corporations and Industry Groups

• General Public

Response to Comments

In conducting its NEPA analyses, BOEMRE utilizes the best available scientific information. A rather large body of information regarding the Chukchi Sea environment has been compiled, especially within the last 35 or so years via the Alaska Region Environmental Studies Program (ESP) and other sources. More description of the ESP and other sources of information is provided below. While additional information regarding the Chukchi Sea ecosystem is certainly desirable, and concerted efforts to collect such information are ongoing, the level of information available today is sufficient to inform this SEIS analysis and any leasing decision.

Sound Science and Ongoing Research. BOEMRE uses sound science in fulfilling its mandate under OCS Lands Act to protect the environment, including Arctic wildlife. Much of the information used in BOEMRE’s NEPA document is derived from studies commissioned by the Alaska Region Environmental Studies Program (ESP). The ESP conducts a systematic and aggressive research program to study and monitor affected environments and communities on the North Slope of Alaska. Details of the program can be accessed from the web portal: www.boemre.gov/alaska/ess/index.htm. Current social research projects involving local residents on the Chukchi Sea coast include “Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska”; “Impact Monitoring for Offshore Subsistence Hunting”; and “Economic Impact Modeling.”

Each autumn the ESP publishes the Alaska Annual Studies Plan, which describes the Region’s ongoing research and studies proposed for the coming year. This document is distributed to approximately 200 organizations, including the Northwest Arctic Borough, the North Slope Borough, the Village of Wainwright, the Native Villages of Point Hope and Point Lay, the Inuvialuit Beluga Whaling Committee, the Maniilaq Association, the Alaska Eskimo Whaling Commission, the Alaska Nanuuq Commission, the Eskimo Walrus Commission, and many others. The Annual Studies Plan is accompanied by a call for suggestions of new studies from stakeholders.

Funding New Research. The ESP is not a grant program; studies are most commonly procured through competitive contracting or agreements with other federal agencies. However, BOEMRE’s Coastal Impact Assistance Program (CIAP) provides funding to the State of Alaska and eligible
coastal political subdivisions on a grant basis for projects related to conservation, protection or restoration of coastal areas, and for mitigation of impacts from OCS activities (Table E-1). For example, the CIAP has recently awarded approximately $1.8 million to the Northwest Arctic Borough for the collection of local information on subsistence resources.

Table E-1. CIAP allocation to the State of Alaska for the period FY 2007 to FY 2010.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>$2,425,000.00</td>
</tr>
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<td>$2,425,000.00</td>
</tr>
<tr>
<td>2009</td>
<td>$37,471,876.48</td>
</tr>
<tr>
<td>2010</td>
<td>$37,471,876.48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$79,793,752.96</strong></td>
</tr>
</tbody>
</table>

Many ESP studies involve substantial local participation in field work, as well as data analysis and reporting. One example is the study “Pinniped Movements and Foraging: Bearded Seals” conducted by the National Marine Mammal Laboratory. Information about the study, including a detailed list of the contributions by local participants, is at http://kotzebueira.org/current_projects3.html. Native hunters also participate in ESP projects that collect data on bowhead whales and walrus.

The ESP is a very robust program which identifies and obtains information regarding a variety of pertinent environmental issues. Since 1975, over $300 million in studies of the Alaska OCS area have been commissioned through the ESP alone. Pursuant to 43 U.S.C. 1346 and in anticipation of future NEPA processes, the BOEMRE Alaska OCS Region Environmental Studies Program will continue to fund the collection of additional environmental information and commission additional research regarding important environmental and social issues within the Chukchi Sea and North Slope region.

COMIDA. In preparation for possible oil and gas exploration in the Chukchi Sea, the Alaska OCS Region conducted a three-day Chukchi Offshore Monitoring in Drilling Area (COMIDA) planning workshop November 1-4, 2006, in Anchorage. In total, the agency received 15 study profiles on the various topics discussed by participating experts. The workshop report was published in April 2007, and that input continues to influence research priorities in the Chukchi Sea. Beginning in 2007, the agency developed a new suite of studies in the Chukchi Sea, leveraging more than $45 million to conduct interim baseline research and monitoring. In recent years, a large percentage of research effort has been expended in new oceanographic studies, including meteorology, ice dynamics, circulations modeling and surface current data collection, benthic fauna and sedimentation, and ecosystem monitoring through hydrographic moorings.

Of course, studies directly related to the BOEMRE ESP are by no means the only sources of relevant, valuable data and analysis of the Chukchi Sea environment and resources. A substantial body of information has been compiled by other researchers as well, including but not limited to universities, government agencies, and industry. The suggestion that the Chukchi Sea is one of the least studied and most poorly understood regions in the world is not accurate.

Information Regarding Ecologically Important Areas. Decades of study in the region have elucidated the heightened importance of many areas within the Chukchi Sea as well as the North Slope. The understanding that certain areas of the Chukchi Sea are of special importance is reflected in recent decisions, such as the Secretary’s 25 Statute mile deferral in the 2007-2012 Five-Year
Program as well as the selection of Alternative IV (which included a corridor deferral) from the Sale 193 FEIS for the decision on Lease Sale 193. Within the present Final SEIS, special consideration is given to coastal communities, the spring lead system, subsistence harvest areas, migratory corridors, Ledyard Bay Critical Habitat Unit, Kasegaluk Lagoon, Hanna Shoal, avian breeding colonies such as Cape Lisburne and Cape Thompson, designated Essential Fish Habitat, caribou calving grounds and insect relief areas, special vegetative communities, marine mammal haulout areas, and many other spatial areas.

Incomplete Information. In addressing the second and third concerns of the District Court’s remand, BOEMRE analysts and managers analyzed each reference to incomplete or missing information within the Sale 193 FEIS, in accordance with the requirements of 40 CFR 1502.22. BOEMRE developed a systematic process under which each item received focused, objective, and complete review. As illustrated in Appendix A of the Final SEIS, this process determined that no items of “incomplete” information collected in Exhibit 129 (which was submitted to the District Court by the plaintiffs) or identified during our subsequent review of the Sale 193 FEIS are “essential” for a reasoned choice among alternatives at the lease sale stage. Therefore, BOEMRE has determined that no new information need be incorporated into the Final SEIS to comply with 40 CFR 1502.22. Similarly, no information beyond what it already provided in the Final SEIS is essential for understanding the potential impacts of natural gas development and production. Additional EIS drafts, comment periods, and interagency research plans will not be necessary to support a decision on Lease Sale 193. Please see Issue 27 below for further discussion of the analysis carried out pursuant to 40 CFR 1502.22.

To further its commitment to sound science and inform future decisions, BOEMRE will continue to incorporate new information from a variety of sources including the ESP, USGS, NOAA, other state and federal agencies, the President’s Spill Commission, universities, and industry.

Response to comments regarding the recently released USGS report is provided in Issue 36.


Summary of Comments

One comment asked BOEMRE to explain several apparent inconsistencies between the Draft SEIS and the Revised Draft SEIS. Several other commenters asserted fundamental challenges to the assumptions and/or scope of the SEIS; relief funding efforts were also addressed. Such commenters stated the following:

- U.S. government lacks authority over Iñupiat lands, waters, and resources. Iñupiat have sole ownership of and authority over (including the power to tax) adjacent oceans.
- BOEMRE’s NEPA documents are deficient because they don’t look at how the human population will be impacted.
- BOEMRE misapplies the concept of “tiering” by deferring the gathering of information to later stages of the OCS Lands Act process.
- BOEMRE cannot rely on the narrow scope of the remand to exclude new information and circumstances arising since the 193 FEIS was prepared. Even if the District Court had not remanded the 193 FEIS, the agency would still need to conduct a supplemental EIS to address the new information that has come to light about bowhead whales and oil spills.
- The difficulty in collecting specific information for the entire Lease Sale 193 area is a consequence of BOEMRE’s decision to offer for lease an area the size of Colorado. The size of the lease sale tends to preclude meaningful site-specific review.
The SEIS repeatedly states that more information will be required at the exploration and development phases, but it does not indicate what specific information will be needed at those phases. Also, it may be difficult to fill these gaps given the 30-day requirement for BOEMRE to make a decision on a proposed exploration plan. There was little emphasis on filling information gaps during review of Shell’s Chukchi Sea exploration plan.

Existing TAPS infrastructure may not be in sufficient condition to safely transport oil given obsolescence and lack of adequate maintenance. Extending the life of the TAPS may be risky.

The pipelines used to transport oil and natural gas may not be built correctly or maintained adequately, leading to spills, releases, or other undesirable environmental impacts.

The Draft SEIS does not explain Best Available and Safest Technologies in enough detail.

Chapter VI.D. of the SEIS does not comply with CEQ regulations specifying that the EIS shall identify a list of preparers along with other specific information. Compliance with Section 1502.17 is essential in informing the public and decision makers regarding the qualifications of the document’s authors, and necessary if BOEMRE wishes to gain the public’s trust.

More information about seismic testing would be appreciated.

There are some locations in the document that use the name MMS. Where applicable, use of the agency’s new name should be conformed.

The SEIS should consider the risks of a VLOS from a tanker spill.

BOEMRE may not avoid analyzing the impacts of an activity in an EIS by relying on future mitigation measures. To the extent that mitigation measures are incorporated into the effects analysis, the agency must analyze the efficacy of those measures. There is evidence (from an expert analysis, an expert panel, and the recent USGS report) that mitigation measures such as those posited in BOEMRE’s analysis are not always effective.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Scope. The issue of U.S. government authority over Inupiat lands, waters, and resources is beyond the scope of analysis in the SEIS. However, as a jurisdictional matter, the Federal government holds jurisdiction on the Outer Continental Shelf.

No mandates are established through an EIS, which is an information document prepared pursuant to NEPA. Mechanisms for revenue sharing would have to be established through an act of Congress.

Impacts to People. In its NEPA analysis of potential impacts of the human environment, BOEMRE specifically considers impacts to the human population. Relevant analysis is in the Economy, Subsistence Harvest Patterns, Sociocultural Systems, and Environmental Justice sections of the Sale 193 FEIS as well as the SEIS.

Oil Spills. The SEIS was revised to include a Very Large Oil Spill (VLOS) scenario and analysis intended to address stakeholder concerns.
Claims for Damages. Oil Spill Liability Trust Fund is administered by the National Pollution Funds Center of the United States Coast Guard. The Loss of Subsistence Use of Natural Resources/Loss of Subsistence Use claim is used if natural resources you depend on for subsistence purposes have been injured, destroyed, or lost by an oil spill incident. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost (you do not have to own or manage the natural resource to submit a claim under this category) can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims.

Tiering. BOEMRE correctly applies the concept of tiering under NEPA and CEQ’s implementing regulations. The OCS Lands Act establishes a four-stage process established for planning, leasing, exploration, and production of oil and gas resources in federal waters. The OCS Lands Act’s four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner (Sierra Club v. Morton, 510 F.2d 813, 828 [5th Cir.1975]). This staged or “tiered” approach to NEPA compliance and decision making is encouraged by the NEPA regulations (40 CFR 1502.20 and 1508.28). 40 CFR 1508.28 states:

Tiering is appropriate when the sequence of statements or analyses is:
(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

OCS Lands Act – Four Stage Review Process. As provided in 40 CFR 1508.28(a), BOEMRE’s NEPA analyses under the OCS Lands Act’s four-stage review process proceed from an EIS on a Five-year Program through a regional-level EIS on a lease sale to a site-specific EA or EIS on an exploration or development and production plan. Thus, BOEMRE does not “defer” gathering of information to later stages of OCS activities; rather, BOEMRE analyzes more and more specific information at each stage of OCS activities as the location, time, and intensity of the activities become known and/or are better understood. The amount and detail of the information needed for a NEPA analysis depends upon the decision it is intended to support.

A lease sale EIS supports informed decision making on a specific proposed lease sale. Information that becomes available after the Secretary’s decision on the lease sale and the lease sale itself is considered during the technical and environmental review of specific proposed activities related to leases resulting from the sale. New information is also considered and incorporated as appropriate in NEPA analyses for subsequent lease sales.

A lease sale EIS provides an areawide-level analysis that is appropriate to support a decision on configuration and requirements of an areawide lease sale. BOEMRE completes a site-specific NEPA review as appropriate at the exploration or development and production stage when the location (site), timing, and proposed activities are known.

The OCS operating regulations at 30 CFR 250, Subpart B specify the information that must be submitted by a lessee with an exploration or development and production plan. Information is collected and analyzed by the operator prior to plan submission. Appropriate regional and site-specific information is required to be submitted with all plans. Further, additional information is required in support of required permits and authorizations by other federal agencies. For example, air
quality monitoring data is required in support of a Prevention of Significant Deterioration (PSD) permit from the EPA under the Clean Air Act.

**Oil and Gas Transport.** Consideration of the condition of the TAPS infrastructure to safely transport oil in the future is the responsibility of the other Federal and State agencies and beyond the scope of this SEIS. The scenario for the analysis in the Sale 193 FEIS assumed the continued permitting and operation of TAPS.

Gas pipelines constructed in support of OCS natural gas production would be new-built to regulatory standards. Requirements for Best Available and Safest Control Technology are intended to prevent accidental release of hydrocarbons into the environment and requirements for oil spill response are expected to minimize the environmental effects of any accidental hydrocarbon release. Project-specific technical and environmental review would be completed if a gas pipeline is proposed. Necessary project-specific mitigation measures would be identified and imposed at that time. Please see also Section I.E.3–I.E.7 of the Final SEIS for further discussion of these issues.

Section I.E.4 of the Final SEIS provides a general explanation of Best Available and Safest Technology requirements because the specific technologies required for compliance are site- and operation-specific and because the standards and technologies that are likely to be available for natural gas development and production 30 years in the future are unknowable at this time.

It is widely recognized that warming could extend the periods which are open to marine transportation through the Arctic. However, sea ice will continue to form every winter and movements of the arctic ice pack will constrain marine transportation for at least 6 months in typical years. Pipelines are more practical and economically viable because they can transport larger volumes of oil for 12 months a year. Our analysis focuses on a pipeline transportation scenario because it is far more likely than marine transportation from this ice-infested Arctic area.

**List of Preparers.** Some additional information on the List of Preparers has been incorporated into the Final SEIS.

**Safety and Enforcement.** On October 1, 2011, the safety and enforcement component of BOEMRE will reside within a separate agency, the Bureau of Safety and Environmental Enforcement (BSEE). BSEE will ensure that oil and gas activities on the OCS comply with applicable safety, environmental and conservation standards.

**Seismic Testing.** Detailed discussion and analysis regarding seismic testing is provided in the Sale 193 FEIS, which the present document supplements.

**Discrepancies Between Draft and Revised Draft SEIS.** Discrepancies between the Draft SEIS and the Revised Draft SEIS, as well as between the Revised Draft SEIS and the Final SEIS, exist for two reasons. First, BOEMRE’s ongoing efforts to improve the document involved continued editorial review and clarifications. Second, this Final SEIS has now undergone two extensive response-to-comment processes. In many instances, the document has been edited in response to public comments.

**Future Mitigation.** BOEMRE does not rely on the prospect of future mitigation measures to shirk its duties under NEPA. BOEMRE’s environmental analysis does acknowledge mitigation measures (whether administered by BOEMRE, another Federal agency, or some other entity) do exist, and are relevant to accurately analyzing potential environmental effects.

**Existing Discussion Sufficient.** Existing discussion of Best Available and Safest Technologies, the condition of TAPS and existing infrastructure, and other issues not related to the District Court remand is deemed sufficient. More detailed discussion on many of these issues is available in the Sale 193 FEIS.
**Issue 10. Natural gas scenario.**

**Summary of Comments**

A small portion of comments received evaluated the natural gas development and production scenario.

Several comments disapproved of the scenario, citing the following reasons:

- It is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future.
- The assumption that gas development will result in no additional exploration activities because gas development will remain much less financially attractive than oil development is contrary to the agency’s past statements on the attractiveness and probability of gas development, and ignores the incentives that a gas pipeline would create for companies to perform additional exploration.
- BOEMRE should analyze the effects of LNG (liquefied natural gas) tankering, a feasible option. The record shows that BOEMRE has promoted and industry has showed an interest in LNG tankering.
- The SEIS should explain when and how the additional pipeline for gas will be built and how that will affect risks to the environment.
- The natural gas release scenario is flawed in that it fails to account for a release from an offshore pipeline that would likely occur under ice, and could impact species such as the bowhead whale, beluga whale, ice seals, Arctic cod, and polar bears.
- The natural gas scenario is flawed because it does not address the following: the number and type of exploration and production wells, alternative pipeline routes and construction and operational activities, noise levels for construction and operations, and alternatives for the infrastructure and activities, including where it crosses land.
- The natural gas scenario should not merely piggyback off the oil scenario, as it is possible that prospective areas for natural gas may differ from the oil development areas in timing or location, that different companies could choose to develop at different locations, and that more than one development platform may be needed.
- There are no maps showing the location of the one assumed platform location, either in the FEIS or the Revised Draft SEIS.
- The assumption that only one platform is needed for gas development is contradicted by materials that BOEMRE provided to coastal communities, which indicated the possibility of more than one offshore natural gas platform location, and more than one potential shoreline landfall and “shorebase” and gas pipeline route.
- The SEIS should analyze the potential effects of different pipeline landfall locations.
- Since the natural gas scenario assumes that landfall would be at Wainwright, a site specific analysis should be done, and additional alternatives or mitigation measures should be considered.
- The SEIS should analyze how local residents could be affected if a natural gas pipeline breaks, leaks, or explodes near its coastal landfall.
- A more thorough assessment of natural gas blowouts should be done, especially in light of the assumption that gas drilling would be done on the same exploratory rigs and production platforms as oil development and production.
• The SEIS should discuss the degree to which the proposed action will lead to increased vessel traffic and provide more analysis on the probability of vessel strikes and the attendant threat to bowhead whales and other marine mammals.

• A more thorough assessment of natural gas blowouts should be done, especially in light of the assumption that gas drilling would be done on the same exploratory rigs and production platforms as oil development and production.

Several comments approved of the natural gas development and production scenario, with a few comments offering minor suggestions. Such comments are summarized below:

• The SEIS correctly assumes that commercial gas production would only follow oil exploration, development and production activities already analyzed in the Final EIS.

• The expectation that economic considerations will restrict any natural gas exploration and production to projects coincident with and subsequent to oil exploration and development is reasonable.

• It is appropriate to conclude that because the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring during the natural gas development and production scenario is unlikely.

• The treatment of incomplete information from the 193 FEIS and incomplete information regarding natural gas in the Draft SEIS could appear inconsistent. BOEMRE should consider bolstering its analysis of the incomplete information from the Draft SEIS by undertaking the same rigorous analysis of that information that it did for the incomplete information from the 193 FEIS.

• The Draft SEIS could be read to be inconsistent in its treatment of well control events. While the Section II.C.3. statement that “any change in the likelihood of an oil spill from a blowout” during exploration drilling would not alter the potential effects of the oil spill already analyzed is true; this sentence as drafted could be read to indicate that the Deepwater Horizon incident could affect or change prior analysis of the likelihood of a well control event in the Arctic.

• In Section IV.B.5, the Draft SEIS addresses the potential for natural gas releases, including the potential for a loss of well control. This section does not reference the Deepwater Horizon incident, either to adjust the analysis of the likelihood of a loss of well control event, or to explain why the analysis done in the 193 FEIS remains valid. Shell suggests that BOEMRE address this issue, which affects the natural gas development and production scenario and is, therefore, properly within the scope of the remand.

• The natural gas scenario should include discussion of the emergence of shale gas production and its effect on natural gas prices in the lower 48 for the next several decades. Exporting natural gas to Asia is also unlikely given the cost of requisite infrastructure and transport, as well as the OCSLA prohibition on exporting OCS resources.

Source of Comments

• Environmental Organizations
• Corporations and Industry Groups
• General Public

Response to Comments

Assumptions of Natural Gas Scenario. The natural gas development and production scenario contained within the Draft SEIS is the product of thorough analysis of past, existing, and projected
economic and environmental conditions related to potential oil and gas development in the action area and beyond. To provide a reasonable scenario that facilitates environmental analysis of potential impacts stemming from Lease Sale 193, BOEMRE prepared a detailed analysis of the key issues relevant to future natural gas development activities in Arctic Alaska. Based on this analysis, BOEMRE developed the natural gas development and production scenario, a detailed summary of which is provided in Section IV.B of the Final SEIS. The conclusions of BOEMRE’s analysis and the assumptions that direct BOEMRE’s ensuing environmental analysis remain valid and are not arbitrary.

There is no information to call into question BOEMRE’s determination that natural gas production in the Arctic will remain relatively unattractive unless infrastructure for oil development and production already exists. The BOEMRE analysis found that gas development has a large economic disadvantage compared to oil, and production of natural gas becomes feasible only in the event that suitable infrastructure (i.e., offshore platform, onshore facilities, etc.) is in place. Exploration and appraisal drilling of the hydrocarbon accumulation described in the scenario would have delineated the limits of both the oil and gas accumulations prior to the start of oil production. There would be no reason for additional gas exploration drilling prior to the start of gas production. The existence of a future gas pipeline from the North Slope will not alter these realities, especially given the very high cost of exploring and developing additional infrastructure in this area.

The first gas development in the Chukchi Sea OCS would be economically feasible only if it is associated with existing oil facilities. In any case, gas development is highly unlikely until a gas transportation system is constructed from northern Alaska. The scenario analyzed in the Final SEIS represents the most likely situation in view of historical experience in northern Alaska and industry has confirmed our conclusion. It is not practical to attempt to evaluate a wide variety of scenarios, many of which are not feasible options for future gas development.

The rationale for selecting a pipeline as the most likely scenario for future gas development was discussed in several parts of the Final SEIS (see Sections II.C.3, IV.B). Our conclusions are clearly stated and the points are valid without exhaustive economic studies. Individual companies may have conducted their own feasibility studies of transportation options, but these studies are not available in the public domain. General industry comments support our conclusion that the gas scenario analyzed in the SEIS is the most likely one regarding future gas development and transportation.

**Tankering Natural Gas.** The prospect of transporting liquefied natural gas via tankers was also specifically considered during the development of the natural gas scenario. In Section II.C.3., Issues Considered but Not Analyzed, the Final SEIS provides a detailed explanation as to why analysis of LNG tankering is not as feasible as an overland pipeline system. We also recognize that the State and Federal incentives (e.g., loan guarantee) apply only to a gas pipeline project—not an LNG project with probable exports to overseas markets. We acknowledge that other conceptual designs for gas transportation could be possible, but our detailed analysis focuses on the most commercially feasible strategy. The difficulties facing LNG tankering are summarized in this quote taken from Section II.C.3 of the Final SEIS:

> LNG operations will face difficult economic, technical, and regulatory challenges because it is a new concept to the region. LNG operations require expensive infrastructure, including pipelines, a large processing facility, a marine loading terminal, a fleet of LNG tankers, and receiving terminals at market destinations. Numerous feasibility and environmental issues will be present for each of these components in the LNG delivery chain. Marine transportation in the Arctic is restricted by sea-ice conditions that inhibit tanker loadings and transits for 6 months of the year. No LNG ships have been built to handle severe ice conditions common in the Chukchi. Nearshore areas are relatively shallow and water depth could limit the size of LNG ships (loaded draft of 40 ft, [12 m]).

BOEMRE has not and does not promote LNG tankering. To the contrary, in consideration of local stakeholder concerns, BOEMRE requires transportation of produced Arctic OCS oil and gas to shore
via pipeline unless certain factors precluding a pipeline occur. Please see Stipulation No. 3 – Transportation of Hydrocarbons in Section II.B.3.c(1) of the Sale 193 FEIS.

Treatment of Incomplete Information for Natural Gas. It is not necessary to conduct additional 1502.22 analysis of any incomplete information in the Draft SEIS or Revised Draft SEIS. The Final SEIS is written in compliance with the requirements of 40 CFR 1502.22. The types of procedural deficiencies within the Sale 193 FEIS that formed the basis for the second and third concerns of the District Court’s remand do not recur within the Final SEIS. There are no unexplained statements regarding incomplete information made within the natural gas development and production analysis of the Final SEIS. Incomplete information relevant to “reasonably foreseeable significant adverse effects,” and with respect to natural gas development and production, is not “essential to a reasoned choice among alternatives.” Because there is no incomplete information “essential to a reasoned choice among alternatives,” determination of “whether the cost of obtaining the missing information is exorbitant, or the means of doing so unknown,” is not necessary as per the requirements of 1502.22.

To illustrate these points with an example from the Final SEIS, consider analysis of potential impacts to archaeological resources provided in Section IV.C.16, in which BOEMRE acknowledges that it does not possess complete information on the existence or location of unknown archaeological resources. This “missing” information is “relevant to reasonably foreseeable significant adverse effects” given the possibility that natural gas development activities could irreversibly damage currently unknown sites, which would constitute a significant adverse effect. This “missing” information is, however, not “essential for a reasoned choice among alternatives.” As the Final SEIS explains, potential impacts to archaeological resources are similar among all action alternatives given that pipelines would in each case use the same existing oil infrastructure corridor; additional information on the location of archaeological resources would be gathered through required preconstruction surveys and used to avoid or minimize impacts during the Development & Production phase; and other environmental laws and regulations (i.e. pipeline protocols, Section 106 of the NHPA) would greatly reduce the potential for significant adverse effects under each alternative. The text of the Final SEIS also provides the decision maker with comparative analysis of the slight differences between alternatives when it states: “Comparing alternatives, there is a positive correlation between the size of the area deferred from leasing and potential impacts to archaeological resources, but the overall potential for impacts remains small under each alternative” (Section IV.C.16). By identifying all missing information relevant to reasonably foreseeable significant adverse effects, and then explaining why the missing information is not essential to a decision among alternatives at the lease sale stage, the Final SEIS fully complies with 40 CFR 1502.22. Additional language explaining this process, using the analysis of potential impacts to archeological resources as an example, has been incorporated into the introduction to Appendix A of the Final SEIS.

Natural Gas Pipeline. The natural gas development and production scenario provided in Section IV.B of the Final SEIS explains that natural gas production would commence around 2035. Gas pipelines would need to be installed before gas production could begin. The analysis assumes that the pipelines would be installed over several years just prior to gas production (see Final SEIS). A new gas pipeline from the offshore production facility to shore would be constructed during the open-water season in the same corridor as the existing offshore oil pipeline. This offshore pipeline would be trenched into the seafloor as a protective measure against damage by floating ice masses. A second new pipeline would be required to transport gas from shore to a main transportation hub near Prudhoe Bay. This onshore pipeline would be constructed on risers and during winter along the same corridor through NPR-A as the existing oil pipeline to TAPS. The potential effects of installing and operating both pipelines through these corridors are discussed in detail in the Sale 193 FEIS (that analysis is incorporated by reference in the Final SEIS). Discussion of potential direct, indirect, and
cumulative impacts specifically associated with the natural gas pipelines is provided in Sections IV.C and V.B of the Final SEIS.

**Gas Release Under Ice.** The point was made that the Final SEIS analysis of potential natural gas releases should contain analysis of a pipeline release under ice. Natural gas is less dense than seawater and will rise to the surface in a plume if released at depth. The disposition of gas under an ice cover is controlled primarily by three factors; the nature of the discharge, the condition of the ice, and the physical variables associated with the discharge of gas from a loss of well control or a pipeline leak. Gas venting can occur by a number of mechanisms which include: (a) rupture of the ice sheet due to the buoyancy forces exerted by the pressure wave from the loss of well control incident or gas bubble from a pipeline leak, (b) release of gas through flaw zones or leads passing over the release site, or (c) release of trapped gas to the ice surface through brine channels. Further, recent work (Semiletov et al., 2004) has demonstrated the usual assumption that the sea-ice cover is a barrier to gas exchange between the upper ocean and the atmosphere might need to be reconsidered for ice temperatures greater than -10°C (Gosink et al., 1976). This would mean gas could be released at temperatures lower than -2°C; up to -10°C. Should the gas be trapped under an ice sheet while the sheet is still growing it could be encapsulated into the growing ice sheet by subsequent growth beneath it. This has been observed to occur during all of the field and laboratory tests conducted to date with oil and gas. In the Arctic spring it would be released to the atmosphere through brine channels when temperatures reached – 2.2°C to 6°C (Purves, 1978). If gas was encapsulated in sea ice, it could take 18 to 72 hours for encapsulation to occur, depending on the time of year (Dickins and Buist, 1981). Section IV.C.6 provides impacts analysis of natural gas occurring under ice cavities for 1 to 3 days, prior to encapsulation into the ice sheet. Additional analysis of the possibility of a natural gas release under ice is provided in various portions of Chapter IV of the Final SEIS.

**Shale Gas.** Emerging shale gas production in the lower 48 and its effect on lower 48 gas prices, as well as the potential for exporting gas, were duly considered while developing the natural gas scenario. More complete analysis of these factors is available in the aforementioned August 26, 2010 memorandum available in the administrative record. The difficulties associated with projected lower 48 markets, as well as attempts to export OCS gas, serve to reinforce the conclusions of the natural gas scenario laid out in the Final SEIS.

**Additional Detail Requested.** The activities and associated infrastructure are discussed in Section IV.B of the Final SEIS, but we cannot define the exact location of future commercial projects. Until the actual location is known, it is overly speculative to hypothesize alternate pipeline routes or other site specific details. The schedule of construction and operations is also tentative because industry has the option to explore their leases anytime in the primary (10-year) lease term. It should be noted that the original analysis for Lease Sale 193 predicted that the commercial discovery would be made in 2009, so the process is already behind our estimated schedule.

When the Sale 193 FEIS was written, we could not accurately predict the location of leases. After the sale was held, we know the location of the leases, but we cannot predict where future commercial discoveries will be made. It is reasonable to conclude that a costly production platform will only be installed on a commercially viable prospect. No one knows this location at the present time.

**Vessel Traffic.** Vessel traffic is an acknowledged component of the natural gas development and production scenario, the effects of which are analyzed in relevant portions of Section IV.C. The exact degree to which vessel traffic would increase as a result of the proposed action is difficult to forecast at this time. That said, Section IV.B.4 of the Final SEIS contains estimates regarding the frequency of vessel traffic associated with the natural gas development and production scenario. (Also, note that Section IV.A.2.e of the Sale 193 FEIS provides additional detail on the amount of vessel traffic required to support development and production of oil. The amount of foreseeable vessel traffic associated with the natural gas development and production scenario is not expected to exceed the
level of vessel traffic required to support very similar activities conducted under the banner of oil
development and production.)

**Consistency with Past Statements.** As discussed in the Final SEIS, gas production would follow oil
development and would be economically feasible only when sharing existing oil facilities. Oil is the
more valuable commodity and has immediate access to outside markets through TAPS. Gas
development will require a future gas transportation system (probably an overland pipeline) and gas
prices would have to be much higher than current prices to support this expensive project. While it is
uncertain whether a gas pipeline project will occur, it is highly speculative to try to predict the
location and characteristics of unknown oil or gas fields. The development scenario includes only one
offshore oil project, so only one shoreline landfall and onshore support facility is needed.

**Site-Specific Analysis of Landfall.** It is misleading to predict a specific location for facilities before
a commercial discovery is confirmed. The area near Wainwright is a logical place for a pipeline
landfall and shore facility because it is the closest onshore location along a direct route from the
Chukchi Sea OCS to existing facilities on the central North Slope. However, a site specific analysis
is not realistic for a broad area (tens of miles) of coastline. After an offshore project is proposed and
a suitable onshore site is selected, then detailed site specific studies can be conducted.

**Blowouts.** The natural gas scenario includes a natural gas release component. The hypothetical
blowout examined in the VLOS Scenario also entails a release of natural gas. The potential
environmental effects of a natural gas release are analyzed within various resource sections of
Chapter IV. Given the absence of specific suggestions within comments, the low probability for a gas
blowout, and the lack of any specific development and production plans to analyze, the existing level
of analysis is deemed sufficient.

**Issue 11. NEPA requirements for analysis.**

**Summary of Comments**

Most comments included conclusory language regarding the sufficiency of the SEIS under NEPA, or
the inadequacy of conducting site-specific analyses and evaluating mitigation measures at later stages
in the NEPA process, as follows:

- Some comments characterized the document and process as sufficient and generally found
  the document’s approach to be on track with the District Court’s remand, and sufficiently
detailed to satisfy NEPA’s analytical standards. For example, such comments asserted the
SEIS provides a substantially more robust environmental analysis of Lease Sale 193 in a
thoughtful and comprehensive discussion, and includes new information on a wide variety
of topics. This is clearly a “hard look” at the issues remanded by the court.

- Some comments characterized the document and process as insufficient and generally
  expressed disapproval of the document’s process, level of analysis, conclusions, and/or the
public comment process. To this end, it was often stated that BOEMRE appears intent on
justifying why it originally held the lease sale rather than meeting its obligations under
NEPA and the court order.

- Several comments expressed very specific reasons why the document is inadequate,
  including arbitrary and capricious analysis, failure to take a “hard look” at potential
impacts, lack of effective mitigation measures, undue consideration of economic factors,
lack of adequate alternatives, or authorization of illegal activities.

The US Environmental Protection Agency (EPA) made the following points with respect to the
sufficiency BOEMRE’s analysis under NEPA.
• BOEMRE has produced a succinct document that clearly addresses the deficiencies identified by the District Court.

• EPA is particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. The EPA believes that the process employed by BOEMRE fully meets the intent of CEQ’s requirements for such situations.

• The analysis of potential impacts from the natural gas scenario is quite thorough, with clear indication of relatively minor impacts.

• EPA commended BOEMRE for being responsive to requests to perform the VLOS evaluation and believe the analysis will help inform the public, other stakeholders and the decision maker of the full range of potential effects from the project.

• Overall, the Revised Draft SEIS provides a careful and supportable analysis of a VLOS.

• The addition of an Executive Summary would be helpful for readers, particularly North Slope residents who are trying to balance everyday obligations with reviewing the numerous technical documents regarding this region.

• The Final EIS should incorporate (within either an Executive Summary or Chapter 2) an impact summary table to facilitate visual comparison of the impacts associated with each alternative.

• Additional figures should be incorporated throughout the text as a visual aid in presenting information. For example, figures identifying active leases and deferral areas would be helpful.

**Source of Comments**

These issues were raised (implicitly if not explicitly) by all types of commenters, and within the majority of comments received.

**Response to Comments**

The Sale 193 Final SEIS and BOEMRE’s NEPA process comply with CEQ regulations and Department of the Interior guidelines. Additional responses to specific assertions of non-compliance are provided in other relevant portions of this Appendix.

**EIS for Proposed EPs.** The OCS Lands Act provides for a four-stage process for oil and gas development. This four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” ([Sierra Club v. Morton](https://example.com), 510 F.2d 813, 828 [5th Cir. 1975]). During each of these stages the BOEMRE prepares an environmental document under the National Environmental Policy Act. A lease sale EIS provides an area-wide-level analysis that is appropriate to support a decision on configuration and requirements of a lease sale. The BOEMRE completes a site-specific NEPA review as appropriate at the exploration or development and production plan stage when the location (site), timing, and proposed activities are known.

Specifically, BOEMRE prepared an Environmental Impact Statement (EIS) at the lease sale stage for Chukchi Sea OCS Oil and Gas Lease Sale 193 that included an analysis of leasing and exploration of oil and gas in the OCS. When an exploration plan is filed, BOEMRE will perform an environmental review. Pursuant to NEPA, BOEMRE will tier from the Sale 193 FEIS and the Final SEIS to prepare an Environmental Assessment. The Environmental Assessment will provide sufficient analysis for determining whether to prepare an EIS. If the Environmental Assessment analysis supports a Finding of No New Significant Impact (FONNSI), then an EIS will not be prepared.

**Additions to the Final SEIS.** Consistent with comments from the EPA, an Executive Summary, an impacts summary table, and additional figures have been included in the Final SEIS.
Issue 12. Validity of analysis and conclusions.

Summary of Comments

Many comments asserted that the analysis and/or conclusions within the SEIS are not valid, listing a variety of reasons, including the following:

- The studies used for the analysis are flawed. Studies are usually unable to adequately simulate Arctic conditions. Also, studies should be non-invasive and designed so as to avoid disrupting the behavior being studied.
- The SEIS shows a lack of understanding of this area and the unique environmental challenges of working there.
- In light of changing conditions brought on by global warming, the data used to support the SEIS is obsolete.
- The analysis is insufficient; it does not adequately take into account the weakened and fragile state of a warming Arctic and discounts potential impacts to animal populations.
- The analysis of a development scenario that would occur 10 years from now is too speculative. Receipt of a specific transportation pipeline proposal is required for a sufficient impacts analysis. The extent of the reservoir should be known before determining the lease sale area.
- The analysis lacks adequate specificity. Differences in impacts between alternatives should be quantified, not merely generalized in qualitative terms; there should be more detail in Affected Environment discussion of the physical environment; and summaries of impacts in Ch 2 and Ch 4 are too generic.
- The conclusion that impacts from natural gas development would simply be similar to impacts from oil development is not sufficient.
- It is suggested that BOEMRE identify the new information reviewed in all cases, or where there is no new information available, state that no new information is available.

On a related note, a very large quantity of comments asserted that the SEIS simply does not contain enough scientific information to adequately support a decision. This comment is addressed as a separate issue within this Appendix (see Issue 8 – Not enough information for adequate analysis).

Finally, one comment suggested the assumption that larger deferral areas decrease environmental impacts is not necessarily correct. This comment called for more in-depth discussion within Section II.D.3 of the balancing of risks and impacts associated with a larger deferral area.

Source of Comments

- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Best Available Information. In preparing this SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the Final SEIS analysis. Due consideration was also
given to Arctic warming and associated changes to Arctic ecosystems and animal populations. See Issue Category 6 for additional response to these issues. The effects of climate change are analyzed in detail in the Cumulative Effects chapters of both the Sale 193 FEIS and the Final SEIS.

**Reasonable Scenarios.** NEPA and its implementing regulations require federal agencies to analyze the reasonably foreseeable impacts to the human environment that could result from a proposed action or alternatives. This requirement sometimes translates into long-range projection of impacts. Such is the case with OCS lease sales. To better analyze potential environment effects that could occur years from now, BOEMRE uses reasonable scenarios. These scenarios predict the timing, characteristics, and extent of potential oil and gas development and production activities in the future. These scenarios inform the environmental analyses, which in turn constitute the heart of the agency’s NEPA analyses. With respect to one comment above, a “scenario that would occur 10 years from now” is assumed to refer to the oil development scenario analyzed in the Sale 193 FEIS and summarized for context in the Final SEIS. The oil development scenario is outside the scope of new analysis for the Final SEIS. Thorough NEPA review of a pipeline proposal would occur at a later stage of the OCS Lands Act process, if BOEMRE receives such a proposal. Also, it is not always possible to know the extent of a reservoir at the lease sale stage. Lease sales allow lessees to explore portions of the OCS with the goal of finding commercially viable reservoirs. And despite remarkable progression of seismic technologies that further our understanding of sub-seafloor geology, the existence of commercial quantities of hydrocarbons remains uncertain until the results of an exploration well are known.

**Climate Change.** The Final SEIS analysis of potential cumulative effects takes climate change issues into full account. Section V.A describes how BOEMRE uses best available data and projections to identify potential contributions of Arctic warming to cumulative impacts, and where the Final SEIS draws the line between reasonably foreseeable factors and unduly speculative possibilities.

**Specificity of Information.** Given that this analysis is of a scenario that would occur, if it occurred at all, many years in the future, and that the exact location of infrastructure cannot be known at this time, portions of the Final SEIS are necessarily nonspecific at times. Analysts were as specific as was appropriate for each piece of the analysis. The role of the Final SEIS in the Lease Sale process also affects the level of specificity in the SEIS itself. The Final SEIS is a supplemental document that incorporates the Sale 193 FEIS by reference. The SEIS generally summarizes, rather than duplicates, background information, analysis, and conclusions from the Sale 193 FEIS. Readers seeking more specificity on the physical environment in the Chukchi Sea region, for instance, should refer to the physical environmental section of the Sale 193 FEIS. Summary of impact sections in Chapters II and IV serve their limited purpose aptly; readers seeking more detail are referred to relevant portions of Chapter IV.

**Similar Effects under Alternatives.** To understand why potential impacts under each action alternative are similar, it is important to recall the scope of the SEIS analysis. In complying with the first concern of the District Court’s remand, BOEMRE developed a new natural gas scenario and impacts assessment. First, BOEMRE geologists with knowledge of Alaska’s oil and gas industry determined the most reasonable natural gas development and production scenario based on current realities and foreseeable trends. Next, BOEMRE analysts reviewed this reasonable scenario and provided new impacts assessments. The scenario and impacts assessments were then incorporated into the Draft SEIS, and have now undergone two public review and comment processes. There are indeed many similarities between the potential impacts of natural gas development and production analyzed in the SEIS and the potential impacts of oil development and production analyzed in the Sale 193 FEIS. This is due to the similarity of activities that would occur under each scenario. For instance, there is little difference in potential impacts between building an oil pipeline and building a parallel gas pipeline within the same corridor. This is not to say that impacts would be identical; the
SEIS carefully notes several instances where potential impacts would vary. The types of effects that could occur during to a VLOS are also similar as between alternatives. Additional responses regarding the VLOS scenario and analysis (including similarities and differences between alternatives) are provided in later Issue Categories.

**New Information.** In Chapter III of the Final SEIS, BOEMRE carefully identifies new information incorporated into the SEIS analysis. For resource areas where no new information beyond what was considered for the Sale 193 FEIS was necessary for the supplemental analysis of natural gas development and production, statements to that effect are included.

**Analyzing Deferral Corridors.** BOEMRE has strived to identify, analyze and discuss all of the benefits, as well as the drawbacks, of the deferral corridors (associated with Alternatives III and IV) as they pertain to each particular resource. For expanded discussion and more nuanced explanation of balancing risks and benefits, the reader is referred to Chapter IV. For summaries of the more thorough discussion in Chapter IV, refer to Sections II.D.3 and II.D.4. It is difficult to succinctly summarize all of the implications of deferral the corridors to anticipated environmental impacts. The text of Sections II.D.3 and II.D.4 represent analysts’ best attempt to do so in the limited space that a summary section allows. Take for instance the Essential Fish Habitat subsection of Section II.D.3. This subsection summarizes in an appropriate level of detail the proposed corridors’ potential benefits (increased distance between oil and gas activities and coastal habitats, slightly decreased potential for an oil spill to contact important coastal resources, potentially more time for response in the event of a spill) as well as its drawbacks (potentially increased pipeline distances, meaning larger construction footprint and increased chance for rupture).

**Unique Challenges of the Arctic.** Protecting the environment while ensuring the safe development of the Nation’s offshore energy and marine mineral resources is a critical part of BOEMRE’s mission. In preparing this SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the SEIS analysis. BOEMRE has many subject matter experts preparing the SEIS as well as over 30 years of experience in Alaska in managing the OCS resources which have been subject to leasing, exploration, and development and production. The commenter does not provide a description of how and where the SEIS shows a lack of understanding regarding the unique environmental challenges. Without this specificity from the commenter, BOEMRE response is limited.

**Issue 13. Significance thresholds.**

**Summary of Comments**

Several comments criticized significance threshold use in the SEIS analysis. Some of these specifically addressed the significance thresholds used to gauge potential impacts to subsistence activities:

- The significance thresholds were too general, require more detail, and should be more quantitative.
- Significance thresholds are set to where catastrophic consequences to people, culture, and the environment would occur. BOEMRE must set thresholds that comport with applicable environmental laws instead of significance thresholds that assume major violations of statutes such as the Clean Water Act (CWA), Clean Air Act (CAA), and MMPA. BOEMRE cannot assume that these laws can be broken numerous times before causing significant impacts.
Some commenters took issue with the thresholds for marine mammals and Threatened and Endangered Species:

- With respect to marine mammals, a threshold predicated on impacts lasting 3 or more generations is set too high.
- The significance threshold for Threatened and Endangered species is inadequate. For some species currently listed or under consideration for listing, population levels and/or trends are unknown. Thus, there is no basis for determining when the threshold’s special standard for “declining populations” applies. BOEMRE should clarify how this threshold would apply for T&E species where population numbers are unknown.

Several comments took issue with the significance threshold for subsistence. These comments made the following points:

- The significance threshold for subsistence vastly understates the importance of subsistence activities and resources for residents of the North Slope.
- Any adverse effect on the hunt, the availability of any subsistence resource, or directly on the subsistence resource population is significant.
- The significance threshold for subsistence should be: “The impact of an activity is considered to be significant when the activity will reduce the availability of a subsistence species to a level insufficient for a harvest to meet subsistence needs.”
- The standard should also recognize that effects which make the hunt more difficult, time-intensive, or dangerous are also significant.
- Stock-level reduction is not the correct level at which to judge impacts, since deflection of migration patterns could significantly affect subsistence.
- BOEMRE significance thresholds for subsistence unlawfully stress impacts of long-term duration; whereas, CEQ regulations stress that context for significance includes both short-term and long-term effects. Thus, the 1–2 year element is unacceptable.
- Findings of “significance” should not be limited to resources BOEMRE deems “important”.
- Assumptions about how Inupiat can mitigate impacts are unrealistic and even unlawful in light of provisions in the MMPA. By unlawfully stressing long-term impacts, it was stated, BOEMRE significance thresholds for subsistence activities ignore CEQ regulations which stress that context for significance includes short- and long-term effects.
- Assuming that communities can simply turn to store bought foods ignores the high prices of such food in the villages, health impacts of relying on Western foods, and the social and cultural dependence of Village communities on subsistence hunting.

One comment also stated that the threshold for socio-cultural systems must be revised, but provided no recommendations.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- General Public

**Response to Comments**

**Supplementing the FEIS.** The significance thresholds used in the SEIS process are the same thresholds stated in the Sale 193 FEIS, with exceptions noted below.
Re-evaluation of Significance Thresholds. In response to comments regarding the significance thresholds, BOEMRE re-examined all of the significance thresholds to ensure that the thresholds clearly and accurately reflect the BOEMRE considerations in determining significance. Revisions to significance thresholds for subsistence harvest patterns, sociocultural systems, and environmental justice are explained above. During this review, BOEMRE also became aware of two additional thresholds which had confusing language: air quality and water quality. BOEMRE has rewritten these thresholds to clarify for the reader when BOEMRE considers an action significant.

Avoiding Significant Impacts. Major violations of statutes such as CWA, CAA or MMPA (or any other statutes protecting environmental resources) would indeed lead to significant impacts. BOEMRE’s significance thresholds are designed and applied to be consistent with this concept. Each threshold is multi-faceted and tailored to address the unique characteristics of the individual resource.

Threatened and Endangered Species. Adjustment of these thresholds for the Final SEIS is not supported by any clear science and would unnecessarily complicate the objective assessment and comparison of impacts. Determining appropriate significance thresholds is a difficult exercise, and reasonable people may disagree on the results. BOEMRE’s current thresholds adequately account for the range of potential impacts that may affect a particular resource, balance short-term and long-term effects (as well as high probability and low probability impacts), and protect resources against undue harm. In light of these considerations, no changes to the significance threshold for Threatened and Endangered Species has been made in the Final SEIS. Whether or not a population is declining is determined using best available science and in consultation with the applicable Service (NMFS or FWS).

Protection of Subsistence. BOEMRE Alaska Region has adopted through regulatory practice a position in the context of NEPA that supports the goal of protecting subsistence activities. This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities for several decades. The predominate attribute of this regulatory practice makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest can be minimized in such a manner that the disruption is short term and only results from accidental or incidental encounters. Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233).

Revised Significance Threshold for Impacts to Subsistence Harvest Patterns. In response to comments, BOEMRE revised its significance threshold for subsistence-harvest patterns. A finding of significance is triggered whenever: “Adverse impacts which disrupt subsistence activities, or make subsistence resources unavailable, undesirable for use, or only available in greatly reduced numbers, for a substantial portion of a subsistence season for any community.” While generally consistent with how the former subsistence threshold was applied by BOEMRE analysts, it is BOEMRE’s intent that this revised threshold (1) more clearly articulates the standard, as it is actually applied; (2) resolves ambiguity regarding application of the subsistence threshold; (3) specifically addresses the concerns raised in comments such as those summarized above.

Analysis in the Final SEIS has been updated to account for this revision. BOEMRE encourages continuing dialogue with stakeholder organizations, and invites interested parties to help develop mutually agreeable definitions in the future.
Sociocultural Systems. In response to comments, BOEMRE reevaluated and revised its significance threshold for sociocultural systems. The new threshold identifies as a significant adverse effect any “Disruption of sociocultural systems that occurs with a tendency towards the displacement of existing social patterns.” Analysis in the Final SEIS has been updated to account for this revision.

Environmental Justice. In response to comments, and to reflect updated thresholds for subsistence-harvest patterns and sociocultural systems, BOEMRE reevaluated and revised its significance threshold for Environmental Justice. The new threshold reads: “Significant effects in this category include impacts on human health or environment that cause disproportionate, high adverse effects on minority or low-income populations. This threshold would be reached in the event of significant impacts to either subsistence-harvest patterns or sociocultural systems (see above). Tainting of subsistence foods from oil spills and contamination of subsistence foods from pollutants would contribute to potential adverse human health effects. Concerns that subsistence foods could be contaminated could also affect human health.” Analysis in the Final SEIS has been updated to account for this revision.

Air and Water Quality.

To address imprecise language, BOEMRE developed a clearer standard, which is organized into two easily understood parts. The first part asks whether the action itself is contributing a significant amount of pollutants on its own, and is broken down into three subparts. Subpart (a) asks whether project-related emissions will amount to more than half the concentration of each pollutant (other than ozone) under the NAAQS. Subpart (b) asks whether project-related emissions will amount to more than half the maximum allowable increase under the PSD criteria. Subpart (c) asks whether the action will emit the precursor pollutants for ozone such that the analyst could expect that ozone to reach more than half the NAAQS. Answering any of these questions in the affirmative would trigger a significant impact.

The first part of the new threshold permits greater emissions of ozone without a finding of significance, as compared with the previous threshold. This increase is appropriate because ozone is not a pollutant that is directly emitted by any source, and the ambient air analysis does not include a dispersion simulation of ozone for comparison to the ozone NAAQS. Rather, ozone is a secondary pollutant formed later in time and sometimes further removed from the emission source. Ozone formation is a result of a photochemical reaction involving the necessary precursor pollutants, VOC and NOX, in the presence of sunlight. Initial emissions of VOC and NOX are not directly proportional to the maximum ozone concentration that ultimately forms, and the degree of ozone development is a function of the complex chemistry involved in the ratio of the VOC-to-NOX mixture (NRC, 1991). As such, the expected significance of ozone formation will be based on the project-level analysis of expected increases in emissions of VOC and NOX.

The second part of the revised threshold asks whether the project design concentrations, which are the pollutant concentrations caused by the project-related emissions, together with existing background concentrations, will violate the NAAQS. BOEMRE would consider significant those project-related emissions which are not significant on their own, but would surpass NAAWS thresholds when combined with background concentrations.

BOEMRE also clarified the terms and phrases used in the significance threshold. First, the new standard clarifies the phrase “area of at least a few tens of square kilometers,” and resolves ambiguity as to the location of such area. That clause now reads, “an area of at least 20 square kilometers on the nearest onshore area.” Second, BOEMRE defined the term “increase” to be the increase caused by project-related pollutant concentrations, which does not include existing background concentrations. Then, BOEMRE clarified the clause “exceeds half the increase permitted under the Prevention of Significant Deterioration (PSD) criteria or the NAAQS.” The increases allowed under PSD criteria are characterized by the statute as the ‘maximum allowable increase’ for a Class II area, which is the...
classification of the entire North Slope Borough and is directly related to the PSD criteria. While the amount of increase permitted is clear under PSD, it is not clear for NAAQS. So, the new definition describes an action as significant if it emits greater than half the NAAQS (except for ozone).

In addition to clarity, the new threshold also adds flexibility by not limiting the threshold to the current set of NAAQS pollutants, and thereby allowing the threshold to be updated with changes to the NAAQS as established by EPA.

In reviewing the water quality threshold, BOEMRE found the language unnecessarily technical. To improve the readability of the threshold, BOEMRE clarified that the threshold takes many different water quality effects into account. The first part of the definition clarifies the following language:

A regulated contaminant is discharged into the water column, and the resulting concentration outside a specified mixing zone is above the acute (toxic) State standard or Environmental Protection Agency (USEPA) criterion more than once in a 1-year period and averages more than the chronic State Standard or USEPA criterion over 25 square kilometers for a month.

BOEMRE simplified this standard to, “The action is likely to violate its National Pollution Discharge Elimination System permit.” Next, BOEMRE cleaned up the following clause:

The spillage of crude or refined oil in which the total aqueous hydrocarbons in the water column exceeds 1.5 ppm (parts per million), the assumed acute (toxic) criterion, for more than 3 days over at least 10 km2 and 15 parts per billion (ppb), the assumed chronic criteria, and the State of Alaska ambient-water-quality standard, for more than a month over 25 km2

The new standard, “In the event of a reasonably foreseeable accidental spill of crude or refined oil, the event will exceed total aromatic hydrocarbon or total aqueous hydrocarbon criteria for the Alaska marine- or fresh-water quality standards,” removes the reference to specific levels of concentrations, because the level of concentration where it is known a significant impact occurs may be changed by the state or the EPA over time.

Last, BOEMRE includes a third clause to catch any expected ecological effects that are not caught in the NPDES regulations. The new language is, “The action is otherwise likely to introduce changes in the physical, chemical, or biological characteristics of the waterbody, which cause an unreasonable degradation of the marine environment as determined in accordance with 40 CFR 125.122.” This clause captures any adverse impacts to biota, biological communities, protected species, unique habitats, or human health that would not otherwise be analyzed. The clause specifically references 40 CFR 125.122 which the EPA wrote to analyze whether there is an “unreasonable degradation of the marine environment.” By including this clause, BOEMRE now takes into account the full spectrum of potentially significant effects that could occur through the degradation of water quality.

Revisions to the significance thresholds for air quality and water quality did not change the conclusions of the Sale 193 FEIS or the Final SEIS.

**Significant versus Adverse.** The absence of a significant effect does not equate to “no effect.” Effects from activities can be adverse and noticeable before they reach the significance threshold. Furthermore, the cumulative effects analysis considers the combined effects of projected activities with other actions, acknowledging that individually insignificant effects can exceed that significance threshold when considered collectively.

**MMPA Standards.** The MMPA standard of “no unmitigable adverse impacts” is regulated by NMFS, who independently ensures that all activities in the Arctic Ocean, including oil and gas activities, comply with this standard. While BOEMRE lacks the regulatory authority to enforce this MMPA provision, the significance thresholds BOEMRE uses in its NEPA documents are, nevertheless, consistent with this standard. The significance threshold works together with substantive MMPA provisions to identify potential impacts to, and thereby help protect, subsistence
activities. If a NEPA document predicts significant impacts to subsistence, either the project would be altered to reduce potential impacts, or a mitigation strategy would be developed to help maintain the availability of subsistence foods. In addition, required lease stipulations, mitigation measures, and conflict avoidance measures, as well as conflict avoidance measures under MMPA requirements, are followed in locations where the subsistence hunt is affected. The IHA (Incidental Harassment Authorization) requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

**Issue 14. Air and water quality**

**Summary of Comments**

BOEMRE received several comments regarding air or water quality that are not otherwise addressed under other Issues within this Appendix. These comments are summarized below:

- The Clean Air Act should be enforced for OCS-related vessels.
- Any reduction in air quality should be considered significant (regardless of whether National Ambient Air Quality Standards [NAAQS] are exceeded.
- BOEMRE should clarify the scope of the air analysis performed for the natural gas development and production scenario and provide a basis for the conclusion that increases in pollutants due to natural gas development and production are likely to be small, local, and temporary. Further, BOEMRE should identify the applicable air quality standards against which it measured the anticipated air quality impacts and provide the basis for its determination of the applicable air quality standard.
- There are children that are not able to return to their Villages on the North Slope because the air is toxic to their lungs due to flaring, toxins, and the lack of scrubbers. These toxins must be affecting marine and other cell life as well.
- BOEMRE’s actions could introduce substantially more black carbon into the Arctic environment, where it is most likely to have the most dramatic effect. It is inappropriate to discount these impacts by analyzing black carbon emissions on a global scale.
- “Relatively” unpolluted is not well defined in the discussion of water quality of rivers.
- Section IV.E.2 should note that the NPDES Arctic General Permit for Oil and Gas Exploration is undergoing renewal and in the future there will be separate permits for the Chukchi and Beaufort Seas.

**Source of Comments**

- State Government
- Environmental Organizations
- Corporations and Industry Groups
- General Public

**Response to Comments**

**Air Quality Enforcement.** Air emissions from OCS facilities in Chukchi Sea would be regulated by the EPA, which has jurisdiction for OCS air quality as prescribed in 40 CFR Part 55. For facilities located within 40 km (25 mi) of the State seaward boundary, the air quality regulations would be the same as if the emission source were located onshore and, thus, the State of Alaska regulations would apply. For facilities located beyond 40 km (25 mi) of the State seaward boundary, the basic Federal air quality regulations apply.
Air Quality Analysis. The air quality analysis for the natural gas development and production scenario tiers from the air quality analysis in the Sale 193 FEIS. The SEIS used a reasonable, conservative estimate that annual emissions during the gas production phase would be less than 50% of the emissions during the oil production phase. This figure would likely be lower because with oil production only, there would be some gas re-injection. The estimate was based on the professional judgment of a BOEMRE air quality expert, with knowledge of historic and current OCS emissions data and analyses. The assessment used current NAAQS standards because the air quality standards that may be in effect 30 years from now are not known.

Significant Impacts. The Final SEIS includes an analysis of air quality that discloses the possible positive or negative impacts of a proposed federal action. Based on the severity of the impact, considered within the context of the affected region, a judgment can be made regarding the potential for significant impacts (40 CFR Part 1508.27). The severity of the impacts in NEPA documents is measured by comparing the results of the analysis against some standard. The Council on Environmental Quality (CEQ), which governs the implementation of NEPA, authorizes the U.S. Environmental Protection Agency (EPA) to establish standards of measure. There are two sets of air quality standards that are relevant to federal actions proposed on the North Slope. These are the Significant Impact Levels (SILs) and the National Ambient Air Quality Standards (NAAQS). Comparison of project emission against the SILs are required under the Prevention of Significant Deterioration (PSD) program intended to maintain otherwise clean air resources in areas like the North Slope (40 CFR Part 52.21). The SILs define maximum allowable incremental increases in pollutant concentrations caused by the federal action, where emissions that equal or exceed the SILs will be considered to significantly deteriorate air quality; such a project could not be funded or approved by any federal agency. The second level of control is the comparison of an action’s emissions against the NAAQS, as required under the Clean Air Act, Section 176(c). The NAAQS reflect the maximum allowable ceiling established for healthful air relative to each regulated pollutant. The air quality assessment of the Proposed Action demonstrates emissions that would not equal or exceed the SILs and would be less than the NAAQS. As such, there is no potential for the Proposed Action to cause harm to human health, environmental resources, or to damage property. Consequently, the air quality impacts are not considered significant. The comment is not clear as to what standard was used to constitute a significant impact, if not the SILs and the NAAQS.

Toxic Air. BOEMRE is not aware of any toxic levels of air contaminants in the communities on the North Slope. This comment has been brought to the attention of the Environmental Protection Agency.

Black Carbon. Potential effects to the environment (both globally and locally) from black carbon emissions are analyzed within Air Quality sections. Additional information and analysis regarding black carbon emissions and their potential effects has been incorporated into the Final SEIS.

Water Quality Analysis. The statement that water quality in the main rivers that flow into the Arctic marine environment remains relatively unpolluted is a general statement providing context by summarizing the more detailed analysis in Section III.A.5 (Sale 193 FEIS), which is incorporated by reference. The reader is referred to the Sale 193 FEIS for more detailed discussion of water quality.

NPDES Permitting. Additional language has been inserted into Section IV.E.2 to reflect upcoming changes to the NPDES Arctic General Permit for Oil and Gas Exploration.
**Issue 15. Impacts on marine ecosystems and habitats.**

*Summary of Comments*

Three comments present issues related to marine ecosystems and habitats that are not addressed in other portions of this Appendix. The first identifies two broad categories of information that should be considered essential:

- Information on the distributions and life histories of species which are critical in marine food webs, as well as how loss of sea ice will influence these species. There is a lack of even basic abundance estimates for species such as Arctic cod and Arctic cisco.
- Information on conducting quantitative risk and impact assessments. There is insufficient information about the distribution and productivity of plankton, benthic organisms, fishes, seabirds, the response of marine mammals to noise, ecological changes likely to be caused by sea ice loss, and other basic environmental parameters to support quantitative evaluation of potential and actual impacts from offshore activity, including oil spills. Without such information, risk and damage assessments and projections are reduced to speculation.

Another comment recommended that site-specific ice gouging surveys should be completed prior to leasing.

*Source of Comments*

- Environmental Organizations
- General Public

*Response to Comments*

**Essential Information.** The Final SEIS uses best available science to gauge the potential impacts to marine ecosystems and habitat that may result from the natural gas development and production scenario and from the hypothetical VLOS scenario. A wealth of background information on the marine ecosystems of the Chukchi Sea and factors relevant to risk assessment is also provided in the Sale 193 FEIS, which is summarized and incorporated by reference in the SEIS. Regarding the issue of whether missing information is essential to making reasoned choices among lease sale alternatives, the reader is referred to Appendix A of the SEIS, which compiles the results of BOEMRE’s comprehensive analysis of incomplete or missing information (1502.22 analysis). Specific discussion of every item of incomplete information indentified in the Sale 193 FEIS is contained therein. Response to related comments is provided in Issue Category 27 of this Appendix.

**Ice Gouging.** Requiring site-specific ice gouging surveys prior to leasing is not logistically practicable given the relatively large size of lease sale areas, cost, environmental conditions, etc. Nor would this requirement be warranted by environmental concerns or other reasons apparent to BOEMRE. Site-specific shallow hazard surveys that occur prior to any seafloor-disrupting activity are adequate to address any expressed concerns.

**Issue 16. Impacts on fish.**

*Summary of Comments*

Several comments regarding impacts to fish were received.

One comment provided a lengthy critique of the fish analysis in the Draft SEIS, focusing on the following points:

- BOEMRE needs to conduct a block-by-block analysis of the Chukchi Sea Planning Area, investigating adverse impacts associated with leasing blocks where rare fish species occur,
and needs to consider removing lease blocks where rare fish occurrences are documented from past studies.

- The recovery of local fish populations from significant adverse impacts cannot be assumed prior to conducting a detailed metapopulation analysis.
- Contrary to assertions in the 193 FEIS, there is potential for significant impacts to rare fish species in the Chukchi Sea Lease Sale 193 area.
- Not enough information is known to confidently develop areas within the Chukchi Sea without risking the regional extirpation of certain fish populations. Blocks should not be leasable or their seafloors modified unless more information is gathered indicating the species (1) has more populations in the Chukchi Sea Planning Area, (2) is more abundant than previous data indicate, (3) has a broader distribution than several point sampling sites, and (4) has known habitat requirements are not unique to that block.

Another comment asserted that information on essential habitat for the most sensitive early life stages of all three commercial fisheries species identified in the SEIS (page 39) is essential prior to leasing.

Two comments criticized the SEIS’ analysis of potential impacts resulting from the gas pipeline where it makes landfall. These comments suggest the following:

- There is no scientific discussion of currents, expected changes to water temperature and salinity, alteration of coastal currents that may affect migrations and water quality, changes to beach erosion and sedimentation, moving ice, the highly productive nature of coastal polynya areas, and impacts to Essential Fish Habitat.
- Adverse effects have been noted from similar projects in the Beaufort.

Another comment makes two points about the importance of offshore areas and the effects of seismic activities on salmon:

- Offshore areas of Arctic are very important as habitat for juvenile salmon. There are enormous schools of salmon that congregate here.
- Past seismic activities have altered the migration of salmon and scattered them into more northern rivers that do not normally get large runs.

A final comment takes issue with the finding in Appendix A that four particular items of incomplete information identified in the Final EIS are not considered relevant to reasonably foreseeable significant adverse impacts.

**Source of Comments**

- Federal Government (NMFS)
- Environmental Organizations
- General Public

**Response to Comments**

**Adequacy of Information and Analysis.** BOEMRE agrees that protection of rare fish and early life stage habitat, the ability to predict recovery rates of local fish populations, and avoiding significant impacts are all legitimate scientific concerns. Additional data on these subjects will continue to be sought and incorporated into NEPA analyses. However, the Final SEIS concludes that natural gas development and production would not cause significant adverse impacts on fish. Because no significant adverse impacts would occur, conducting a detailed metapopulation analysis is not necessary at this time. Regarding other types of information asserted to be missing, the reader is referred to the 1502.22 analysis provided in Appendix A of the Final SEIS, which demonstrates no additional information (including additional information on recovery rates, locations of regionally
rare fish populations, or potential early life stage EFH) is essential to a reasoned choice among alternatives.

In July 2011 BOEMRE submitted an EFH Assessment to NMFS regarding proposed leasing and exploration activities in the Chukchi Sea.

**Impacts to Juvenile Salmon in the Chukchi Sea.** BOEMRE recognizes that the Arctic offshore, particularly the Chukchi Sea offshore, is important to juvenile salmon. Many sources of information, both western science journal articles and shared traditional knowledge, document the existence and importance of Pacific salmon in the Chukchi Sea and the freshwater rivers and streams along the Chukchi coast.

The many salmon-spawning rivers, streams and lagoons along the Chukchi Sea Coast and Western Beaufort Coast are indicative of the numbers of juvenile and adult salmon that rely on the Chukchi offshore waters for some portion of their lives. Chukchi coastal rivers and lagoons such as the Kuk, Kokolik, Utukok, Ikpikpuk and Kukpowruk rivers, and the Kasegaluk Lagoon along the Chukchi Sea coast are known to be important to spawning pink salmon (ADFG, Anadromous Waters Catalog, 2011). Juvenile pink and chum salmon were captured in high numbers in the Chukchi offshore environment in 2007 (Moss, et al., 2009). Subsistence take of salmon in the Chukchi coastal waters has been recorded in several documents compiling traditional knowledge (Braund 2010, 2011; Woods and Carothers, 2011). The BOEMRE welcomes the commenter to share additional local knowledge regarding juvenile salmon occurrence in the nearshore and offshore Chukchi and Beaufort seas.

**Impacts to Salmon from Seismic Activities.** Salmon have been reported by several sources, both western science journals and compilations of local and traditional knowledge, to be occurring farther north in Arctic rivers, streams and the marine environment. In many of these reports, warming sea temperatures and decreases in sea ice are attributed to the salmon movement, range extensions in marine waters and entry into previously-undocumented freshwater spawning areas. The commenter reports that the movement of salmon into farther north rivers is attributable to past seismic activities. Seismic activity has been shown in some western science publications to affect fish behaviors. To date, however, the shift of large groups of migrating salmon at sea due to seismic activities has not been tested. BOEMRE is currently working with university faculty and other agency staff on acoustic effects on fish and welcomes local knowledge on this topic to help inform study development and interpretation of results.

**Minor Revisions.** Minor modifications have been made to portions of the Final SEIS addressing water quality, fish resources, and Essential Fish Habitat to expand upon the analysis, increase accuracy, or resolve ambiguity. This includes clarification of potential impacts associated with the coastal landfall of an offshore natural gas pipeline.

**Relevance of Incomplete Information to Significant Effects.** Appendix A presents detailed analysis of each item of incomplete or missing information mentioned in the Sale 193 FEIS. Of the four particular items referenced in the comment, none were determined relevant to reasonably foreseeable significant adverse effects from the particular proposed action analyzed in the Sale 193 FEIS and Final SEIS. It should be mentioned that a relative lack of studies on a particular subject does not establish a nexus between that subject and potential significant effects from oil and gas leasing. Sufficient explanation of each determination at issue is provided in Appendix A. Additional responses pertaining to the general issue of incomplete information is provided in Issue Category 27.

**Issue 17. Impacts on Endangered or Threatened species.**

**Summary of Comments**

Several comments addressed Endangered or Threatened species, as follows:
• It is unclear what new information regarding whales (sightings of fin whales, humpback whales, or both) resulted in re-initiation of ESA consultation with the NMFS for OCS activities.

• Section 7 consultation should be reinitiated in light of recently-designated polar bear Critical Habitat. The SEIS should be put on hold, if not canceled, pending completion of consultation, and BOEMRE should re-initiate full, formal consultation as opposed to incremental consultation.

• The conclusion on page 100 of the Revised Draft SEIS that impacts to polar bears would be minimal is not consistent with studies that demonstrate the harmful effects of oil on polar bears.

• Because new data shows significant use of the proposed lease sale area by bowhead whales, there is an increased likelihood that noise and disturbance will be greater, such that vessel strikes may now become an important source of injury. BOEMRE should incorporate new information regarding the migratory pattern of bowhead whales and impacts to whales from geophysical operations, anthropogenic noise sources, and vessel strikes.

• BOEMRE should develop an alternative that requires the use of new and improved technologies (such as survey equipment that does not depend upon seismic waves) that would mitigate impacts to bowhead whales.

• Agency analysis regarding the levels of sound that bowhead whale can with stand are flawed. Traditional knowledge teaches that bowheads are very sensitive to noise.

• There is no mention of the yellow-billed loon, a candidate species under the ESA, in the Threatened and Endangered Marine and Coastal Birds section of the SIS.

• The SEIS should include more thorough analysis of the impacts to bowhead whales resulting from an oil spill by addressing MMPA requirements. This comment notes that the MMPA requires mitigation efforts to demonstrate how an oil spill will not result in take of the bowhead whale.

• The SEIS must disclose and provide more analysis of the incomplete information pertinent to understanding bowhead breeding, feeding, and migration habitat.

• The low recovery rate off bowhead whale requires more careful examination of potential effects from a large oil spill.

• The SEIS should explain the exact number of threatened Steller’s or Spectacled eiders that industry can “take.”

• Seismic activities can harass bowhead whales, creating risks to the resource as well as subsistence.

• The agency lacks substantial support for its statement that “at present, available data does not suggest that strikes of bowheads by oil and gas-related vessels will become an important source of injury or mortality” (SEIS at p. 95). More analysis is needed.

• The VLOS analysis needs to explain the circumstances under which “some cetaceans may require three or more generations coincident with restored and unaffected habitat to restore distribution and populations,” and analyze whether these conditions will in fact occur.

• The statements in Section III.B.4 regarding bowhead migration through the lease sale area should be clarified to further distinguish between spring and fall migrations.

One comment suggested two categories of information with respect to endangered and threatened species that it found essential to a reasoned choice among alternatives:
• Information on how distribution of species of concern (including ESA candidate or listed species) may shift due to climate change. The ability to predict such shifts is deemed necessary to evaluate the life-cycle impacts of offshore development and infrastructure.

• Information that would allow BOEMRE to analyze the importance of the deferred areas to bowhead whales. This information is deemed essential in light of admittedly limited recent data on distribution, abundance, and habitat use in the Chukchi Sea, as well as the stated purposes of the deferral areas.

One comment warned against assuming that larger deferral areas would decrease environmental effects. While increasing the deferral area would likely move development and infrastructure offshore, the comment stated that impacts to bowhead whales will not necessarily be reduced. The increase in distance may increase marine vessel and aircraft traffic and, in turn, increase risk and adverse impacts. This comment called for more in-depth discussion within Section II.D.3 of the balancing of risks and impacts associated with a larger deferral area. The current deferral area, along with applicable mitigation measures, provides ample protection to marine mammals and subsistence activities. Given the potential impacts associated with moving facilities further offshore, it is debatable whether a larger corridor would really decrease adverse impacts.

**Source of Comments**

• Tribal Governments and Alaska Native Organizations
• Environmental Organizations
• Local Governments
• Corporations and Industry Groups
• General Public

**Response to Comments**

**Information Gaps.** BOEMRE takes very seriously the recognition of information gaps and scientific knowledge in the Arctic regarding species and their habitats, and is an aggressive participant in initiating and completing research efforts to address such information gaps. BOEMRE has thoroughly investigated the current information and finds it sufficient to assess the potential effects of leasing in the Chukchi Sea and the resulting level of activities specified in the analysis scenario. BOEMRE, NMFS, and FWS continually evaluate activities and monitoring to determine and improve effectiveness in practices to protect marine animals, and will continue to assess and include new data as it becomes available for future environmental analyses.

**ESA Consultation – Whales.** Prior to the release of the Sale 193 FEIS, NMFS did not consider fin or humpback whales to be present in the action area. To this end, Section III.B.4 states: “During the 2006-2009 open water seasons, marine mammal observer (MMO)-monitoring associated with seismic surveys, barging, and marine research in the Chukchi Sea documented sightings of fin whales and humpback whales.” In a letter dated December 3, 2007, BOEMRE proposed to re-initiate ESA consultation with NMFS for OCS activities. Chapter VI of the SEIS contains additional information regarding ESA consultations associated with Lease Sale 193.

**ESA Consultation – Polar Bears.** BOEMRE will meet all of its Section 7 responsibilities in terms of polar bears and their newly-designated Critical Habitat (75 FR 76086 [7 Dec 2010]). BOEMRE has conferenced with FWS since Critical Habitat was first proposed on October 22, 2009. Now that Critical Habitat has been designated, BOEMRE has reinitiated consultation with the FWS. Incremental consultation is appropriate and will continue concurrent with BOEMRE’s NEPA processes. New language has been added to the Final SEIS recognizing the designation of Critical Habitat units and, in particular, addressing terrestrial denning habitat (CH Unit 2) as it relates to
natural gas pipeline construction. Chapter VI of the Final SEIS contains additional information regarding ESA consultations associated with Lease Sale 193.

**New Information – Whales.** BOEMRE acknowledges new data regarding the movements of individual bowhead whales during the fall/winter in the Chukchi Sea. BOEMRE has included in the Final SEIS the available published new information from COMIDA (2009, 2010, 2011) and from Clarke et al., (2011) survey data, satellite tagged whale and traditional knowledge investigations (Quakenbush et al., 2010a; Quakenbush, Small, and Citta, 2010), and required industry monitoring reports. We have thoroughly evaluated the potential and anticipated effects upon bowhead whales and their habitat use patterns from oil and natural gas operations including geophysical operations, anthropogenic noise sources and vessel strikes. This information supports BOEMRE’s understanding of seasonal whale movement patterns. Quakenbush et al. (2010) and Quakenbush, Small, and Citta (2010) indicated that all satellite tagged whales travelled through the Lease Sale 193 area, most whales crossing the area in less than a week. Quakenbush et al. (2010) and Quakenbush, Small, and Citta (2010) discuss the considerable limitations of these data: small sample sizes relative to the total population sex and age structure, sample timing, and other biases. While the data is important to our understanding of bowhead whale biology, a more robust data set and, over time, sampling that is representative of the population, is needed to provide for more conclusive analyses. Further, the authors concluded that “the fall migratory corridor between Barrow and the Bering Strait is poorly defined.”

**Vessel Strikes.** There are a number of factors to be considered when evaluating the risk of vessel strikes. Under certain circumstances, vessel noise and traffic can result in avoidance behavior by bowhead whales. Anticipated traffic by large vessels during oil and gas activities—such as seismic surveying operations, sea lift operations, moving drilling ships, and icebreaking—involves speeds of 4-6 knots. The majority of documented vessel/whale collisions and injury occur at speeds of over 10 knots (NMFS, 2004). Support vessels and vessels in transit to and from activity areas can travel at speeds greater than 6 knots. These OCS-related vessels have marine mammal observers to dictate reductions in speed, course alteration, and distance buffers between vessels. These measures (marine mammal observers) are consistently required by NMFS within Incidental Harassment Authorizations and by FWS in Letters of Authorization issued under MMPA for the Chukchi Sea region, and are intended to reduce the likelihood of collision-related injury and mortality to marine mammals. Therefore there is little likelihood of increasing collisions and other injuries from these vessels in the Lease Sale 193 area. Vessel activity could increase in remote parts of the Lease Sale 193 area where vessel activity was nearly absent in the past; however, injury and mortality from vessel interactions with marine mammals are currently negligible and are anticipated to remain so. The Final SEIS has been revised to augment the analysis of potential effects from vessel strikes.

**Alternative Technologies.** BOEMRE encourages use of alternative technologies for oil and gas exploration and is currently performing an analysis of such technologies for the Environmental Impact Statement on the Effects of Oil and Gas Activities (Seismic Surveys and Offshore Exploratory Drilling Activities) in the Arctic Ocean (U.S. Chukchi and Beaufort Seas) as a cooperating agency with NMFS, who is the lead agency. Alternative seismic survey sound sources analyzed to date are not adequate to replace airguns as a tool for oil and gas exploration. These technologies are neither fully developed (to penetrate to the depths needed for oil and gas assessment) nor are they commercially available at this time. BOEMRE conducts technical reviews and environmental assessments for all proposed OCS operations in Alaska in accordance with 30 CFR 250 and 30 CFR 251 and, in cooperation with NMFS and FWS, produces measures to mitigate impacts to the bowhead whale and other marine mammal species.

**Yellow-billed Loon.** The yellow-billed loon was identified as a candidate species after publication of the Sale 193 FEIS. The SEIS makes a distinction between summarized information from the Sale 193 FEIS and new information introduced in the SEIS. The yellow-billed loon and its current status under
the ESA are discussed in New Information subsections within III.B.4 and III.B.5, and in subsection IV.C of the Final SEIS. Potential impacts to loons from natural gas development and production activities are analyzed in Section IV.C.9, Marine and Coastal Birds.

**Climate Change.** It is acknowledged that species ranges, oceanographic/atmospheric parameters, and ocean productivity shifts are likely to occur as result of climate change and, indeed, we are observing and monitoring such changes. As such changes manifest themselves, we must monitor and evaluate them and respond with appropriate protective actions. The Sale 193 FEIS and the Final SEIS use best available information to identify reasonably foreseeable components and trends of Arctic warming. An attempt to predict the exact changes that will occur over the next few decades would be highly speculative at this time. A strategy to assess and reassess activities over the time period and rates that the ecosystem changes occur, appears to be a prudent way forward to protect species and habitats. We cannot always predict with accuracy the rates or magnitude of changes, or in some cases how changes will develop. The same applies to energy development because we cannot predict with accuracy when or where resources will be found, the magnitude of such a discovery and whether development will occur, or if resources will be found or developed at all. This is the main reason for an incremental approach to energy development so that analysis at each phase of energy activity (planning, leasing, exploration, development and production) undergoes analysis specific to the circumstances present at the appropriate time.

**Bowhead Migration Patterns.** The protection of bowhead whales indicated in the various alternatives is focused on protecting well documented vulnerable time periods, habitats, and biologically sensitive life functions. These include the spring polynya system, where the majority of the bowheads migrate and nurture newborn calves in an ice-restricted area. The fall migration corridor remains poorly defined (ADF&G, 2010) and the bowhead migration is not as sensitive or constrained as during the spring period. There is no evidence supporting the deferral of additional specific portions of the Lease Sale 193 area to benefit bowheads during their fall migration.

Text changes were made to Section III.B.4 to clarify spring and fall migration and satellite tagged whale movement within the Lease Sale 193 area.

**Bowhead Sensitivity to Noise.** BOEMRE recognizes bowheads can be very sensitive to noise. Responses to noise and tolerance levels to various noise sources displayed by bowheads are variable depending on contextual variables such as whale activity (feeding, migrating, resting, nursing etc.) the composition of sex, age, and group demographics (i.e. cows with calves, single males, juveniles, etc.), past experience with similar noise, and the nature of the noise source and sound propagation environment at the time of exposure. The 180 dB re 1 μPa is the lower threshold established by NMFS for preventing injury to bowhead hearing, while the 160 dB re 1 μPa is the received level of sound established by NMFS, at which baleen whales display disturbance behaviors such as avoidance responses. These are not the maximum levels that bowheads can withstand, but rather are received sound levels at which protective mitigation measures are implemented to prevent injury (180 dB level) and to determine the potential exposure rates to noise levels that would result in behavioral responses (160 dB level) that may incur stress and energy expenditure to a majority of exposed individuals. BOEMRE deems the 180 dB and 160 dB thresholds as a sufficient gauge of potential impacts. NMFS’s development and use of these thresholds to regulate take under the MMPA and ESA corroborates this position.

**Low Recovery Rate.** We have carefully reviewed available literature regarding cetacean and bowhead whale contact, inhalation, ingestion, contamination with a large oil in the Lease Sale 193 FEIS, Section IV.C.1.f(1)g) and a very large oil spill (VLOS) in the Final SEIS, Section IV.E.7. We have evaluated the potential for oil spill occurrence, contact with bowhead habitats, subsequent potential for spill related injury and mortality to the Western Arctic bowhead population including
vulnerable sex and age classes. We have identified situational circumstances whereby an annual cohort may be implicated as well as longer term effects upon recruitment and reproduction.

**Conditions Facilitating Recovery.** The VLOS analysis evaluates effects of a hypothetical scenario that integrates widely differing variables in terms of spill location, trajectories under various conditional circumstances, and contact of Environmental Resource Areas (ERAs) that do not determine the degree of contact of specific ERAs. Gray whales, beluga whales and harbor porpoises are the cetaceans that could potentially require 3 or more generations to restore pre-spill distribution and populations. It would be speculative at this time to determine the interactions of all the factors and variables that are possible with a very large oil spill that may create an environment where three or more generation times is required for recovery. There are multiple sets of circumstances that could result in disruption and modification of the gray whale population and habitat in the Chukchi Sea. Gray whale displacement, redistribution, loss and rate of recovery of habitat (prey), direct loss of numbers through health related factors such as starvation and reproductive productivity that could be dependent upon a number of factors acting either alone or in combination that result from a VLOS. These factors could vary widely and include the temporal and spatial distribution of a spill; rates and fate of petroleum in relation to concentrations of gray whales; rate and longevity of injury, mortality, contamination and subsequent ingestion of contaminated prey; intensity and longevity of cleanup operations in key gray whale feeding or migration areas; proportion of the gray whale population injured, killed and/or displaced from a contacted ERA(s); gray whale success in finding adequate alternate feeding areas if needed. Pre- and post-spill monitoring of these factors is currently the means by which BOEMRE can evaluate the actual impact of, recovery and restoration of gray whale habitats and population. A similar approach applies to beluga whales and harbor porpoise. It would be presumptuous to determine the multitude of specific combinations of circumstances that could decrease or eliminate (short or long term) distribution, displace individuals or portions of the population, damage habitat and prey bases, or effect the rates at which restoration of these parameters take place if at all. Harbor porpoise numbers are few and mortality or displacement of local groups whose restoration may be dependent upon the pioneering capability of adjacent members of the population to restore distribution and population levels in damaged areas, recovery rates of localized seasonal prey. This could in recovery taking decades depending on the multitude of circumstances.

**Oil Spills, Bowhead Whales and the MMPA.** In the event of an oil spill, it is anticipated that adverse impacts would accrue to bowhead whales. Potential impacts are analyzed in the Sale 193 FEIS (in reference to a “large” oil spill) as well as the SEIS (in reference to a “very large” oil spill). To the extent that these impacts constitute unauthorized “take” of one or more bowhead whales, there would be a violation of the MMPA (and the ESA). “Take” under the MMPA includes both “harm” and “harassment,” and each of these thresholds in turn encompasses a variety of activities. All potential adverse impacts to bowhead whales (including impacts that may qualify as “harm” or “harassment”) are considered in BOEMRE’s NEPA documents, including the SEIS. However, specific determinations as to whether impacts exceed MMPA thresholds are a regulatory responsibility held by NMFS.

**Incomplete Information About Bowhead Whales.** Consistent with 40 CFR 1502.22, BOEMRE has disclosed and discussed all incomplete or missing information relevant to reasonably foreseeable significant adverse effects to bowheads and other environmental resources from natural gas development and production, as well as from a VLOS. For an example, please refer to the portion of Section IV.E.7 analyzing potential impacts to bowheads in the event of contact with oil. For additional discussion of what is known and not known about bowhead whale breeding, feeding, and migration habitat, one can refer to the Sale 193 FEIS, which the present document supplements, or to Appendix A.
**Steller’s Eiders and Spectacled Eiders.** Incidental take for Steller’s eiders and Spectacled eiders was identified on p. IV-125 of the Sale 193 FEIS (USDOI, MMS, 2007a; incorporated by reference) and in Section IV.C.8 Marine and Coastal Birds – Threatened and Endangered of this Final SEIS.

**Seismic Activities.** Detailed discussion and analysis regarding seismic testing is provided in the Sale 193 FEIS, which the present document supplements.

**Deferral Areas.** Applicable mitigation measures apply the best state of the technology to aircraft and vessel traffic to minimize adverse impacts to bowhead whales to negligible or low levels. We agree that increased travel distances could potentially incrementally increase exposure of bowheads to vessel and aircraft traffic; however, vessel and aircraft travel distances would not necessarily increase. Potential energy prospects, discoveries and development within the final lease area would remain static and not “move” development and infrastructure further offshore as result of an increased deferral area. An increased deferral area would effectively protect the proportion of bowhead whales that utilize habitats within additional deferral area where some activities (drilling, platform construction and operations, construction and operation of product gathering infrastructure) would no longer occur. Bowhead whales utilizing habitats within the lease area would be subject to the proportionally the same level of adverse impacts from development activities under the deferral area noted in Alternative II less the impacts that might have occurred in an increased deferral area.

**Impacts to Polar Bears.** Conclusions presented on page 100 of the Revised Draft SEIS concerned only those potential impacts that could occur via the natural gas development and production scenario. To date, impacts to polar bears in the Beaufort Sea from oil and gas industry activities appear to be limited to disturbance and exclusion from some localized habitat areas. There is no reason to assume that a different level of impact would occur from similar activities in the Chukchi Sea. Oil spill impacts, meanwhile, are discussed in the Sale 193 FEIS and Section IV.E of the Final SEIS.

**Issue 18. Impacts on birds**

**Summary of Comments**

One commenter asserts that the Analysis of Incomplete or Missing Information (SEIS, Appendix A) and natural gas development and production analysis inadequately assess potential impacts to birds, as follows:

- Regarding the 1502.22 analysis, the following information is essential for a reasoned choice among alternatives: information about how and when marine and coastal birds use coastal areas, especially given the acknowledged correlation between deferral corridors and potentially serious impacts to birds from a large oil spill; information that BOEMRE prepared in connection with its Section 7 consultation with the Fish and Wildlife Service on threatened spectacled and Steller’s eiders; several important studies pertaining to potential impacts to birds that were not incorporated into the Draft SEIS; information regarding long-term trends in marine bird distribution and variation due to climate change.

- BOEMRE has not sufficiently analyzed the effects of gas development and production on birds. Rather than avoiding substantive analysis by stating that later analyses and permitting processes will prevent impacts to birds, the agency should more specifically analyze the effects that disturbance could have on different species of birds, including threatened and endangered species. The SEIS should also consider increased predation, especially from increased populations of arctic foxes which may be attracted to development infrastructure.
• The apparent contradiction between the statement on page 102 that “[a]dditional facility footprints were no[t] considered necessary” and the statement on page 104 that the “natural gas scenario entail[s] expansion of the onshore facility” should be addressed.

• Given that predators could be attracted to infrastructure or additional human foods or garbage, unsupported conclusions that development will occur in a manner so as not to attract predators is incongruous with the component of the natural gas scenario which entails expansion of onshore facilities.

Source of Comments

• Environmental Organizations

Response to Comments

The Analysis of Incomplete or Missing Information (Final SEIS, Appendix A) determined—with respect to long-term trends in bird populations and variation due to climate change—that no incomplete information in the Sale 193 FEIS was essential to a reasoned choice between alternatives. Rather, the information and analysis within the Sale 193 FEIS was more than adequate to make clear distinctions between alternatives and support an informed decision. Additional datasets are not essential to making a reasoned choice among alternatives.

Patterns of Use within Deferral Areas. The distribution, abundance, and temporal use patterns of marine and coastal birds are described in the Chapter III, Description of the Affected Environment in the Sale 193 FEIS. Sufficient information was available to evaluate the benefits of deferral alternatives to marine and coastal birds, including the benefits of deferrals in regard to a large oil spill. Analysis on potential impacts under Alternative I is provided in detail on pages IV-134 through 145 in the Sale 193 FEIS.

With respect to the specific benefits of Alternative III to birds and important bird habitats, the Sale 193 FEIS explains:

This alternative would provide the largest deferral area and provide the greatest net resource benefits to marine and coastal birds. This deferral area would be in the form of a corridor on the shoreward margin of the proposed lease-sale area. The primary benefit of this corridor is that it would move sources of potential adverse effects further away from important bird habitats. The increased distance between offshore development and coastal bird habitats conceivably would decrease the percent chance of spilled oil contact, increase weathering of spilled oil prior to contact, and increase available spill-response time.

With respect to specific benefits of Alternative IV to birds and important bird habitats, the 193 FEIS explains:

This alternative has a smaller deferral area than Alternative III. The deferral area would be in the form of a corridor on the shoreward margin of the proposed lease-sale area. The primary benefit of this corridor is that it would move sources of potential adverse effects farther away from important bird habitats. The increased distance between offshore development and coastal bird habitats would conceivably decrease percent chance of one or more [large] spills contacting important bird habitats, increase weathering of spilled oil prior to contact, and increase available spill-response time. This alternative would provide the same types of net resource benefits as Alternative III, but at a reduced level.

ESA Consultation – Steller’s Eider. Information that BOEMRE prepared in connection with its Section 7 consultation with FWS on threatened spectacled and Steller’s eiders satisfies ESA requirements, requirements distinct from NEPA. BOEMRE analysts use comprehensive information and analysis to satisfy both of these obligations. Often this information and analysis is derived from the same sources and studies. The Sale 193 FEIS contained sufficient information (see Sale 193 FEIS
Sections IV.C.1.f, IV.C.1.g, V.C) on spectacled and Steller’s eiders to distinguish between alternatives and inform the decision maker about potential environmental effects.

**Distributions of Marine Birds.** The best available scientific information regarding changes in the distribution of marine birds is discussed in the Sale 193 FEIS. Additional information was incorporated into the Draft and Revised Draft SEIS and Section 7 consultation documents, as appropriate. NEPA does not require a listing of all the information that is considered, but not incorporated and specifically cited, within the environmental impact statement. Thus the lack of citation of a particular publication does not indicate that the information was not considered in the analysis. BOEMRE appreciates the list of citations provided by the commenter, but BOEMRE did not find any reason to revise the text based on these studies.

The commenter specifically references the Coastal Response Research Center (CRRC), which was established as a partnership between the National Oceanic Atmospheric Administration (NOAA), through the Office of Response and Restoration (OR&R), and the University of New Hampshire in 2004. The CRRC partnership stimulates innovation in spill preparedness, response, assessment, and implementation of optimum spill recovery strategies. The primary purpose of the CRRC is to bring together the resources of a research-oriented university and the field expertise of OR&R to conduct and oversee basic and applied research, conduct outreach, and encourage strategic partnerships in spill response, assessment, and restoration.

On April 22, 2010, the CRRC and NOAA’s Office of Response and Restoration completed a workshop on planning for (post-spill) NRDA (Natural Resource Damage Assessment) in the Arctic. According to CRRC 2010, outcomes from that workshop included the following:

- **Arctic Baseline Shifts:** Physical conditions and biological use of Arctic habitat are changing. Indications include Bering Sea fish moving north; walrus moving into the shoreline areas, polar bears moving into shoreline areas and tundra; changes in ice cover and thickness; and longer periods of tundra thaw.

- **Baseline Data:** A large body of environmental data was identified that has been collected at various locations and for several purposes (e.g., fisheries monitoring, oil and gas lease development). In order to maximize its usefulness for NRDA, this data must be synthesized and made publically available. Targeted additional data collection would also be useful.

**Long-term Data.** The commenter also mentions conclusions drawn by certain researchers participating in the Northern Oil and Gas Research Forum: Current Status and Future Directions in the Beaufort Sea, North Slope and Mackenzie Delta who described the value of future, long-term data sets, especially regarding lake chemistry and permafrost in coastal areas of the Beaufort Sea. The specific relevance of the proceedings in relationship to the Chukchi Sea is not clear. BOEMRE uses long-term datasets when such information is available. While these data sets do not exist for every resource, BOEMRE found that long-term data sets of this type were not essential for a reasoned choice between lease sale alternatives.

**Effects to Birds from Natural Gas Scenario.** Sections IV.C.8, IV.C.9, V.B.6, and V.B.7 of the SEIS analyze the potential impacts to birds associated with the natural gas development and production scenario. This analysis identifies all reasonably foreseeable potential impacts. More specific quantification of impacts is impossible at this time given lack of specific project locations or plans, the inherent uncertainties of environmental conditions 30 years from now when natural gas projects may commence, etc.

The potential that birds could be affected by increased predation due to natural gas development received additional analysis in the Final SEIS.
**Contradictions in Statements and Unsupported Conclusions.** The contradictions indicated regarding components of the natural gas scenario have been resolved and clarifying revisions are provided in the Final SEIS. Also, a NSB ordinance concerning food and garbage handling along with other requirements to prevent wildlife (especially brown and polar bears) access to human-use foods and garbage are anticipated to be in effect. It is inappropriate to conclude that these measures would be ineffective. While the Revised Draft SEIS indicated the shore facility may change to accommodate gas production, no new sources of garbage or human-use foods would be created.

**Issue 19. Impacts on marine mammals**

*Summary of Comments*

Several comments concerned marine mammal issues that did not fit within other issue categories of this Appendix.

One of these comments called for study of the effects of noise pollution on beluga in the Point Lay and Kotzebue Sound Area before any lease sale.

Another asserts that several types of information related to marine mammals and their habitats are missing from the Sale 193 FEIS and the SEIS and are essential for a reasoned choice among alternatives, as follows:

- **Knowledge of where Pacific walrus will be during summer.** This comment notes that while prior to 2007 walrus spent summers on sea ice in the Chukchi Sea, in 2010 walrus hauled out along the U.S. Chukchi coast. Also, a number of walrus used the Hanna Shoal area which is within the Lease Sale 193 area. The 2010 USGS study of walrus tracking and telemetry data is cited.

- **Knowledge of the areas in the Chukchi sea that are crucial for life stages of marine mammals,** especially in light of recent satellite telemetry data showing that movements of bowhead whales, beluga whales, walrus, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously anticipated.

- **Knowledge of the distribution and timing of movements of beluga whales in the Chukchi Sea,** including late summer distribution, fall-migration patterns, wintering areas, and areas that are particularly important for feeding.

This same comment went on to assert major inadequacies in the natural gas development and production analysis portion of the SEIS:

- **Failure to provide sufficient analysis of the effects that constructing a gas pipeline from the offshore facility to shore could have on marine mammals.** While the SEIS mentions that noise from construction could affect various species, it provides only a minimal description of the potential harm and unduly relies on avoidance and later processes to prevent harms.

- **BOEMRE should perform a complete analysis of the potential effects of the construction of a natural gas pipeline that takes into account the locations of important marine mammal habitat and the cost of excluding animals from that habitat.**

- **Failure to sufficiently consider impacts to polar bears.** The analysis fails to account for changes in the Arctic climate and ice extent and how this will affect polar bears, which may be more likely to become hungry, weak, or otherwise stressed. For instance, vessel and human-bear encounters (assumed in the SEIS to cause only minor disturbances to polar bears) may become more frequent and harmful.

- **Failure to provide additional analysis of effects on walrus.** BOEMRE’s own analysis shows that human safety considerations may result in aircraft flying at an altitude that can
startle walrus and cause walrus mortalities. Since low-ceiling clouds in the Arctic prevent compliance with the minimum altitude requirements with some frequency, BOEMRE essentially ignores this potential harm. Also, BOEMRE states that vessels can cause walrus to abandon haulouts but does not further address the potential for such disturbance.

One comment stated that the analysis should explain how impacts to subsistence use and marine mammal populations will be mitigated throughout the oil spill cleanup process and afterward, so as to preserve subsistence hunting opportunities and maintain current marine mammal populations.

Another comment stated a need for more analysis on the probability of vessel strikes and the attendant threat marine mammals.

One comment calls “incorrect” the statements that noises from 160-170 dB appear to cause avoidance by certain whales. For support, the comment references previous MMS NEPA and IHA applications recognizing that avoidance responses can occur at 120 dB.

Finally, one comment suggests that a recent study demonstrated that adult bearded seals feed in areas adjacent to the lease area for a few months during the period when there is open water (and when development activities would be occurring). The comment notes:

- This study has a small sample size but, if extrapolated, demonstrates the importance of this area to marine mammals.

**Source of Comments**
- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

**Response to Comments**

**Beluga and Noise.** A number of studies of the effects of ship and industrial noise on beluga have been done, including studies on impacts to beluga in the heavily traveled St. Lawrence Seaway (Scheifele et al, 2002, 2003, 2004, Schneider 2004), studies using captive beluga (Erbe and Farmer 2003), studies of industrial noise and beluga in Cook Inlet (NMFS, ongoing studies) and studies on ice breaker noise and other industrial noises on the Beaufort Sea population of beluga in Canada (COSEWIC, recovery and management plans). This information is already incorporated into the Sale 193 FEIS and Final SEIS. BOEMRE is not aware of any data which would indicate that beluga in the Point Lay and Kotzebue Sound area would be affected differently from these other populations.

**Sufficiency of Walrus and Beluga Information.** Regarding the sufficiency of existing information in making reasoned choices among lease sale alternatives, the reader is referred to Appendix A of the Final SEIS which compiles the results of BOEMRE’s comprehensive 1502.22 analysis. Specific discussion of every item of incomplete information referenced in the Sale 193 FEIS is contained therein. Additional explanation of the state of the current science and its implications for resource management decisions is provided below. It is well understood that walrus habitat use is largely determined by the availability of sea ice in the Chukchi Sea. Walrus will remain with the ice as long as it does not move northward of the continental shelf. Walrus will take advantage of any remaining floes as late in the season as possible, before moving to terrestrial haulouts. The large number of walrus hauling out near Point Lay in the summer of 2010 provides a recent illustration of this phenomenon.

As required by NEPA, if a specific infrastructure is proposed, further evaluation of the potential impacts of that development will be assessed. At that time, BOEMRE will have more information
Information on Habitat Preferences. Marine mammal habitat preferences are complicated; however, there is a great deal of information available on habitat preferences based upon water depth, season, ice type and ice coverage for all of the species mentioned. Recent tagging studies have furthered our knowledge base about speed and frequency of movements, and confirmed prior information about habitat preferences. Moreover, recent observations have confirmed our knowledge of established habitat preferences for walrus; the Revised Draft SEIS was modified to acknowledge this information. BOEMRE is confident that the Sale 193 FEIS and Final SEIS include sufficient information regarding marine mammal habitat preference upon which to make reasoned choices among lease sale alternatives. Recent studies assessing the variability of marine mammal movement confirm the current approach of deferring areas closer to the spring lead system (where there is a relatively well-defined migration corridor) but not other areas of the Chukchi Sea Program Area (which typically experience less concentrated and more variable use by marine mammals over the long-term).

BOEMRE has identified Hanna Shoal in the Sale 193 FEIS, the Final SEIS, and elsewhere as an area of importance to both walrus and gray whales at certain times of the year. There is sufficient information to inform the Secretary of the differences among alternatives so that he can make a well-reasoned decision. Additional research on bowhead, walrus, beluga, and seals, as well as fish species, benthic invertebrates, sea currents, temperature, salinity and other factors are underway, and will add additional detail. But this information is not anticipated to substantively change the baseline data already acquired.

Beluga Distribution. There is sufficient information available on the distribution and migration of beluga to make a reasoned decision among lease sale alternatives. For example, beluga use the spring lead system in their northward migration in spring and also use the Kasegaluk Lagoon area. This was one of the factors that led the Secretary to choose to defer a coastal corridor along the Chukchi Sea Planning Area from leasing.

Natural Gas Construction and Operation. The Final SEIS appropriately and sufficiently analyzes the effects of the construction and operation of an offshore pipeline resulting from natural gas development. The reader is reminded that effects from building a gas pipeline are not very different from the effects of building an oil pipeline. This activity was previously and thoroughly analyzed in the Sale 193 FEIS, which is summarized and incorporated by reference in the Final SEIS. Harm to marine mammals from construction of a gas or oil pipeline are limited to temporary disturbance due to noise and activity. It is possible that these activities will lead to some avoidance behavior, but significant impacts are not anticipated. Since gas/oil pipelines must be built in deep trenches to avoid the potential for ruptures from ice gauging, once the pipe is laid and recovered, that habitat is again available to benthic invertebrates, fish, and marine mammals. At this time, there are no production facilities or pipelines proposed in the Chukchi Sea. If a production facility or an oil or gas pipeline is proposed at a later date, additional analysis will take place at that point, which will include analysis of the precise proposed location. Mandatory adherence to MMPA (and for several species of marine mammals, ESA) regulations concerning take will further protect these animals if development occurs.

Vessel Strikes. The potential for vessel strikes to cause effects to marine mammals is analyzed in several portions of the Sale 193 FEIS and the Final SEIS. Additional language responding to comments regarding vessels strikes is provided in Issue Category 17. BOEMRE’s analysis finds little likelihood for vessels associated with OCS activities to collide with marine mammals. The potential
for increased shipping in the Arctic is identified as a component of Arctic warming and analyzed in Section V of the Final SEIS, Cumulative Effects.

**Polar Bears and Climate Change.** Analysis of the impacts of climate change on polar bears is provided in the Sale 193 FEIS and expanded on greatly in the SEIS. Currently, most polar bears remain offshore on the pack ice, while some come ashore. Current predictions of changes in sea ice extent suggest that the open water season will continue to get longer, and more polar bears may come ashore to await the formation of sea ice in fall. All studies to date indicate that vessels (other than ice breakers) avoid large ice floes and very rarely occur in the vicinity of polar bears. Moreover, vessels operating in conjunction with OCS oil and gas activities are required to avoid any marine mammals by distances prescribed by FWS and NMFS. Polar bears appear to be indifferent to the presence of ice breakers and may either approach or ignore the vessels.

BOEMRE does not regulate onshore oil and gas facilities; therefore, we do not analyze them in our NEPA documents except as contributions to cumulative effects. However, BOEMRE is not aware of any research indicating that oil and gas facilities draw polar bears. Polar bears do occur in the oil and gas fields as they are moving through the area, usually in nearshore areas. To date, the FWS has developed a very robust program to reduce interactions between polar bears and oil and gas operations, and there have only been two polar bears killed in defense of human life in the oil fields in Alaska, one in 1968 and one in 1990.

**Walrus.** A thorough analysis of possible impacts to walrus, including the potential for disturbance via aircraft and vessels, is available in the Sale 193 FEIS and summarized and expanded upon in the SEIS. As this comment suggests, more in depth and site specific NEPA analysis correctly takes place when we have a specific proposal for an activity. It is true that aircraft overflights may result in disturbance events and also that aircraft flight routes and altitudes are largely unrestricted under Federal Aviation Administration (FAA) regulations. However, aircraft and helicopter flights that take place in conjunction with BOEMRE-regulated activities have specific guidelines in place which greatly reduce the likelihood of marine mammal disturbance events occurring. Flights are generally routed a mile or more inland to avoid shoreline areas where walrus may congregate. Aircraft associated with OCS activities must also fly at 1500 feet or more above ground level, except if human safety considerations require otherwise. Similarly, all vessels operating under BOEMRE regulations must have marine mammal observers on board and must avoid approaching marine mammals or causing any disturbance events. These restrictions do not apply to other vessels operating in the Arctic. The current level of analysis within the Sale 193 FEIS and SEIS is sufficient given the thorough identification of potential harms and the relatively small chance that they would actually occur.

**Mitigating Adverse Impacts of Cleanup and Response Activities.** The SEIS identifies this potential issue when it notes that “Overall, oil-spill-cleanup activities, far from providing mitigation, more likely should be viewed as additional impacts, potentially causing displacement of subsistence resources and subsistence hunters.” However, in the event of a spill, BOEMRE would not have primary authority over the cleanup process, and cannot guarantee that subsistence hunting opportunities would be preserved. The typical mitigation for animals in the event of a spill is recovery and cleanup of spilled oil. Responders will continue these efforts unless directed otherwise by the Federal On-Scene Coordinator (FOSC). It is possible that other hunting opportunities in unaffected areas may still occur.

**Seals.** The referenced marine mammal tracking study is being conducted through the BOEMRE Environmental Studies Program. As such, BOEMRE is keenly aware of these study results with radio-tagged bearded and ringed seals. A map associated with this study has been incorporated into the Final SEIS (Section III.B.6, Figure 9). The map generally reflects fewer bearded or ringed seal occurrences in and around the Lease Sale 193 area, than in most other areas of the Chukchi Sea.
map depicts bearded seal locations mostly occurring south of Point Hope, while spotted seals were mostly detected off Point Lay, Wainwright, and Barrow, Alaska. Ringed seals were observed throughout the Beaufort and Chukchi Seas, however there were fewer occurrences in the Sale Area than in most other regions of the Chukchi and Beaufort Seas. In addition to ice seals, the map includes beluga and bowhead occurrences too. According to what is portrayed on this map, most ringed and bearded seal observations seem to occur between Kotzebue and Point Hope, indicating that the Sale Area does not have any noteworthy characteristics making it of particular importance to any of the ice seal species. This view is further supported by numerous surveys that have been conducted in the lease area over recent years (Brueggeman et al. 2010; Funk et al. 2010; Blees et al. 2010) that provide visual observations of marine mammals. Consequently the map confirms BOEMRE’s analyses.

Effects of Noise on Whales. BOEMRE recognizes that some baleen whales avoidance response behaviors can occur at 120 dB re 1 μPa received sound levels (Richardson, et al. 1999), that a majority respond at higher received sound levels at around and above 160 dB re 1 μPa, and that some may not respond until received levels are louder still. The onset of behavioral disturbance from anthropogenic noise depends on both external factors (characteristics of noise sources and their paths) and the receiving animals (hearing, motivation, experience, activity, demography, etc.), which makes it difficult to predict (Southall et al. 2007). Currently, NMFS uses 160 dB re 1 μPa at received level for impulse noises (such as airgun pulses) as the onset of marine mammal behavioral harassment. The Final SEIS has been revised to better reflect the concerns raised in the comment.

**Issue 20. Impacts on terrestrial mammals.**

**Summary of Comments**

Several comments specific to caribou were received and asserted the following:

- The Chukchi Sea coastline is important to the Western Arctic caribou herd for calving and insect relief.
- There are deficiencies in the Draft SEIS natural gas development and production analysis of potential effects to caribou. It is recommended that the Final SEIS incorporate additional analysis of the potential for these activities to disturb caribou and suggested incorporating analysis from several BLM studies of these issues.
- It is important to mention that potential impacts to terrestrial-mammal populations are tied primarily to the development and production stages of oil and gas activity. Exploration efforts are conducted offshore and do not include pipeline construction, ice roads, gravel roads, or permanent onshore facilities.
- The statement that terrestrial mammals will be displaced by 4 km of pipelines and roads is unsupported in the Draft SEIS. It appears that the distance identified in literature for avoidance of roads by caribou cows with calves (by Cameron in 2005) has been applied more broadly than the scientific data and literature support.
- BOEMRE should reference the ADF&G census of caribou herds, and in particular the Central Arctic herd, because it is the main herd that occupies and migrates through the North Slope oilfields annually. Since the beginning of tracking these animals in the 1970s their numbers have been up and down, most recently on an uptrend to 60,000 animals in 2008.

One comment contained a lengthy critique of BOEMRE’s analysis of effects from the construction and operation of pipelines. This comment focused largely on impacts to caribou. Specific concerns in this comment were asserted as follows:
• The 193 FEIS analysis of an oil pipeline does not provide the necessary analysis of the effects of a gas pipeline.
• The Draft SEIS provides no more than a cursory and incomplete analysis of the effects of the construction and operation of a gas pipeline.
• Even if the gas pipeline travels the same corridor as the oil pipeline discussed in the 193 FEIS, a second pipeline and additional compression facilities and maintenance activities will result in other effects, both individually and cumulatively with oil-related activities.
• Instead of providing a detailed analysis, the draft SEIS relies on later analyses and permitting processes to identify and prevent environmental harms.
• Information about the biological resources of an area and the effects of oil and gas activities on those resources is essential at the lease sale stage because it is at this stage that the agency has discretion to determine if, when, where, and how oil and gas activities may occur in a planning area. At later stages, the agency will already be invested in particular courses of action, and its discretion may be more constrained.
• In recent Integrate Activity Plan/EIS documents for the National Petroleum Reserve-Alaska (NPR-A), BLM identified numerous potential adverse effects of onshore pipelines to caribou. The BOEMRE analysis and conclusions in the SEIS are contrary to BLM’s.
• The BOEMRE analysis and conclusions in the SEIS are contrary to the National Research Council’s Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope (2003).

Source of Comments
• Tribal Governments and Alaska Native Organizations
• Environmental Organizations
• General Public

Response to Comments

Caribou. The potential for natural gas development and production activities to impact the Western Arctic caribou herd (WAH) is analyzed in Section IV.C.11 of the SEIS. Background information on the distribution and habits of the WAH (including discussion of areas used for insect relief and calving) is provided in Section III.B.7 of the SEIS. The very thorough discussion of these issues provided in Section III.B.7 of the Sale 193 FEIS is summarized and incorporated by reference in the SEIS.

The potential for an onshore gas pipeline and other natural gas development and production activities to impact caribou is discussed in Section IV.C.11 of the SEIS. Analysis of cumulative effects to caribou is provided in Section V.B.9 of the SEIS. As is explained in the SEIS, any overland gas pipeline construction would occur after the construction of an overland oil pipeline from the Chukchi coast to the TAPS. Consequently, the gas pipeline would use the existing oil pipeline right-of-way and disturbance area. The resulting effects from constructing a gas pipeline would be additive to those of an oil pipeline, albeit much less than the initial perturbation created by constructing an oil pipeline. Thorough analysis of the potential effects of an oil pipeline on caribou is available in Section IV.C.1.i of the Sale 193 FEIS. This analysis is summarized and incorporated by reference in the SEIS, providing context for the natural gas analysis and conclusions.

The referenced BLM studies are consistent with and in many cases confirm the analysis and conclusions of the Sale 193 FEIS and SEIS. Each of these documents acknowledges that caribou tend to avoid areas of intense activities, especially during the calving period, and that the zone of disturbance extends up to 2.4 miles from the road or construction area.
Despite the construction of several pipelines across calving grounds for the Central Arctic Herd (CAH), the herd has increased in number in the decades since the pipelines were constructed. The upward trend of CAH caribou may be indicative of a lack of lasting adverse effects from pipeline construction in the Prudhoe Bay project area and the surrounding fields.

**Impacts of Development and Production.** The SEIS acknowledges that potential impacts on terrestrial-mammal populations are tied primarily to the development and production stages of oil and gas activity (Final SEIS, Section II.D.1, Terrestrial Mammals):

> The primary potential effects of OCS exploration and development activities on terrestrial mammals would come from disturbance associated with ice-road and air-support traffic along pipeline corridors and near other onshore support facilities. Habitat alteration associated with gravel extraction (mining) to support the construction of offshore gravel islands and gravel pads for onshore facilities is possible. Effects could also come from potential oil spills contacting coastal areas used by caribou for insect relief, and for scavenging by grizzly bears and arctic foxes...

These statements specifically present the relevant effecters that could be expected to impact terrestrial mammals. This includes the potential for spills, and air traffic which may support exploration activity and development activity.

**Displacement.** The statement that terrestrial mammals will be displaced 4 km from pipelines and roads is supported by Cameron et al. (1992, 2005 cited in Joly et al., 2006), summarizing that caribou reduced their use of a 0-4 km zone around a road after its construction while increasing their use of a 4-6 km zone from the road, and may have some level of adaptability to oilfield developments if mitigations are implemented (Haskell et al. 2006). These references were added to the Revised Draft SEIS text, and the ADF&G caribou population surveys have also been incorporated and cited in the SEIS.

The SEIS appropriately and sufficiently analyzes the effects of the construction and operation of an overland pipeline resulting from natural gas development. The potential effects from the construction and operation of the oil pipeline across NPR-A are thoroughly analyzed in the Sale 193 FEIS; that analysis is incorporated in the SEIS by reference. Although the resulting effects from constructing a gas pipeline would be additive to those of the oil pipeline, they would be much less than the initial perturbation created by the earlier construction the oil pipeline. The effects of constructing and operating the gas pipeline would be very similar to and less than the effects associated with constructing and operating the oil pipeline.

**Regulatory Agencies.** A gas pipeline across NPR-A would be permitted and regulated by other federal agencies including BLM and the U.S. Army Corps of Engineers. The Sale 193 FEIS and SEIS assume that other federal agencies will appropriately fulfill their responsibilities. It is unknown what the requirements and mitigation measures will be 30 years hence; therefore, the Sale 193 FEIS and SEIS assume that the current requirements would be the minimum environmental protection level for future overland pipelines.

**OCS Lands Act – Four Stage Process.** The OCS Lands Act created a four-stage process for planning, leasing, exploration, and production of oil and gas resources in federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner.

The amount and detail of the information needed for a NEPA analysis depends upon the decision it is intended to support. A lease sale EIS provides an areawide-level analysis that is appropriate for to support a decision on configuration and requirements of an areawide-lease sale. In compliance with OCS Lands Act and DOI policy in 516 DM 15, BOEMRE conducts technical and environmental review on each exploration and development and production plan. BOEMRE completes a site-
specific NEPA review as appropriate at the exploration or development and production stage when specific and more detailed regional information is required and the location (site), timing, and proposed activities are known. Decisions on each proposed action resulting from Lease Sale 193 are based on the best available scientific information from proposal-specific technical and environmental reviews.

**Effects on Caribou.** The most current BLM document (BLM, 2008) stated:

Ground observations of caribou within the Kuparuk area from 1978 to 1990 indicated that caribou increasingly avoided zones of intense activity, especially during the calving period (Smith et al. 1994). Lawhead et al. (2004) reported that maternal caribou with calves were displaced from areas near both the Tarn and Meltwater roads during calving and up to two weeks post calving. Very few calves were observed within 1.2 miles of either road during the calving period and densities appeared to be reduced as far away as 2.4 miles. Traffic convoys on the Meltwater road was not effective at reducing calving displacement to less than 1.2 to 2.4 miles, or reducing the disturbance reactions of caribou within 1,640 feet of the road. Data analyzed by Cameron et al. (2002) suggested that having roads too closely spaced would displace calving activity within the oil field complex. Other studies (Roby 1978; Cameron et al. 1981, 1983, 1992; Pollard and Ballard 1993) and literature reviews (Cronin et al. 1994, 1998) indicate some seasonal avoidance of habitats within three miles of existing Prudhoe Bay area facilities by cows and calves during calving and early post-calving periods (May through June). The WAH and CAH caribou core calving ranges lie outside of the planning area, while the TLH caribou calving area is concentrated in the northern section of the planning area near Teshekpuk Lake.

In other words, caribou tended to avoid areas of intense activity, especially during the calving period and the zone of disturbance extended up to 2.4 miles from the road or construction area.

Despite the construction of several pipelines across calving grounds for the CAH, the herd has increased in number in the decades since those pipelines were constructed. The upward population trend of CAH caribou may be indicative of a lack of lasting adverse effects from pipeline construction in the Prudhoe Bay project and the surrounding oil fields.

BLM’s statement that “there could be reproductive consequences from extensive disruption of caribou [movement] during the insect-relief season” is not contrary to BOEMRE’s statements in the 193 Draft SEIS at p. 90 and the 193 Revised Draft SEIS at p. 108:

Research has suggested that caribou in arctic Alaska generally avoid areas within 4 km of oil-field roads after they are constructed (Cameron et al., 1992; Joly, Nellmann, and Vistness, 2006). However, avoidance is not absolute and caribou may habituate to infrastructure and human activity (Haskell et al., 2006).

The construction of roads and gravel pads may provide caribou with additional insect-relief habitat, particularly when there is little or no road traffic present. Conversely, the construction of roads and pipelines could provide vectors by which invasive species, parasites and new diseases could be introduced into the arctic environment (Kutz et al., 2004; Urban, 2006).

Caribou are somewhat tolerant of development and can habituate to developed landscapes. This is discussed in the SEIS, Section IV.C.11. BLM analyses generally support the conclusions of the SEIS, and are cited appropriately.

The SEIS acknowledges minimum height requirements for elevated pipelines (emphasis added):

Caribou successfully cross under pipelines that are elevated a minimum of 7 ft above the tundra, a requirement for onshore pipelines in the NPR-A (USDOI, BLM, 2006). Pipelines without adjacent roads and vehicle traffic are not likely to affect caribou movements”… (SEIS, IV.C.11)

BOEMRE analysts have reviewed the National Research Council’s Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope (2003) and incorporated and considered the information therein as appropriate. In relation to the potential effects to caribou from onshore oil and gas activities, the NRC report states:
The decrease in herd size between 1992 and 1995 may reflect the additive effects of surface development and relatively high insect activity, in contrast to an increased in the herd’s size from 1995 to 2000, when insect activity was generally low... (NRC 2003, p 116)

The calving grounds for the TLJ are located within the Teshekpuk Lake Special Management Area portion of NPR-A. Approval of a pipeline corridor through this protected area is not reasonably foreseeable in light of the area’s special status and abundance of wildlife, the ongoing attempts to permanently exclude the area from any oil and gas development activities, and the heightened engineering difficulties. The WAH and CAH calving areas lie outside of what could be considered viable pipeline corridors (BLM 2003; BLM 2008). Consequently, no caribou calving areas are expected to be disturbed by the presence or construction of an OCS-related natural gas pipelines.

**Issue 21. Economy, employment, and demographics.**

**Summary of Comments**

Many comments focused on the potential economic impacts of the Lease Sale 193. These comments discussed positive and negative impacts on local, regional, state, and national scales:

- Regarding positive local and regional impacts, Lease Sale 193 would lead to large economic benefits for the North Slope and its villages through increased jobs and revenues such as taxes. North Slope Borough has benefitted greatly from higher tax revenues resulting from oil and gas activities (in the Prudhoe Bay area), and petroleum revenues have enabled more services and better schools. The North Slope Borough population is growing, and this growth will require additional funding. Offshore activities would help create more jobs in the villages and would encourage younger generations to stay in or return to North Slope communities.

- Regarding negative impacts, incentivizing offshore development decreases the chances that local government can derive tax proceeds; actual opportunities for Natives in the North Slope oil and gas industry have been limited in terms of employment rates as well as job positions; and environmental impacts of leasing may diminish Arctic tourism values.

- Offshore activities, including potential activities stemming from Lease Sale 193, are important to Alaska and its economy. Many such comments cited a 2009 study by Northern Economics Inc. and the University of Alaska, which found that new offshore energy in Alaska would produce an average of 35,000 jobs—both directly and indirectly generated by increased offshore production—over the next 50 years for the state of Alaska alone, with a total payroll of $72 billion (2007) over the 50-year period.

- Another frequently cited study by Northern Economics and the University of Alaska estimates an annual average of 54,700 new jobs would be created and sustained through the year 2057 from the Alaska OCS, with 68,600 during production and 91,500 at peak employment. Total payroll through that time would be $145 billion ($63 billion to employees in Alaska and $82 to employees in the rest of the U.S.). Roughly, $193 billion in government revenue would be generated ($167 to the Federal government, $15 billion to the State of Alaska, $4 billion to local Alaska governments, and $6.5 billion to other state governments).

- The oil and gas industry is extremely important in the State of Alaska, accounting for more than 41,000 jobs (which equates to 9.4 percent of employment and 11.2 percent of wages).

- Development of the OCS would generate approximately $5.8 billion in additional state and local revenues.

- Moving forward with OCS development would: maximize the value of resources under agencies’ management; enhance the real option value of TAPS and other critical
infrastructure; reduce regulatory uncertainty, which is destroying resource value; and set high standards for developing the Arctic.

- There could be dire impacts to the Alaska economy in the event that the lease sale is not affirmed:
  - Chukchi Sea resources are essential to keeping the Trans Alaska Pipeline System at operational capacity.
  - If the TAPS goes away, there is no North Slope economy.
  - Delay of the lease sale process jeopardizes hundreds of jobs and contracts for local Alaskans.
  - Uncertainty regarding oil and gas activities in the Alaska OCS discourages continued investment.
  - Lack of access to resources keeps Alaska dependent on the federal money.

- The jobs figures (quoted by other commenters) are misleading: only a fraction of the jobs would be the direct oil industry positions implied, and it is likely that many of those slots would be filled by workers not now residing in Alaska.

- The federal government should share a portion of the proceeds from any development with the State of Alaska through revenue sharing.

- Regarding national issues, the energy sector is very important to the domestic economy, and new offshore development in Alaska's Chukchi Sea would help stimulate America's economic recovery by generating thousands of new, high-paying jobs (in industries from steel and pipe manufacturing to shipping to computer technology) throughout the 50 states.

- Renewable energy is an emerging industry that can provide good jobs for workers currently in the oil and gas industry, as well as others.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Overall, Chukchi Sea exploration, development, and production will contribute to the large role that petroleum plays in the Alaskan economy, creating jobs directly and indirectly, through revenues accruing to state and local governments, and through state savings accounts established with oil revenues. Increased revenue, employment, and personal income provide new opportunities and an increased capacity for local governments to meet public services needs and improve the quality of life for local residents. A more diversified economy can help offset the emigration of population from rural areas (caused predominantly by the pursuit of economic and education opportunities in urban areas) and help local governments address fundamental aspects of quality of life, such as maintaining traditional culture and subsistence lifestyles, while also providing for human health, public safety, education, and public sanitation.

Job Creation. The Sale 193 FEIS as well as the SEIS (in particular Section IV.C.13) found that oil and gas exploration, development, and production activities within the Alaska OCS would indeed create jobs and many economic benefits for the U.S. economy, the State of Alaska, the North Slope
region and various governmental entities. BOEMRE analysts have reviewed the referenced Northern Economics Inc. and University of Alaska (UAA) study and found it to be a thorough analysis of the potential economic effects if OCS oil and gas development and production occurred in offshore Alaska. Because the UAA study analyzes a different development scenario than does the SEIS, and because the employment numbers reflect assumptions of activities in several other planning areas outside the Chukchi Sea, its conclusions regarding net job growth and payroll are not incorporated into the SEIS.

Increases in employment from OCS activities could more than offset employment losses from declining production on State lands. While a relatively small share of the direct jobs are expected to be taken by local residents, most of the infrastructure, government, and support jobs are expected to be taken by local residents. The proposed sale will also help extend the life span of TAPS, which BOEMRE recognizes as critical to the State and local economy. Prolonging the lifespan of TAPS would generate employment opportunities in a wide array of industries throughout the State.

**New Revenues.** Any OCS development resulting from the proposed sale will generate state and local revenues in several ways: (1) direct revenues from property and corporate income taxes, (2) sharing of lease revenues with the Federal Government (e.g., coastal impact assistance, states’ share from offshore leases [section 8(g) revenues], etc.), (3) revenues from taxes and fees paid by those working directly in OCS-related jobs and those working in businesses that support OCS activity; and (4) revenues from taxes and fees paid by non-OCS petroleum activities. The SEIS projects approximately $90 million of NSB property tax revenue over the depreciable life of the shore based gas support facilities and overland pipeline. This calculation used a straight line depreciation rate of 12.5% per year over 8 years. Calculating depreciation over the useful life of the asset would likely result in even larger revenues. A note to this effect has been inserted into the SEIS.

**No Action.** The economic benefits delayed or lost under the No Action Alternative would particularly affect the State and local governments in Alaska. For example, assuming the lost production of 1 billion barrels that could be sold at current prices of $80/barrel represents a loss in gross income of $80 billion. Infrastructure costs could be $10 billion, with much of this amount spent in Alaska for materials and labor. Gas production of 2.25 Tcf sold at $5/Mcf represent a loss in gross income of another $11.25 billion. A project lasting nearly 50 years could substantially benefit the local and State economy.

**Renewable Energy.** Issues pertaining to the economic impacts from renewable energy development are important, but exceed the scope of analysis in the Final SEIS.

**Issue 22. Responsibilities to the Arctic people and environment.**

**Summary of Comments**

Many comments addressed BOEMRE’s responsibilities to the Arctic people and environment. These comments focused on the following themes:

- The Draft SEIS does not satisfy BOEMRE’s obligation to protect America’s Arctic; BOEMRE’s first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean.
- BOEMRE must not allow drilling to go forward unless it has the scientific knowledge to say that drilling is safe, and/or until a properly funded department is formed and comes up with solutions to all possible accidents.
- The Clean Water Act and Clean Air Act charge the government with a Public Trust Doctrine and a Tribal Trust Doctrine. It is a shame that Native people are forced to use the courts to ensure that laws are upheld.
Several comments expressed the desire to be involved in decisions that affect the Native way of life:

- The people of the Arctic need to be involved in all of these decisions to protect their way of life.
- Arctic people need to have a seat at the table to improve decisions. So far, communication, partnership, and providing information have made a change.
- “I love being Iñupiat. I love our food, our way of life, our circle of life, our land and sea.” This commenter expressed the need to be involved and to make sure everything is done right.

Several commenters stated that the SEIS was written by people in Washington, D.C who have never lived in the Arctic.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- General Public

**Response to Comments**

BOEMRE takes seriously each of its responsibilities, which include offshore energy and mineral resource development, as well as protecting human safety and environmental and cultural resources. Safety and protection of environmental and cultural resources continue to be a paramount concern for BOEMRE.

**No Decision to Drill.** No decision on drilling will be made during this SEIS process. The SEIS uses best available information to analyze reasonably foreseeable environmental effects. The SEIS also models and analyzes the potential impacts on the environment of a low probability, high impacts event. But a decision on whether to go forward with drilling or other exploration activities in light of these risks is beyond the scope of the Final SEIS. If a lessee submits a specific proposal to drill at a later date, BOEMRE would then conduct a full technical and environmental review of that site-, time-, and project-specific proposal, incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would also be developed and required at that time. The purpose of this Final SEIS is to inform the Secretary’s decision whether or not to reaffirm, modify, or cancel Lease Sale 193.

**Regulatory Agencies.** In the Arctic OCS, the U.S. Environmental Protection Agency (EPA) regulates compliance with the Clean Water Act and the Clean Air Act. BOEMRE manages the OCS Program as established by the OCS Lands Act. One of BOEMRE’s responsibilities is to ensure that OCS activities comply with applicable environmental laws. To that end, BOEMRE places “conditions of approval” on OCS activity authorizations stating that activities cannot begin until the appropriate Clean Water Act and Clean Air Act permits (if applicable) are obtained from the EPA.

**Opportunities for Involvement.** BOEMRE has invited for many years the people of the Arctic to be involved in agency decisions. BOEMRE has requested involvement through informational meetings, scoping meetings, meetings with community leaders, public hearings on environmental documents, and government-to-government consultations with tribal leaders. Additional information regarding the public outreach processes for the Draft SEIS and Revised Draft SEIS are provided in Issue Category 2.

BOEMRE Alaska Region welcomes suggestions to improving the sharing of information and communication between the agency and people in Alaska communities.
Authors’ Familiarity with Arctic. The Draft SEIS, Revised Draft SEIS, and Final SEIS for Chukchi Sea Lease Sale 193 were written by BOEMRE analysts of the Alaska OCS Region in Anchorage, Alaska. Many of these analysts have lived in Alaska for many years. When considering environmental impacts to the resources in the Arctic, these analysts are considered subject matter experts by the agency.

**Issue 23. Impacts on subsistence.**

**Summary of Comments**

BOEMRE received many comments focused on the myriad benefits of subsistence, as well as the many direct, indirect, and cumulative effects that could occur if subsistence activities are curtailed. These issues were a central concern at public meetings. Notable points included:

- There is a lack of understanding among federal decision makers regarding life in the village and subsistence.
- Residents have a wealth of information to share regarding animal movements, etc. but they are rarely asked or listened to.
- Subsistence resources are so vital to our well being that if the health of the ocean deteriorates so will the physical health of our people. In the North Slope communities, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food.
- Native people do not always like to eat Western foods. Subsistence foods are irreplaceable, and their loss would cause suffering.
- Even with this increasingly mixed economy, subsistence hunting continues to provide 40% of caloric intake for Inupiat Eskimos on the North Slope, with substantially higher percentages in the more rural villages.
- Arctic Ocean subsistence resources not only provide food but are also fundamental to the peoples’ identity.
- Interference in subsistence activities and/or decrease in subsistence foods also cause social impacts.
- Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.
- Pollution and/or disturbance in one portion of the Arctic may push whalers into other areas, creating or increasing competition for resources.
- There is no effective means to compensate for the loss of subsistence resources. Western foods are cost prohibitive and lead to increased rates of diabetes and other health issues as compared with traditional foods.
- Disruption of subsistence activities can endanger participants as well as decrease the likelihood of success.
- Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness – it gambles our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences.
- I would rather pay $50 for a gallon of gas than worry about not being able to go hunting and get the food that I need.
- Observations of sick and diseased animals have increased in recent years.
Some comments stressed the need for money (for supplies, equipment, fuel, etc.) to engage in subsistence activities. It was noted that a balanced approach between traditional subsistence lifestyle and economic development is important because communities no longer function in an isolated barter economy or rely totally on subsistence. Such comments stressed the following:

- The influx of money from development makes people reliant on modern technology and spoils the Native way of life.
- Subsistence-use areas have been expanding as technology improves, such that a 25-mile corridor is not sufficient to protect current use areas and avoid disturbance of subsistence areas.
- Native people cannot survive on muktuk and seal anymore. There is a need for hamburger. Children are already used to that. We also need money to use modern-day equipment for acquiring subsistence foods.

One comment requested that BOEMRE be more explicit about MMPA’s protections with respect to subsistence. The comment asserts:

- BOEMRE should assess potential impacts against the MMPA requirements.
- BOEMRE should specifically identify how mitigation will reduce impacts (including impacts from seismic activities) to a level that does not violate the MMPA.

Several commenters noted that Wainwright engaged in a successful bowhead hunt during the fall of 2010, rendering certain statements in the Revised Draft SEIS obsolete. Also, several commenters asserted that the agency should consider the potential for ship movements to affect winter bowhead whale hunting off St. Lawrence Island.

One comment specifically asserts that BOEMRE fails to adequately analyze the potential for gas development and production activities to displace subsistence users. This comment asserts the following:

- The Draft SEIS’s analysis of effects on subsistence-harvest patterns is largely focused on the potential for activities to restrict access to resources through reductions in the resources themselves or changes in the distribution of those resources.
- The Final SEIS should additionally analyze the potential that large scale natural gas development and production could displace subsistence users (via lack of cultural privacy, belief that resources are contaminated, reduced resource productivity, and physical obstacles) from vast expanses of this region.

One comment requested Section III.B.4 explain, based on historical accounts, that subsistence hunts for bowhead whale do not occur more than 20 miles from the coast. Also, most of the bowhead harvest occurs during spring migration as whales follow ice parallel to the coast line. This same comments characterized the current deferral area, along with applicable mitigation measures, as providing ample protection to marine mammals and subsistence activities.

Several comments also criticized the significance threshold used in the SEIS in evaluating potential impacts to subsistence activities. These comments are addressed under the Issue 13 - Significance thresholds.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
Response to Comments

BOEMRE acknowledges the pivotal importance of subsistence food and subsistence practices to the indigenous people of the North Slope and the Northwest Arctic boroughs. The Sale 193 FEIS contains a very thorough discussion of the broad importance of subsistence. The Final SEIS summarizes and incorporates by reference the information and analysis in the Sale 193 FEIS. The Final SEIS specifically acknowledges the importance of subsistence and addresses potential impacts within various sections addressing Subsistence-Harvest Patterns, Sociocultural Systems, and Environmental Justice.

BOEMRE is committed to protecting subsistence activities. The BOEMRE Alaska Region has adopted, through regulatory practice, a position on significance in the context of NEPA that supports the goal of protecting subsistence activities. This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities. The predominate attribute of this regulatory policy makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest of resource can be minimized in such a manner that the disruption is short term and as a result of incidental or accidental encounters.

Traditional Ecological Knowledge. BOEMRE agrees that traditional and local knowledge are rich sources for information in the Chukchi Sea region and it is our policy to use research, exchanges with local governments and tribal organizations, and public meetings to continue to update what we know. Since 1995, Traditional Ecological Knowledge (TEK) has been incorporated into the lease sale analysis process by including Iñupiat observations into the text of the EIS analyses. Indigenous speakers are cited in text and in the bibliography. In addition to other available published TEK sources, TEK has been solicited from Iñupiat sources that included past and more recent testimony from community meetings conducted for lease-sale hearings. Indigenous public comment in the form of 25 years of lease-sale hearings in the Alaskan Arctic has been posted on the Alaska OCS Region website at http://www.boemre.gov/alaska/ref/PublicHearingsArctic/PublicHearings.htm.

BOEMRE considers TEK in lease-sale and project planning, in determining deferral areas, in EIS analyses, in the formulation of new mitigation measures, in the drafting of new scientific studies, and in decision making. Also posted on the Alaska OCS Region website is a discussion of how TEK is used in the OCS decision process (http://www.boemre.gov/alaska/native/tradknow/tk_mms2.htm). The Deferral Alternative III, Corridor I for Chukchi Sea Lease Sale 193, was developed in direct response to TEK and more recent comments by bowhead whale subsistence hunters to protect important bowhead whale habitat used for migration, feeding, nursing of calves, and breeding. BOEMRE will continue to consider TEK in future environmental analyses and welcomes any additional TEK that readers can provide.

BOEMRE Studies and Reports. The Alaska OCS Region promotes studies that directly address the standing issues and concerns of Native stakeholders. BOEMRE involves local and tribal governments in its studies planning process and has held meetings in all local communities to assist their involvement in this effort. BOEMRE’s participation in the North Slope Science Initiative ensures our continued involvement in Slope-wide scientific research formulation and coordination.

Particular studies that BOEMRE has funded to address sociocultural and environmental justice impacts include the following (each of which is available at http://alaska.boemre.gov/reports/2002rpts/akpubs02.htm):


BOEMRE 2010-032. Arctic Nearshore Impact Monitoring In Development Areas (ANIMIDA). Designed specifically to meet requests from the Inupiat community and its follow-up study: Continuation of Arctic Nearshore Impact Monitoring in Development Areas (CANIMIDA).


There are also ongoing studies funded by BOEMRE and addressing sociocultural impacts and impacts related to environmental justice (available at http://alaska.boemre.gov/ess/ongoingStudies/Ongoing_studies.pdf):

AK-05-04a. Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska.

AK-07-01. Monitoring the Distribution of Arctic Whales.


AK-08-01. Continuation of Impact Assessment for Cross Island Whaling Activities.

AK-12-04. Subsistence Use and Knowledge of Beaufort Salmon Populations.

AK-08-04. COMIDA: Impact Monitoring for Offshore Subsistence Hunting.

AK-03-12. Social and Economic Assessment of Major Oil-Spill Litigation Settlement for the Alaska OCS Region.


A TEK-specific subsistence report, Passing on the Knowledge: Mapping Human Ecology in Wainwright, Alaska (Kassam and Wainwright Traditional Council, 2001) was used in the
subsistence-harvest pattern analysis for the Chukchi Sea Lease Sale 193 FEIS. The recent study *Subsistence Mapping at Nuiqsut, Kaktovik, Barrow, and Wainwright: Past and Present Comparison* incorporates local TEK and maps geographic patterns of subsistence use near these communities. This comparative time-series information will be used to assess cumulative sociocultural impacts of OCS activities in the Chukchi and Beaufort seas regions.

**Mitigations.** Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Lease Sale 193, as held in February 2008, included Stipulation No. 5 – Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvest Activities. A discussion of this lease stipulation is provided in Section II.B.3.c(1) of the Sale 193 FEIS. This lease stipulation is incorporated by reference in the Final SEIS per Section II.C.1. Conflict avoidance measures are also required by NMFS and FWS under the MMPA. The MMPA requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

Meanwhile, the Department of the Interior is taking affirmative steps to increase the safety of OCS activities. On January 19, 2011, the Secretary of the Interior and the Director of BOEMRE announced the formation of the Ocean Energy Safety Advisory Committee (OESC). The OESC is a 15 member public federal advisory body composed of the nation’s leading scientific, engineering and technical experts. The OESC is comprised of representatives from federal agencies—including BOEMRE, the Department of Energy, the National Ocean and Atmospheric Administration, the United States Geological Survey, the Environmental Protection Agency, and the United States Coast Guard—as well as the offshore oil and gas industry, academic institutions, and other non-governmental organizations. The group advises the Secretary, through the BOEMRE Director, on matters and actions relating to offshore energy safety, including drilling and workplace safety, blowout containment and spill response. The OESC will be a center of excellence charged with driving research and development and technical innovation across government and industry in the areas of drilling safety, well control and subsea containment, and oil spill response. The OESC is the first step toward establishing the proposed Ocean Energy Safety Institute, which would facilitate collaborative research and development, training and execution in these and other areas relating to offshore energy safety going forward. The OESC will provide advice on how best to stand up the Institute, and on what role OESC should play in the Institute. Further information about OESC is available at: http://www.boemre.gov/mmab/EnergySafety.htm.

**OCS Lands Act – Four Stage Review Process.** The OCS Lands Act created a four-stage review process for planning, leasing, exploration, and production of oil and gas resources in federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner (Sierra Club v. Morton, 510 F.2d 813, 828 [5th Cir. 1975]). BOEMRE expects that additional information obtained through exploration seismic surveys and drilling, environmental studies, monitoring of activities, and technological research in the Arctic OCS will increase our knowledge of the environment and support continued improvement in avoiding and minimizing adverse effects from OCS operations. If an exploration or development and production plan is submitted, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Site-specific information provides opportunity for more detailed analysis and mitigation.

**MMPA Requirements.** Consistent with standard NEPA practice, potential impacts to subsistence are measured against a significance threshold that is specifically designed to measure the context and severity of potential impacts to that resource. Subsistence-related provisions of the MMPA, meanwhile, are regulated by NMFS. Further discussion of the significance threshold specific to subsistence harvest patterns is provided within Issue Category 13 of this Appendix.
Natural Gas Production and Development. Onshore support facilities related to OCS natural gas production are expected to be co-located with existing infrastructure. Permitting of a pipeline across NPR-A would be under BLM jurisdiction. For additional information on BLM’s mitigation for the protection of subsistence activities, the reader is referred to the BLM’s NPR-A Integrated Activity Plans/EISs (http://www.blm.gov/ak/st/en/prog/planning/npra_general.html). BOEMRE takes seriously consideration of local concerns about social impacts resulting from disruption or interference with subsistence activities or decreases in subsistence foods. Accordingly, the Final SEIS, Section V.B.15, Environmental Justice Cumulative Effects, states the following:

Onshore oil and gas development, especially potential road development within NPR-A and Alpine satellite field expansion, could impact subsistence resources and harvest practices. Subsistence resources, particularly caribou, could experience long-term disturbance and displacement effects, as well as functional loss of habitat and potential population reductions, causing subsistence hunters to alter traditional harvest practices by having to travel to unfamiliar areas. If this occurred, long-term displacement of ongoing social systems would be expected. Community activities and traditional practices for harvesting, sharing, and processing subsistence resources would be altered, and disproportionate, high, adverse effects would be expected for the Inupiat communities of Barrow, Wainwright, Point Lay, and possibly Point Hope.

Additional discussion on this issue is in the SEIS in Sections: II.C.1 Mitigation Measures, Conflict Avoidance Stipulation; and II.C.2 Issues.

Displacement. In preparing the Sale 193 FEIS and Final SEIS analyses of potential subsistence impacts, BOEMRE analysts thoroughly considered several factors that could lead to displacement of subsistence activities, including but not limited to a lack of cultural privacy, belief that resources are contaminated, reduced resource productivity, and physical obstacles. These efforts are apparent in the text of each document. In the Final SEIS, “displacement of subsistence users” is discussed in Sections II.D.1, IV.A.1, IV.C.15, IV.C.17, V.B.12, and V.B.15. “Lack of cultural privacy” (assumed to refer to increased non-Native presence and hunting competition) is discussed in Final SEIS Section V.B.12. “Belief that resources are contaminated” is discussed in Final SEIS Sections IV.C.17, V.A.2, V.B.12, and V.B.15. The potential for “reduced resource productivity” is addressed in Final SEIS Section V.B.12. “Physical obstacles” are addressed in V.B.12. The Sale 193 FEIS contains much discussion of these issues in the analogous context of an oil pipeline across NPR-A—the Sale 193 FEIS is incorporated by reference into the Final SEIS.

Oil Spills. Concerns regarding impacts that could occur during an oil spill are addressed under the topic of Impacts on Environmental Justice and Human Health. Safety and prevention of pollution, including accidental oil spills, are the primary focus of BOEMRE OCS operating regulations. These regulations require operators that engage in activities such as exploration, development, production, and transportation of oil and gas to prevent unauthorized discharge of pollutants into offshore waters. Operators shall not create conditions that will pose unreasonable risks to public health, life, property, aquatic life, wildlife, recreation, navigation, commercial fishing, or other uses of the ocean. Operators must submit an oil spill response plan to BOEMRE for approval. To continue operations, the facility must be operated in compliance with the approved plan. A BOEMRE-approved spill response plan must be reviewed and updated every two years. Additional discussion on this issue and the impacts of oil spills on subsistence is in the Final SEIS in sections II.D.1 Summary of Impacts: Alternative I-Proposed Action; IV.C.14 Subsistence-Harvest Patterns; IV.C.14 Subsistence-Harvest Patterns, Impacts from Natural Gas Development and Production; IV.E.15, Impacts from VLOS; and V.B.12 Subsistence-Harvest Patterns, Cumulative Effects.

Loss of Subsistence Resources. BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals is fundamental in coastal communities south proximate to the Chukchi Sea Lease Sale 193 area, as is discussed in the Final SEIS, Section IV.E.15. These communities could experience effects from a Very Large Oil Spill
(VLOS) through reduction of sharing through networks with households in northerly communities most proximate to the Lease Sale 193 area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and the consumption of marine mammals or fishes even if they are available and have been certified as being fit for human consumption due to resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards.

**Mixed Cash-Subsistence Economy.** BOEMRE recognizes the dilemma of North Slope Iñupiat living in a mixed cash – subsistence economy. Both Western and traditional foods are consumed by Iñupiat, and in the current mixed cash-subsistence economy, both are vital. It takes cash to buy Western style foods and subsidize even traditional activities such as subsistence hunts. Opportunities to make money can affect people’s choices on what to purchase, where to travel and live, and what to eat. With additional cash, many Iñupiat people elect to purchase better and more sophisticated equipment for subsistence hunting, while others might use the money to move outside of the community. Economic advantages can result in complexities due to increased choices for the individual or the household. An influx of money would only compound the issue. This is addressed in the Sale 193 FEIS III.c.2.a p. III-96, and III c.3.a. p. III-117.

**Local Impact Compensation.** Over the last two decades, Arctic communities have been very vocal about finding a “compensation” source—impact assistance, revenue sharing, bonds, or mitigation payments—to address impacts from OCS activities. Without congressional authorization, BOEMRE cannot provide or require industry to provide such compensation. Federal agencies cannot commit to impact assistance because that is a role of Congress and not the Executive Branch. Only Congress can amend the OCS Lands Act to include provisions for local impact assistance from OCS revenues.

In 2001, Congress appropriated impact-assistance funds for coastal states affected by OCS oil and gas production. The Coastal Impact Assistance Program (CIAP) was reauthorized by Congress under the Energy Policy Act of 2005. Under CIAP, states eligible to receive funding are Alabama, Alaska, California, Louisiana, Mississippi, and Texas. The CIAP funds are allocated to these states based on the proportion of qualified OCS revenues offshore of the individual state to total qualified OCS revenues from all states. Because of the increase in Alaska OCS oil and gas revenues resulting from the Chukchi Sea Lease Sale 193, Alaska FY 2009 and FY 2010 allocation increased to 15.45% of total CIAP funds available. On November 13, 2009, BOEMRE notified the State of Alaska that their allocation for FY 2010 was $79,407,444.96.

**Oil Spill Liability Trust.** The Oil Spill Liability Trust Fund administered by the National Pollution Funds Center of the United States Coast Guard provides compensation for loss of subsistence uses in the event of an oil spill. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see [http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims](http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims).

**Mitigation.** The comment lacks specificity as to the particular mitigation measures or practices that are in question. Both the BOEMRE and NMFS thorough permitting decision processes and IHA/ITS procedures, respectively, require applicable mitigation practices to minimize or eliminate potential adverse effects and comply with the MMPA as required and within proven science principles, technology and cultural sensitivity. BOEMRE and NMFS consistently evaluate and improve upon mitigation requirements as proven science and technology emerges and efficiency improves.

**Deferral Areas.** Lease Sale 193 was held in February 2008 and excluded parcels located within the deferral corridor identified in Alternative IV. Additional discussion of lease sale alternatives is
provided in Issue Category 3. Discussion of how deferral corridors can reduce the potential for impacts to subsistence resources and harvest patterns is provided throughout the Sale 193 FEIS and the Final SEIS. To contextualizing the potential consequences of deferral corridors, additional information is provided below.

The application of a larger deferral area (Alternatives III and/or IV) does not necessarily require the movement of facilities further offshore. However, the geologic formations, prospects and potential discoveries that lie within a deferral area nearer to shore would not be available for lease, exploration or development. It is reasonable that the proportions of marine mammal populations that utilize habitats within a larger corridor deferral as well as those utilizing habitats within the “current deferral area” would experience decreased levels of potentially adverse noise exposure from lease activities such as ancillary seismic surveys; drilling; platform, product gathering pipelines, infrastructure construction and maintenance; production operations; and decommissioning. The sound sources associated with activities would be further from those marine mammals and habitats occurring within deferral areas. Noise from 2D and 3D seismic surveys, pipeline construction and operation from platforms to shore based facilities, and potentially increased vessel and aircraft travel routes could still occur, in part, within deferral areas as well as the lease sale area. Drilling noise, platform and infrastructure construction and operation noise and a large oil spill event(s) would not originate within nearer offshore deferral areas thereby providing some degree of decreased impacts to shorelines, marine mammals, their habitats and protect potential subsistence species seasonal distributions, abundance and human uses within a larger corridor depending on the specific temporal and spatial characteristics of a potential spill and related activities.

The comment that subsistence activities have expanded seaward, especially in light of technological improvements that are expanding use areas, is reinforced by a current BOEMRE study that documents two marine mammal subsistence hunts occurring in the Chukchi Sea over 20 miles from the coast. Existing mitigation measures should accommodate this expansion and preclude any significant impacts to subsistence harvest patterns. Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and the BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233). As indicated in the SEIS (see Section IV.C.14), the proposed action may lead to conflicts resulting from vessel traffic and aircraft traffic. However, overall impacts to subsistence (and by extension, sociocultural systems) are expected to be low. Every proposed action that will tier from the Sale 193 FEIS and Final SEIS involving seismic, exploration or development will require a NEPA analysis to identify environmental effects, including those on the human environment.

Thus, BOEMRE has mechanisms to assure that even if subsistence-use areas expand in the future, existing mitigation and corridors (the 25 statute mile coastal deferral area and the Corridor II deferral under Alternative IV), along with diligent regulation and enforcement, can sufficiently protect current use areas and avoid disturbance of subsistence areas.

**Geographic Extent of Subsistence Activities.** Subsistence use patterns are discussed fully in Section III. C. 2. Section III.B.4. discusses the biological environment not the specifics of human social and cultural use patterns of a given resource.

**Fall Bowhead Hunt.** Revisions to the text have been made in light of Wainwright’s successful bowhead whale hunt in the fall of 2010.

Summary of Comments

Many comments implicated Environmental Justice issues. Many of these comments raised the issue of Environmental Justice as it applies to Alaska OCS activities in general. Others specifically regarded the Draft SEIS and Revised Draft SEIS discussion of these issues.

The following is a list of general concerns voiced at public meetings and referenced in written comments:

- It is not acceptable to promote development at the cost of the tradition, culture, spirituality, and health of the Iñupiat people.
- Human rights issues occur where Native people are affected by decisions that didn’t involve enough of their input or cause disproportionate impacts and risks on Native people.
- Being Iñupiat entails an inherent freedom to hunt and harvest from the vast frozen seas to nurture family and extended family in Alaska and the lower 48. Another commenter expressed a similar concern, “My son wants to grow to a man and a father and teach his kids how to hunt and to live the Iñupiat way.”
- Standards for gauging risk and/or tolerance for risk may vary between the federal government and members of potentially-affected communities.
- Regional governments and regional Tribal organizations do not necessarily represent the viewpoints of all villages.
- If development is inevitable, it should at least occur on communities’ terms, and be done in a manner that helps communities (i.e., fuel sales).
- Oil companies should be bound by written agreements concerning responsibilities, liability, etc.
- Missing information that relates to avoiding negative social and cultural impacts is essential for a reasoned decision.
- Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness – it gambles villagers’ homes and way of life.
- Accidents are inevitable.
- History of accidents (i.e., Exxon Valdez, Deepwater Horizon) makes it difficult to trust the government or its documents.
- The thought of people that don’t live in the Chukchi Sea area coming up and drilling and making rules is scary.
- If major environmental impacts occur, they will significantly impact many more communities than just those that are adjacent to the lease area (due to reliance on marine mammals).
- If resources are damaged, suicide rates could go up, especially since fewer young people are sustained by their culture.

One comment specifically asserts that the Draft SEIS failed to meaningfully address environmental concerns despite the imbalance of risks and benefits (as between North Slope residents and institutions versus outside companies, workers, etc.) posed by Lease Sale 193. This comment also stresses that information regarding means to prevent or mitigate negative social and/or cultural impacts is essential to reasoned decision-making. Similarly, another comment suggests the need to
protect the children’s future, and that the next generation should have the opportunity to utilize subsistence resources. Money can not fix harm to the ecosystem and to the people.

The related issue of human health is often intertwined with Environmental Justice considerations and will also be discussed here. BOEMRE received a variety of comments regarding human health:

- Subsistence resources are so vital to our well being that if the health of the ocean deteriorates, so will the physical health of our people.
- The SEIS does not discuss cumulative impacts to health from gas development alone or cumulatively, or identify any mitigation measures to address these issues.
- The SEIS should include a health assessment that analyzes air quality issues and subsequent increases in respiratory problems, contamination of subsistence resources through water and air pollution, displacement and impairment of access to subsistence resources and associated food insecurity, and social issues associated with increased contact with non-resident industrial workers.

One comment states that the SEIS needs to address how the decision maker is weighing risks to Inupiats, and how BOEMRE can justify forcing the communities to take these risks.

Finally, one comment asserted that various portions of the Draft SEIS Environmental Justice analysis constituted assumptions not supported by accepted facts, or lacked a distinct causal connection to oil and gas activities. Specifically, commenters challenged statements pertaining to a metabolic health effect that may accrue if subsistence foods became less available or desirable, as well as a statement concerning potential negative effects on various social pathologies (e.g., substance abuse, disease, etc.) that could indirectly result from increased oil and gas activities in the region.

Source of Comments
- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

BOEMRE takes seriously each of its responsibilities, which include offshore energy and mineral resource development, as well as protecting human safety and environmental and cultural resources. Safety and protection of environmental and cultural resources continue to be a paramount concern for BOEMRE.

In preparing its analysis of Environmental Justice issues, BOEMRE analysts pay particular attention to issues raised by local residents, governments, and Tribes during scoping, public meetings, government-to-government meetings, and official public commenting opportunities. Concerns about the irreplaceable nutritional value of traditional foods and worries about the influx of disease or drugs and alcohol into village communities are very complex issues that are rarely quantifiable or directly traceable to a particular cause. Because these concerns exist, are plausible, and are very important to the North Slope residents and advocates who voice them, they are addressed in BOEMRE’s environmental analyses. BOEMRE considers its environmental justice analysis credible and robust.

No Decision on Drilling in this Lease Sale Process. No decision on exploration drilling or development and production will be made during this process. The Final SEIS does provide several scenarios that facilitate analysis of environmental effects that could occur in the future, pending various approvals. BOEMRE analysts use the best available information to assess the potential for
accidental events and to model their potential impacts on the environment. The purpose of the Final SEIS is to inform the Secretary’s decision on whether to reaffirm, modify, or cancel Lease Sale 193. Should a lessee submit a specific exploration or development and production plan at a later date, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would also be developed and required at that time.

**Outreach and Consultation.** The NEPA processes followed by BOEMRE for OCS leasing, exploration, and development and production follow a rigorous outreach and consultation protocol that attempts to involve local stakeholders at all levels of project planning.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, requires Federal Agencies to consult with tribal governments on Federal matters that significantly or uniquely affect their communities. In January 2001, a USDOI Alaska Regional Government-to-Government policy was signed by all the USDOI Alaska Regional Directors, including BOEMRE.

Since 1999, all BOEMRE public meetings have been conducted under the auspices of Environmental Justice. The EJ-related concerns are taken back to BOEMRE management and incorporated into environmental study planning and design, environmental impact evaluation, and development of mitigating measures.

On September 14, 2005, BOEMRE published a notice in the Federal Register requesting information for proposed Chukchi Sea Lease Sale 193 and providing a Notice of Intent to prepare an EIS for the proposed sale. The Federal Register notice stated the following:

> …the EIS analysis will focus on the potential environmental effects of the sale, exploration, development and production in the areas selected to be considered for leasing. This NOI also serves to announce the initiation of the scoping process for this EIS. Throughout the scoping process, Federal, State, Tribal, and local governments and other interested parties aid… in determining the significant issues, potential alternatives, mitigating measures and alternatives to be analyzed in the EIS and the possible need for additional information…

Many of these issues were discussed in government-to-government consultation with ICAS and tribal governments in Barrow, Wainwright, Point Lay, and Point Hope in a North Slope-wide teleconference on March 9, 2006, and the tribal government of Barrow on February 2, 2006 and March 6, 2006; Wainwright on March 9, 2006; Point Lay on January 30, 2006; and Point Hope on January 23, 2006. Open public community meetings in Barrow with the NSB (with translation available where requested) were held on December 13, 2004, February 1, 2006, and March 6, 2006; with the NSB Planning and Wildlife Management Departments on February 2, 2006; in Wainwright on March 9, 2006; Point Lay on January 30, 2006; and Point Hope on January 23, 2006. Outreach and information meetings with nongovernment organizations, included the AEWC on December 13, 2004 and March 6, 2006; the ICAS on February 2, 2006; the Alaska Beluga Whale Committee on December 6, 2005; and the AEWC on February 3, 2006. Each meeting included an overview of the activities planned in the area, information on the environmental review for each activity, and identified further opportunities for public participation in the EIS scoping and planning processes. Follow-up NEPA-related training was offered to the communities of Point Lay and Point Hope. BOEMRE is also exploring the creation of a local liaison position to help announce and explain its activities to community members.

BOEMRE conducted public meetings and government-to-government consultation for the Draft SEIS in early November 2010. Representatives from BOEMRE travelled to five North Slope village communities for the purposes of holding public hearings, receiving testimony, and meeting with interested Tribal and governmental leaders. In June 2011, BOEMRE conducted public hearings and government-to-government consultations on the Revised Draft SEIS. Representatives from BOEMRE traveled to five North Slope village communities and Fairbanks for the purpose of holding
public hearings, receiving testimony, and meeting with interested Tribal and government leaders. This process is discussed in more detail in the response to Issue Category 2.

**Environmental Studies Planning.** The Alaska OCS Region funds environmental studies that directly address the standing issues and concerns of Native stakeholders. BOEMRE involves local and tribal governments in its studies planning process and has held meetings in all local communities to assist their involvement in this effort. Particular studies that BOEMRE has funded to address sociocultural and environmental justice impacts are discussed further in the response section in Issue Category 28.

**Conflict Avoidance Measures.** Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Lease Sale 193 as held in February 2008 included Stipulation No. 5 – Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvest Activities. A discussion of this lease stipulation is provided in Section II.B.3.c(1) of the Sale 193 FEIS. This lease stipulation is incorporated by reference in the SEIS per Section II.C.1. Conflict avoidance measures are also required by NMFS and FWS under the MMPA. The MMPA requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

**Operator Agreements.** BOEMRE cannot require agreements between third parties; however, nothing in the OCS operating regulations prevents operators from entering into agreements with local communities. BOEMRE would be unable to enforce the provisions of such agreements, however, because the Federal government is not a party to the agreements.

Several oil and gas companies operating in the Beaufort Sea have elected to enter into a Good Neighbor Policy (GNP) with the NSB and AEWC. The GNP demonstrates an operator’s commitment to a more immediate compensation system to minimize disruption to subsistence activities and provides resources to relocate subsistence hunters to alternate hunting areas or to provide temporary food supplies if a spill affects the taking of marine subsistence resources. The GNP demonstrates that the participating operators have made these commitments prior to conducting the proposed exploration or development operations. The GNP represents a viable mechanism for companies to assure timely and direct compensation to affected communities in the event of a major oil spill as required by OPA-90, and for expediting claims in accordance with 30 CFR 253 Subpart F. BOEMRE has informed lessees in its Information to Lessees Clause No. 19 – Good Neighbor Policy (Sale 193 FEIS Section II.B.3.c(3) and SEIS Section I.C.5).

**Oil Spill Pollution Act of 1990.** Under the Oil Pollution Act of 1990 (OPA-90), oil and gas companies are responsible for damages from an oil spill resulting from their operations, including damages to subsistence resources. The NSB and AEWC have concerns about the OPA-90 process and the remedies available to prevent disruption to seasonal subsistence activities. While BOEMRE recognizes these concerns, modifications to OPA-90 process are beyond the scope of the SEIS.

**Oil Spill Liability Trust Fund.** The Oil Spill Liability Trust Fund administered by the National Pollution Funds Center of the United States Coast Guard provides compensation for loss of subsistence uses in the event of an oil spill. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims.

**Oil Spill Impacts.** BOEMRE views oil spills as having the potential to cause long term significant effects that would disrupt or nearly eliminate subsistence harvests. Oil spills are never permitted and are always in violation of the law. Operators would be held accountable and responsible for mitigation and monitoring loss or reduction of subsistence species on the local subsistence harvesters.
and the linked social organization and institutions. Operators would be held accountable for assuring that appropriate health assessments and assistance be made available for North Slope residents. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards. The concern that an environmental disaster could result in psychosocial distress culminating in suicide and other self-destructive behaviors has been identified in the SEIS, Section IV.E.18 and in the Sale 193 FEIS, Section III.c.1.

BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals is fundamental in coastal communities south proximate to the proposed Chukchi Sea lease sale, as is discussed in the SEIS, Section IV.E.15. These communities could experience adverse effects from a Very Large Oil Spill (VLOS) through the reduction of sharing through networks with households in northerly communities closest to the Chukchi Sea lease sale area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and consumption of marine mammals or fishes even if they are available and have been certified as being fit for human consumption due to resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards to reduce the potential of this scenario.

Human Health. Human health issues are discussed in detail in the Sale 193 FEIS, in both Chapters III and IV under sections for Sociocultural Systems and Environmental Justice. Dr. Aaron Wernham, acting on behalf of the Alaska Inter-Tribal Council and the NSB, provided review of these sections pertaining to public health and many suggestions were incorporated in the Sale 193 FEIS.

BOEMRE supports recent North Slope research initiatives in this area and suggests that this research effort be coordinated with other Federal and State land managers on the North Slope through the vehicle of the interagency North Slope Science Initiative. Ultimately, the most effective strategies to protect human health will depend on developing a monitoring strategy that identifies and tracks important regional health indicators and continuing to develop a more detailed understanding of the ways in which the determinants of health are impacted by development. In turn, this information may inform efforts to both refine existing mitigation measures and develop new measures that target health outcomes and health determinants specifically.

The Final SEIS supplements the Sale 193 FEIS with additional analysis of potential human health impacts.

Cumulative Effects and Sociocultural Change. BOEMRE acknowledges the potential for cumulative sociocultural and environmental justice impacts on the North Slope and that Iñupiat culture has undergone significant change. The influx of money (from wage employment) has added many benefits and raised the standard of living, but these influences also have given rise to an array of social problems, including increased alcoholism. The processes that give rise to these problems are many, varied, and complex, and go well beyond the direct and indirect effects of the cumulative impacting factors that result from onshore and offshore petroleum development.

Any realistic analysis of cumulative effects on the North Slope needs to consider both onshore and offshore effects. The most obvious cumulative effects have occurred and continue to occur onshore as oil and gas activities expand outward from Prudhoe Bay/Deadhorse. Development already has caused increased regulation of subsistence hunting, reduced access to hunting and fishing areas, altered habitat, and intensified competition from nonsubsistence hunters for fish and wildlife (Haynes and Pedersen, 1989; Pedersen et al., 2000).

Many other events have combined with the area’s oil development to bring rapid social change to the area including ANCSA and ANILCA legislation, the formation of the NSB, the AEWC, and other local and regional institutions. It is important to note the difficulty in disaggregating the cumulative
effects of oil development in the region from these other relatively recent processes of extreme local social change. Most of the stress factors mentioned by local stakeholders can normally be associated with onshore impacts.

For additional discussion on this issue and potential disproportionate impacts on Chukchi Sea coastal communities, see the Environmental Justice analyses in Sale 193 FEIS Section IV.C.1.p(1) Environmental Justice (effects from the Proposed action) and Section V.C.16 Environmental Justice (cumulative impacts). The Sale 193 FEIS analyses are incorporated by reference into the SEIS.

**Weighing Risks to Iñupiat.** The role of the SEIS is to identify and provide detailed analysis of potential environmental impacts, including impacts to Iñupiat people. Pertinent analysis is provided within the Environmental Justice, Sociocultural Systems, Subsistence Harvest Patterns, and Economy sections of the SEIS. The Secretary of the Interior will weigh these risks when making the decision of whether to reaffirm, modify, or cancel the lease sale.

**Geographic Scope of Impacts.** BOEMRE views large and very large oil spills as having the potential to cause long term significant effects that would disrupt or nearly eliminate subsistence harvests. Oil spills are never permitted and are always in violation of the law. Operators would be held accountable and responsible for mitigating and monitoring loss or reduction of subsistence species on the local subsistence harvesters. The SEIS includes a Very Large Oil Spill (VLOS) analysis that describes the effects if the VLOS were to make landfall. Readers can use this analysis to determine the percentage of trajectories contacting a specific subsistence area. There is <.05 percent chance that a VLOS would reach the Kotzebue Sound region. The likelihood of direct impacts on subsistence in the Kotzebue Sound region is very low. However, BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals that utilize the Chukchi Sea is fundamental in Kotzebue and other coastal communities south of the proposed Chukchi Sea lease sale. These communities could experience effects from a VLOS through reduction of sharing through networks with households in northerly communities most proximate to the Chukchi Sea lease sale area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and consumption of marine mammals even if they are available and have been certified as being fit for human consumption due to local resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards.

**Issue 25. Impacts on human health and safety.**

**Summary of Comments**

Several comments raised issues pertaining to human safety, stating the following:

- BOEMRE needs to obtain funds from Congress for adequate inspectors and enforcement personnel – it could take several years before BOEMRE has sufficient staffing.
- The document should include more information regarding the frequency and timing of inspections and equipment inspected.
- Oil and gas activities should not occur when ice movements and/or conditions may pose safety issues.
- Rescue efforts in poor conditions may endanger lives of Coast Guard personnel and others.
- Leases could lead to improved search and rescue operations.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
• Environmental Organizations
• General Public

Response to Comments

Inspectors and Enforcement. BOEMRE continues to undergo substantial organizational changes intended to bolster public confidence and ensure safety. While this process could indeed require additional time and resources, it is certain that no activities that could affect Chukchi Sea resources would take place without appropriate regulatory oversight. Protocol in the Alaska OCS region has always been to have an inspector on a drill rig at all times during active drilling. Additional discussion of enhancements of BOEMRE’s inspection program is provided in Section I.F.7.

Safe Conditions. Regarding conduct of oil and gas activities in certain ice conditions, current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS, and does not cause undue or serious harm to the human environment. Consideration of these factors will be incorporated into future, project specific reviews as well as enforcement activities.

Safety of Rescue Personnel. It is acknowledged that rescue efforts by the North Slope Borough, Coast Guard and other responders in poor conditions are often dangerous and could pose a risk to human safety. It is hoped that adequate planning and rigorous adherence to safety standards would preclude the need for such operations. Increased oil and gas industry presence in the Chukchi Sea, coupled with the aforementioned precautionary approach, could very well lead to improved search and rescue operations in the area. However, no specific plans exist at this time.


Summary of Comments

Several comments assert inadequacies in the SEIS analysis of potential cumulative impacts, as follows:

• Conclusions from the 193 FEIS that “no significant cumulative impacts would result from routine activities associated with the Proposed Action or alternatives” and carried over into the Draft SEIS are unsupplied by data, specific discussion, or a meaningful analysis, and are contrary to the plethora of serious impacts discussed throughout the Draft SEIS. Natural gas development and production will have impacts to the environment that are above and beyond those associated with oil and gas development activities.
• It astonishes that additional disturbance to whales from a natural gas pipeline, when combined with the potential for extirpation of species, does not rise to the level of significance.
• The agency has not provided specific data to support its conclusion that noise levels will not lead to significant cumulative impacts to whales.
• The key life forms in our oceans are already suffering increased risk from climate change, over-fishing, and pollution.
• The cumulative effects analysis must better analyze and explain why no significant impacts would occur with respect to bowhead.
• The cumulative effects analysis must include quantified or detailed information as opposed to broad and general statements.
• The Revised Draft SEIS contains only 13 pages on cumulative impacts. This is not sufficient. Also, the cumulative impacts section does not include an evaluation of how a large oil spill may contribute to cumulative impacts.
The cumulative impacts section should include reasonably foreseeable activities that are occurring or may occur in the Bering Sea, Russia, Canada, i.e. oil and gas activities.

The cumulative impacts section should evaluate potential radioactive impacts to Chukchi Sea resources stemming from the radiation leak in Japan.

A more robust cumulative effects analysis, particularly for bowhead whales, is required. This analysis should encompass the whole geographic range of the bowhead and all human activities that could potentially impact this species or degrade its habitat (i.e. activities in American Arctic, Russian Far East, and Canadian Beaufort; icebreaking; increased vessel traffic in the Bering Straights, Chukchi Sea and Beaufort Sea; commercial fishing [including in the North Bering Sea]; increased military presence; and other relevant operations). This cumulative effects analysis should also account for climate change and ocean acidification.

When assessing cumulative effects to migratory species such as bowhead whale, the geographic range under consideration should be expanded.

The analysis fails to address the cumulative impacts to coastal and terrestrial resources of Kasegaluk Lagoon and to tundra wetland environments within the National Petroleum Reserve-Alaska. This comment offered no specifics to support this point.

The SEIS should evaluate the NRC cumulative impacts study.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations

Response to Comments

Support for Conclusions. The conclusions of cumulative impacts analysis in the Sale 193 FEIS are incorporated by reference and summarized in the Final SEIS. Analysis of the incremental contribution of natural gas development and production to potential cumulative impacts to the environment is provided in Chapter V of the SEIS. This includes analysis of the cumulative impacts to whales from installation of an offshore gas pipeline. The structure of the SEIS’s Cumulative Impacts Analysis is explained in Section V.A.1. All factors pertinent to understanding potential cumulative impacts are considered in the analysis.

Vessel Noise and Traffic. The Sale 193 FEIS provides an extensive discussion of the potential effects of noise on cetaceans (Section IC.C.1 F(1)(c), pages IV-84 through IV-90). The primary disturbance factor to bowhead whales from natural gas development and production is expected to be vessel noise and traffic. A discussion of the potential effects on cetaceans from development and production activities is provided in Sections IV.C.1.f(1)(e)2)c) and IV.C.1.f(1)(e)2)d) of the 193 FEIS. A discussion of cumulative noise effects on cetaceans is provided in Section V.C.6.a. These discussions are incorporated into the SEIS by reference. Also, as discussed in the Section IV.C.6 of the SEIS, noise associated with development and production of OCS natural gas is expected to be at low levels from stationary (production platform) to very slow moving (pipe-laying operations), and thus avoidable, sources. Whales appear to exhibit less avoidance behavior in response to stationary sources of relatively constant noise than in response to moving or impulsive sound sources.

Environmental Review and Mitigation. Oil and gas activities are subject to BOEMRE NEPA review, as well as the substantive and procedural requirements of the MMPA and, in the case of the bowhead whale, the ESA. Further, the natural gas development and production scenario analyzed in the SEIS acknowledges that appropriate mitigation would be developed and required as a result of the technical and environmental reviews conducted on any proposed offshore gas pipeline. Mitigation
could include timing restrictions on pipe-laying activities during the bowhead migrations, required
marine mammal observers, and curtailment of operations if marine mammals come within an
established safety zone. Thus, the analysis concludes that effects from installation of an offshore gas
pipeline would be minimized to the extent possible and effects would not rise to the level of
significance.

Large Oil Spill. The potential for a catastrophic oil spill leading to extirpation of species was
certainly considered in this cumulative effects analysis. However, a remote possibility of a
catastrophic event does not necessarily translate into an expectation of “significant” impacts, whether
alone or in a cumulative sense. The SEIS cumulative effects analysis found that the very small
potential for extirpation of species, even when combined with other incremental effects (such as those
from an offshore gas pipeline), does not rise to a level of significance with respect to the significance
thresholds defined in the Sale 193 FEIS and SEIS.

Cumulative impacts associated with the hypothetical VLOS scenario are discussed for each resource
in Section IV.E, principally within Long-Term Recovery subsections.

Geographic Scope of Analysis. Canadian energy development plans in the eastern Beaufort Sea are
uncertain. Future gas and oil development in Russia is unknown and the information available is
speculative. Although cumulative effects analysis necessarily involves assumptions and uncertainties
such as any data or projected modeling that may be gathered on these subjects, the opening statements
on the cumulative effects in Chapter V outline reasons for not including these and other speculative
events in the analysis.

Cumulative Impacts to Bowhead Whales, Generally. The analysis simply found little potential for
activities associated with the natural gas development and production scenario to contribute
incremental, additive, or synergistic effects on bowhead whales. Absent disagreement with the
methodology or identification of factors not considered, the existing level of analysis in this section is
determined to be sufficient. Additional discussion of the potential effects of development and
production activities to endangered whales is provided in the ESA section 7 consultation biological
evaluations (USDOI, MMS, 2006 and 2008) and biological opinions (USDOC, NOAA, NMFS, 2006
and 2008).

Cumulative Impacts to Bowhead Whales, Geographic Scope. The Sale 193 FEIS Section V.C.6.
T& E a(1) through a(8) provide detailed discussion of cumulative effects to Western Arctic bowheads
and is incorporated by reference to the SEIS. These sections include considerations, uncertainties and
discussions for range wide cumulative effects to Western Arctic bowhead whales regarding climate
change, increasing commercial fisheries, shipping traffic, research activities, subsistence activities,
pollution and contaminants and other oil and gas activities. The SEIS Section V.B.6. summarizes
cumulative effects to bowhead whales.

Quantification of Impacts. The cumulative effects analysis considers all past, present, reasonably
foreseeable, and even some speculative activities. Many of these activities, as well as their potential
effects, are inherently unquantifiable. While avoiding undue speculation, BOEMRE has attempted to
provide a high level of detail and has quantified relevant information and analysis wherever
appropriate.

Length of Analysis. The relative brevity of Chapter V can be attributed to the following factors: the
limited scope of the District Court remand; incorporation by reference of the lengthier cumulative
effects discussion within the Sale 193 FEIS; the similarity between oil development and production
and natural gas development and production in terms of their potential to contribute cumulative
effects; and the fact that cumulative effects associated with the VLOS scenario are largely discussed
in Section IV.E of the Final SEIS, as opposed to Chapter V.
**NRC Study.** BOEMRE has analyzed the NRC document entitled “Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope”. Although excellent in its scope and completeness, it is not the most current information upon which the present analysis should be based.

**Fukushima.** The Fukushima nuclear power plant disaster has been thoroughly discussed as a potential pollutant factor for nuclear radiation spreading to Alaskan waters by scientists from the Alaska Health and Social Services offices. Reports have consistently stated that there is no immediate or anticipated threat from nuclear radiation to environmental resources from this disaster reaching Alaska waters, therefore no discussion of this issue is needed in the document.

**Issue 27. Analysis of Incomplete or Missing Information (“1502.22 Analysis”)**

**Summary of Comments**

A variety of comments were received on the Analysis of Incomplete or Missing information (“1502.22 analysis”) presented in Appendix A of the Final SEIS pursuant to 40 CFR 1502.22. The comments ranged from the general to the very specific.

Many comments approved of the 1502.22 analysis, employing adjectives such as thorough, methodical, efficient, understandable, rigorous, well-reasoned, etc. Commenters frequently asserted that BOEMRE’s process fully meets the letter and intent of CEQ’s requirements. Some comments generally approved of the analysis but suggested small edits to certain items. Grammatical and other small changes to the 1502.22 analysis itself constitute BOEMRE’s response to these suggestions.

Other comments disapproved of the analysis, asserting one or more of the following:

- The 1502.22 analysis does not comply with the letter or spirit of applicable law and should be rejected.
- The conclusions of the 1502.22 analysis are contrary to evidence in the record and based on mere speculation.
- BOEMRE made an across-the-board and unwise determination that none of the missing information was essential to a reasoned choice. This is a rushed decision that dismisses and/or ignores the obligations to collect missing science; it discounts potential negative impacts to many species and habitats already threatened by climate change.
- It is astonishing that for the hundreds of pieces of missing information, the agency concluded that not one piece of information was essential for evaluating reasonably foreseeable impacts or to a reasoned choice among alternatives.
- BOEMRE must make a good-faith effort at obtaining information that is realistically attainable.

Many comments critical of the 1502.22 analysis focused on the concept of drilling:

- The Draft SEIS represents a decision by BOEMRE to allow drilling no matter what the impacts.
- BOEMRE should not allow drilling to go forward unless there is scientific knowledge demonstrating that drilling in the Arctic is safe.

Several comments asserted that analysis should not be deferred to later stages as BOEMRE’s ability to regulate potentially harmful activities is constrained once lease sales are approved:

- BOEMRE must have complete information about the environmental effects at the lease sale stage before it decides whether to authorize oil and gas activities, and decides what mitigation measures may be appropriate.
Several comments suggested that the 1502.22 analysis of incomplete information is flawed or inadequate:

- BOEMRE’s three-part test for each piece of missing information is flawed because nowhere in section 1502.22(b) is a reasoned choice among alternatives the focus. The agency should instead focus on the importance of the information to evaluating “reasonably foreseeable significant adverse impacts.”
- BOEMRE’s test and the accompanying pages of missing information fail to provide the analysis required by sections 1502.22(b)(3) and (4) because nowhere does the SEIS provide a summary of existing credible science or the agency’s evaluation of impacts based on generally accepted methodologies.

Some comments suggested alternate or more inclusive definitions for the term “essential.” For instance:

- The threshold for what information is “essential” should be lower for Chukchi Sea resources such as bowhead whales because of the rapidly and unpredictably changing conditions in the Arctic.
- The definition should be expanded to include all other activities within as well as outside the action area that could affect Chukchi Sea resources.
- The definition should focus on the ability to make informed decisions about where, when, and under what conditions oil and gas activities should be permitted.
- In addition to analyzing each individual item of incomplete information, BOEMRE should also consider for each resource and conflicting use the totality of what it knows and does not know. Otherwise, the analysis avoids acknowledging the sheer weight of all of the information not known that, taken as a whole, reveals a poorly understood ecosystem and poorly understood potential impacts.

A few comments presented detailed critiques of one or more of the “common themes” identified by BOEMRE in its introduction to Appendix A of the SEIS and used in the 1502.22 analysis to assess whether a particular item of incomplete information is “essential to a reasoned choice among alternatives.” To summarize:

- Statements that there is enough information available now for informed management and decision-making are unsupported where large quantities of data are missing about the Chukchi Sea. This is especially true where BOEMRE fails to identify the information upon which it is relying, and where statements in the original EIS point to large data gaps.
- Reliance on other environmental laws and regulations and future mitigation measures ignores the agency’s responsibility to analyze impacts.
- Conclusions that information will be known at a later stage of environmental review are contrary to the language of section 1502.22, and overlook the time constraints of the 30-day review deadline under the OCS Lands Act.
- Reliance on an assumption that significant adverse effects would occur [in the event of a catastrophic oil spill] fails to provide the decision maker and public with a clear picture of anticipated impacts.
- Conclusions about the commonality of the impacts between alternatives ignores important impacts, ignores distinctions between alternatives (including the no action alternative), and is evidence that BOEMRE failed to present a reasonable range of alternatives. [Regional variation of species abundance was cited to illustrate these points.]
One comment forwarded two general points as well as many specific comments on individual items within Appendix A. The general points questioned the need for discussion of oil spill-related impacts within the 1502.22 (noting that the EIS addresses leasing and exploration, not development) and also called for stronger language referencing the lack of documented impacts to cetaceans associated with OCS oil and gas operations. The specific comments referenced additional information that purportedly demonstrates a lack of potential significant impacts to OCS resources.

A variety of other comments suggest inconsistencies and/or inappropriate applications of 40 CFR 1502.22:

- BOEMRE cannot credibly assert that existing information is sufficient to “support sound scientific judgments and reasoned managerial decisions” about where to allow oil and gas activities when it does not know what areas of the sea are biologically significant. Missing spatial information—e.g. population distributions, areas of biological importance, etc.—are essential to lease sale decisions.
- NOAA’s 28 Feb 2011 comments on the Draft SEIS stated that, contrary to BOEMRE’s assertions, information about how seismic surveying will affect fish is essential to the lease sale decision and must be obtained. BOEMRE appears to have ignored NOAA’s comment.
- On pages A7 and A69 of the Revised Draft SEIS, BOEMRE states that it does not have sufficient information to determine effects on marine mammals of oil and gas activities. BOEMRE should obtain this information before making decisions about Lease Sale 193.
- The implicit assertion that noise would not cause significant effects to marine mammals is contradicted by previous statements that seismic surveys, if unmitigated or insufficiently mitigated, could in certain circumstances cause biologically significant effects.
- Activities pertaining to a drilling plan proposed for the Chukchi Sea in the 2010 season create a “serious risk of harm to bowheads due to consequences of disturbance, direct injury due to exposure to dangerous levels of noise, and ship strike.” This analysis by David Bain contradicts BOEMRE’s assertion that significant effects on bowhead whales could only occur as a result of the unlikely event of a large oil spill.
- The statement that the probability of an oil spill occurring, and its consequences, are the same for all alternatives contradicts assertions in the 2007 FEIS (at IV-20-21).
- The natural gas analysis omits any acknowledgement of incomplete information save for the discussion of effects on archaeological resources. This ignores incomplete information regarding noise and disturbance from drilling and associated ship and aircraft traffic and, therefore, runs afoul of 40 CFR 1502.22. The VLOS discussion does not acknowledge incomplete information relevant to the analysis, and therefore violates 40 CFR 1502.22.

**Source of Comments**

- Federal Government (EPA, NMFS)
- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public
Response to Comments

Systematic Decision Process. In addressing the second and third concerns of the District Court’s remand, BOEMRE analysts and managers reviewed each item of “incomplete” information cited in Exhibit 129 (which was submitted to the District Court by the plaintiffs), as well as several dozen additional items identified through internal review of the Sale 193 FEIS, in accordance with the requirements of 40 CFR 1502.22. BOEMRE made no “across the board determinations”; rather, we developed a systematic process under which each item received focused, objective, and complete review. BOEMRE’s three-step 1502.22 analysis is based on a careful reading of the regulation. This approach, developed from the most reasonable reading of the whole regulation, is outlined and depicted in the form of a flow chart in the introduction to Appendix A of the Final SEIS.

Individual analysis of each item is provided in Appendix A of the Final SEIS. While many items of incomplete information referenced in the Sale 193 FEIS are indeed “relevant to reasonably foreseeable significant adverse effects on the human environment,” the results of BOEMRE’s 1502.22 analysis confirm that none of these items are “essential to a reasoned choice among alternatives” at the lease sale stage of the OCS Lands Act process. Consequently, there is no 1502.22 requirement to assess the attainability and/or cost of acquiring these specific items of information. The BOEMRE Alaska OCS Region will continue its ongoing, comprehensive efforts to collect data and information regarding Arctic ecosystems and communities in accordance with the requirements of the OCS Lands Act and NEPA and consistent with the Bureau’s commitment to reasoned and informed decision-making.

Lease Sale Decision. The Final SEIS provides the Secretary of the Interior with sufficient information regarding potential environmental impacts to decide whether to reaffirm, modify, or cancel Lease Sale 193. No decision on drilling will be made during this SEIS process. If a lessee submits a specific proposal to drill at a later date, BOEMRE would conduct a full technical and environmental review incorporating the information that becomes available at that time. A determination to accept drilling at any cost would both exceed the delegated authority of the Bureau and violate its statutory and regulatory duties to protect the marine, coastal, and human environment. BOEMRE takes these statutory responsibilities very seriously.

Specific Background and Methodology for the Analysis. Regarding specific criticisms of BOEMRE’s 1502.22 process, readers are referred to the “Background,” “Methodology,” and “Results” portions of Appendix A of the SEIS. Relatively detailed explanation of the 1502.22 analytical process, along with important definitions, assumptions, and considerations that helped shape this process, are provided there. BOEMRE has reviewed and considered the specific criticisms summarized above, but determined that suggested changes to the existing 1502.22 methodology or analysis are not warranted. Additional support for moving forward with the existing process and analysis is provided by the EPA’s official comment letter regarding the Draft SEIS, dated November 29, 2010. This letter reads in relevant part:

We are particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. We also believe the process employed by your agency fully meets the intent of the Council of Environmental Quality’s requirements for such situations.

In light of the above, no substantive changes have been made to BOEMRE’s 1502.22 methodology or analysis in the Final SEIS.

Several minor revisions have been made in response to comments highlighting typographical and formatting errors within Appendix A.

Contents of Appendix A. BOEMRE has not incorporated into Appendix A any additional information or opinions regarding the potential for environmental impacts. The role of BOEMRE’s 1502.22 analysis is to analyze the importance of specific pieces of incomplete information within the
lease sale decision-making process. Appendix A is not an appropriate venue to debate the Sale 193 FEIS assessment of potential environmental impacts. Incorporating additional information intended to downplay or heighten potential impacts is similarly inappropriate. Because the cited information would not assist BOEMRE in assessing the importance of incomplete or missing information to the lease sale decision-making process, it has not been incorporated into Appendix A.

**Information Regarding Ecologically Important Areas.** Decades of study in the region have elucidated the heightened importance of many areas within the Chukchi Sea, as well as the North Slope. The knowledge which exists about these areas is indeed sufficient to support sound scientific judgments and reasoned managerial decisions about where to allow oil and gas activities and about which areas are biologically significant. This understanding is reflected in the Secretary’s decision to include a 25 Statute mile deferral in the 2007-2012 Five-Year Program, as well as the selection of Alternative IV (Corridor II deferral) from the Sale 193 FEIS for Lease Sale 193. Within the SEIS, special consideration is given to coastal communities, the spring lead system, subsistence harvest areas, migratory corridors, Ledyard Bay Critical Habitat Unit, Kasegaluk Lagoon, Hanna Shoal, avian breeding colonies such as Cape Lisburne and Cape Thompson, designated Essential Fish Habitat, caribou calving grounds and insect relief areas, special vegetative communities, marine mammal haulout areas, and many other important areas.

**Consistency with David Bain’s Analyses.** The report by David Bain does not indicate the context and definition of “serious risk”. It also does not include any specifics of the “harm to bowheads” in terms of individuals or portion of population exposed to or injured via noise and/or ship strikes in relation to the exposure of the Western Arctic bowhead whale population to varying levels of similar activities since 1980. There is no evidence to suggest that ship strikes related to industrial vessel traffic has or is occurring in the Alaskan Arctic, but BOEMRE recognizes and notes that increased levels of vessel traffic could increase the opportunity for bowhead vessel contact. BOEMRE recognizes the potential effects of noise upon bowhead whales; however, the application of mitigation measures as analyzed in the anticipated effects upon bowhead whales are believed to be the best current technologies available to minimize such adverse effects. Further, there is currently no evidence that direct injury due to exposure to noise or ship strike from similar and at times greater levels of industry activity in the Chukchi Sea occurred in the period from 1979 to present. Detectable levels of decreased productivity, population growth rate, fecundity have not been documented during that period nor have increased incidence rate or levels of injury or mortality been documented. Mr. Bain includes numerous general and hypothetical points regarding potential exposure and take rates to Arctic species, but this non-peer reviewed analysis does not indicate that these have or are occurring in the Arctic relative to oil and gas activity. While Mr. Bain refers to a “serious risk”, BOEMRE does not have any way to assess whether this finding is actually inconsistent with BOEMRE’s analysis without some context for the risk or a definition of when a risk becomes “serious”. Further, specific proposed drill plan actions are not evaluated in the Sale 193 FEIS or SEIS documents. BOEMRE analysis of such drilling plans in the Chukchi Sea would occur in subsequent NEPA documents.

A response to official NOAA comments regarding incomplete information on fish is provided in Issue Category 16.

**Statements Indicating Insufficient Information.** The referenced statements on pages A7 and A69 originally appeared in the Sale 193 FEIS and are reproduced in Appendix A so that they may be analyzed in appropriate context and under the applicable protocols of 40 CFR 1502.22.

**Incomplete Information in the Gas and VLOS Scenarios.** BOEMRE carefully adhered to the requirements of 40 CFR 1502.22 when developing this Final SEIS. Where BOEMRE identified instances of incomplete or missing information that are relevant to reasonably foreseeable significant adverse effects associated with the proposed action, the Final SEIS identifies this information. The
analysis then goes on to contextualize the incomplete or missing information and proceeds to the next step of 40 CFR 1502.22 analysis.

**Impacts Same for All Alternatives.** It is true that impacts of an oil spill could vary by location of spill source. This is why Appendix A speaks to the “commonality” of potential impacts during an oil spill, but does not claim that each spill has identical impacts. BOEMRE’s use of the OSRA and trajectory analysis accounts for differences in oil spill impacts associated with the location of the spill source. As indicated in the Sale 193 FEIS and the Final SEIS (including Appendix A), sufficient information exists to adequately inform the decision maker about these potential impacts, as well as similarities and differences associated with each alternative.

**Issue 28. Impacts and risks of oil and gas activities.**

**Summary of Comments**

Many comments stated that the risks associated with oil and gas development stemming from the lease sale are too high. Most of these comments focused on the potential for an oil spill. A summary of additional points is provided below:

- It is wrong and irresponsible to treat the Earth’s resources like they belong to this generation of humans only.
- Risks are heightened in this area, which features species of limited range and limited populations.
- Decisions regarding the Alaska OCS should follow a precautionary approach.
- Poorly informed development poses unnecessary risks to high quality habitat.
- The time to prevent an environmental tragedy is now, prior to leasing. Once leases are issued it is too late despite all the stipulations, mitigation, and good intentions of regulators when permitting development.
- The oil spill in the Gulf shows that large spills from exploration drilling can happen and that, even in the relatively benign conditions of the Gulf, they cannot be contained. These facts alone fundamentally undermine BOEMRE’s assumptions about oil spills in the original EIS.
- The people of the coastal communities would need substantial training on how to respond to an oil spill. Corporations currently offer training to a few people, but this will not be sufficient. Young people are encouraged to go to college and get training (i.e. oil spill response training), but they are not ready. Things are moving too fast.
- The decision to release the draft SEIS in its current form may expedite oil drilling plans in the Chukchi Sea and could lead to permanently destructive consequences for the wildlife and Alaska Natives who depend on this region for survival.
- The potential for an Arctic oil spill, and the inability to contain or clean it up, represents a significant and unacceptably unquantifiable risk to the Chukchi Sea ecosystem and the people who depend on its resources for physical health and cultural and social well being.
- The stakes are high. The chances of a major spill from drill platforms or pipelines as a result of Lease Sale 193 are 25 to 54 percent.
- Ice-free summers in the Arctic will cause severe weather and ocean conditions that will increase the risk of an accident.
- In the event of a VLOS, the inability to remove oil from the ecosystem is likely to exacerbate adverse effects.
- One drop of oil could become a big problem for our animals.
• There is tremendous scenic value in this region that would be compromised.
• Significant amounts of oil do not make it to the refinery no matter the technology and conscientiousness employed.
• The SEIS should describe the added risk associated with producing both oil and gas during the later stages of oil extraction.
• The SEIS should assess the added risks associated with the shift in focus from oil extraction to gas extraction.
• The movement of drillships off the drill location and suspension of operations adds considerable risk to the drilling operation.
• The stakes are high because as the 2007 FEIS notes, there is a 27–54% chance of a major spill as a result of Lease Sale 193.

Many others presented a different perspective:
• Alaska’s North Slope and OCS are very likely the most studied energy basins in the United States. In just that past 10 years, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi seas.
• An OCS lease authorizes a lessee to engage only in “ancillary activities” that do not harm the environment pending further review and approvals. BOEMRE approval is required prior to any exploration, development, or production activities within a lease.
• A lease sale is not an authorization to drill. Further environmental review, public process, and federal agency approvals are required before any exploration, development, or production activities may occur.
• Technological advances and the broad knowledge gained from over 250 studies (at a cost of more than $500 million) should also instill confidence in Alaska drilling.
• Thirty years of operational experience in Alaska have led to new technologies and practices that have steadily reduced the footprint and impacts of exploration and production activities to wildlife.
• Lack of infrastructure and related issues will be resolved once activities are allowed to go forward.
• Operating conditions in the Alaska OCS are categorically different than those in the deep waters of the Gulf of Mexico and pose much lower risk. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. In addition, the shallow water depth in the Chukchi Sea would allow blowout preventers to close much more rapidly than those in deep water. The blowout preventers would also be directly accessible to dive teams, unlike the Gulf where any maintenance or repairs had to be accomplished by remote control vehicles. Another distinction is that many Alaskan offshore operations are seasonal in nature. There are also fundamental differences between state and federal oversight and regulatory framework, as well as fundamental differences in the geology of the regions.
• Oil and gas production in the Chukchi Sea can occur safely and without taking unnecessary environmental risks, as has been proved by operations in the North Atlantic.
• There has never been a blowout in the Alaska or Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi without incident. Further, over 200 offshore wells have been drilled in the Canadian Beaufort Sea since the early 1970s without a significant oil spill. These wells were drilled more than two decades ago and utilized older technology than what would be used now.
Oil and gas development in Alaska would be done under the world’s highest safety and environmental standards. All activities will be governed by stringent lease stipulations identified in the 193 FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence and other activities.

The North Slope is an example of how development can occur responsibly, even where there remain some data gaps.

So far, industry plans have committed to unprecedented provision for prevention and spill response that go above and beyond what is required by law.

New technology (e.g. 3D and 4D technology) leads to reduced environmental impacts and footprints from infrastructure.

Specific plans for exploration have/would include numerous additional safety and mitigation measures, and would leverage resources and experience in the Arctic from the Alaska Clean Seas consortium.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

**Response to Comments**

A majority of responses touched on this complicated and controversial set of issues. BOEMRE believes it is possible to strike a balance between responsible OCS exploration, development, and production and protection of the marine, coastal, or human environment.

**OCS Lands Act - Four Stage Review Process.** The OCS Lands Act created a four-stage review process for planning, leasing, exploration, and production of oil and gas resources in Federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner [Sierra Club v. Morton, 510 F.2d 813, 828 (5th Cir.1975)]. Should a lessee submit a specific exploration or development and production plan, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would be developed and required at that time.

**Chance of One or More Large Oil Spills.** When the commenter says that chances of a major spill are 25 to 54 percent, the commenter is expressing the chance of one or more large (≥ 1,000 bbl) spills occurring using the spill rates at the 95% confidence interval over the 25 year life of the proposed action, as is explained in the Sale 193 FEIS. The BOEMRE provides information on the mean and 95% confidence intervals for large spills defined as a threshold value of 1,000 barrels or more. The U.S. Coast Guard defines a major spill as 2,380 barrels or more. The intent of the 95% confidence intervals is to inform the decision maker of the uncertainty in the mean estimate.

The chance of one or more large spills occurring assumes there is a 100% chance that exploration and subsequent development and production will occur. Using the mean spill rates the estimated total mean number of large spills is 0.51 (half a spill) over the 25 year life of the proposed action. The total mean number of spills is derived from the sum of the platform, wells, and pipeline mean number.
of spills added together over the entire 25-year life. The chance of no large spills occurring is 60% and the chance of one or more large spills occurring is 40% over the 25 year life. Using the mean spill rate the chance of no large pipeline spills occurring is 74% and the chance of one or more large pipeline spills occurring is 26% over the 25 year life of the project. The chance of no large platform spills occurring is 81% and the chance of one or more large platform (wells and platform) spills is 19%.

A key element in oil-spill analysis is an assessment of one or more large spills occurring. Large oil spills are unarguably contentious. One of the fundamental problems when using quantitative analysis is related to the way the results of the analyses are expressed and interpreted. People evaluate risks in incompatible ways, based on their value systems (Thompson and Dean, 1996) and their perceived degree of exposure to a potential risk. Oil spills have high levels of “dread potential” (Slovic, 1987) because of their potential to produce consequences in the event of accidents, even though such occurrences have been estimated to have low occurrence probabilities. The BOEMRE recognizes that some stakeholders may wish to reduce the chance of a large spill occurring, while others may consider any chance of a large spill occurring as unacceptable. Still others may find the chance of a large spill occurring as an acceptable tradeoff for the benefits derived from oil and gas production. The Secretary of Interior, in his decision to affirm, amend or cancel the sale considers alternative perspectives on the chance of one or more large spills occurring.

With adherence by the operator to BOEMRE temporary well abandonment requirements in 30 CFR 250 Subpart Q, the move off the well does not add risk to the operation as a whole.

**Oil Recovery and Cleanup.** It is acknowledged that in the event of a VLOS in the Chukchi Sea, some portion of spilled oil would indeed persist in the ecosystem long after the original spill, despite recovery and cleanup efforts. The SEIS analyzes these potential effects with its analysis of Phase 5 of the hypothetical VLOS scenario: “Post-Spill, Long-Term Recovery.” The most pertinent aspect of this phase would be “Contamination”, which evaluates “pollution stemming from an oil spill” that “may contaminate environmental resources, habitat, and/or food sources.” Such impacts are addressed, as appropriate, within each resource section of Section IV.E.

**Local Training and Hiring.** Training and hiring for jobs in the oil industry is a topic for discussion between community and tribal leaders and the oil industry. The scope of this SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193.

Native Corporations such as Umiaq Corporation have established contracts with Alaska Clean Seas (ACS) to provide trained responders for Village Response Teams (VRT) in the event of a spill response. Members of the community may participate in this training as appropriate. Those interested in becoming members of a VRT should contact ACS or Umiaq Corporation to get additional information on training and participation on these teams.

**Visual Impacts and Scenic Value.** BOEMRE agrees that there is tremendous scenic value in the Chukchi Sea region. Exploration seismic surveying and drilling are temporary activities. A production platform more than 50 miles from the coast would likely not be visible to a person standing on the shore. The expansion of onshore support facilities to accommodate natural gas would entail minimal new disturbance. The projected onshore oil and gas transport pipelines across NPR-A are expected to be elevated and therefore visible for some distance. Permitting of a pipeline across NPR-A would be under BLM jurisdiction. The BLM currently requires pipelines across NPR-A to be elevated a minimum of 7 ft. For additional information the reader is referred to the BLM’s NPR-A Integrated Activity Plans/EISs (http://www.blm.gov/ak/st/en/prog/planning/npra_general.html). The BLM evaluates the potential visual impacts of elevated pipelines. Emissions associated with OCS activities and support facilities are subject to limitations pursuant to regulations administered by EPA under the Clean Air Act.
Oil Spill Information. The comment asserting that oil is spilled no matter what technology is employed provides no references or data to support this assertion, so some background information is provided here. Between 1971 and 2007, OCS operators produced almost 15 billion barrels (Bbbl) of oil. During this period, there were 2,645 spills that totaled to approximately 164,100 barrels (bbl) spilled—equal to 0.001% of barrels produced or about 1 bbl spilled for every 91,400 bbl produced. This record has improved over the time analyzed in available studies. Between 1993 and 2007, the most recent 15-year period, almost 7.5 Bbbl of oil were produced. During this period, there were 651 spills that totaled to approximately 47,800 bbl spilled—equal to 0.0006% of barrels produced or approximately 1 bbl spilled for every 156,900 bbl produced (Anderson, 2008, pers. comm.). Although the consumption of petroleum products is increasing, spill rates are decreasing (Etkin, 2009). Approximately 99% of OCS spills are less than 10 bbl in size. The DWH event provides additional data points for these estimates.

Additive Risk of Oil and Gas Operations. With respect to potential risks associated with producing both oil and gas, or shifting focus from oil to gas, BOEMRE has no evidence that either the risk of adverse effects or the magnitude of effects would be additive during this transition. Further, under the OCSLA four-stage review process, the potential for additive effects would be evaluated—and mitigation would be developed if necessary—at each stage, and as the specific circumstances of natural gas production arise. For example, in the event that modifying an oil production platform to produce natural gas is proposed, BOEMRE would require a revised or modified development and production plan. Such revised or modified plans would require and undergo thorough technical and environmental review to address potential risks. All reasonably foreseeable additive and synergistic impacts associated with natural gas development and production are evaluated in the Cumulative Effects section of the SEIS.

BOEMRE substantially agrees with the factual assertions in all the points regarding safety standards and records listed above. Should oil and gas activities proceed in the OCS, BOEMRE will continue to act under its mandate and mission as the regulating agency to uphold the vigorous safety standards that Arctic people and ecosystems deserve.

New Technology. Advancements in seismic technology have improved the resolution of subsurface structures and reservoirs that could contain oil and gas. This technology makes the exploration program more efficient because test wells are located in optimal locations and fewer wells are drilled to determine the viability of a potential prospect. This reduces potential environmental impacts. New technologies used for production wells increases the recovery per well and could reduce the size and number of offshore platforms. Advancements in subsea well technology could also reduce the number of offshore platforms, thereby reducing the longer term impacts of large surface facilities. There are many other technologies that are continuing to be developed that will improve project economics and reduce environmental impacts. The frontier areas in the Arctic are at the forefront of this technology trend.

Issue 29. Lessons from the Deepwater Horizon Event

Summary of Comments

This issue was raised in most comments received. Many comments expressed one or more of the following assertions:

- It is critical that all necessary science and lessons learned from the Deepwater Horizon oil spill are incorporated into any final decision about whether and where to allow oil drilling in the Chukchi Sea. BOEMRE should analyze new information from the spill that is still being developed by, for example, the Presidential commission on the Deepwater Horizon spill.
• As the Deepwater Horizon spill taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences. The Deepwater Horizon spill also demonstrates that we need to know the environmental effects of offshore drilling before it begins.

• BOEMRE should not move forward with any oil drilling plans for the Chukchi Sea until all necessary science is collected and lessons are learned from the Deepwater Horizon spill. It is critical that all necessary science is collected and analyzed and incorporated into any decisions dealing with oil drilling in the Chukchi Sea. It is imperative that all necessary steps are taken to prevent another catastrophic oil spill from happening.

• The Deepwater Horizon spill has yielded significant new information and circumstances that are relevant to Lease Sale 193, which prompted CEQ to state that “[t]o the extent that the effects of a catastrophic spill have been projected or modeled, that analysis would have to be compared to the effects of this spill to provide current information to the decision maker.”

• Recent hearings on the Deepwater Horizon spill indicate that BOEMRE needs regulatory improvements and demonstrate that BOEMRE is not ready to proceed with offshore drilling in the Chukchi.

• It’s refreshing to see that the federal government has learned something from the Deepwater Horizon event, and has now included a VLOS scenario.

• The Draft SEIS is not consistent with the DOI’s offshore oil and gas program reforms that have been adopted in response to the Deepwater Horizon oil spill.

• The Deepwater Horizon oil spill shows that, even with the latest technology, oil spills do, in fact, occur during exploration. In addition, the spills analyzed in the original EIS—a 1,500 barrel oil spill from a production facility and a 4,600 barrel oil spill from a pipeline (193 FEIS at IV-19)—are less than 1/1000 the size of the Deepwater Horizon spill (estimated at close to 5,000,000 barrels of oil by the Presidential commission investigating the Deepwater Horizon spill).

• BOEMRE must supplement its analysis of oil spill prevention and containment to reflect the lessons being learned from the Deepwater Horizon spill and its aftermath, including the effects of dispersants.

• One commenter advocated for elaborating on existing discussion of the Deepwater Horizon spill in light of inevitable legal challenges to the document.

Source of Comments
This issue was raised in nearly all comments opposing offshore oil and gas activities or disapproving of Lease Sale 193 (or the SEIS specifically). This issue was also raised in several comments supportive of offshore oil and gas activities, Lease Sale 193, and/or the SEIS. The specific issues used in the Summary of Comments subsection above are taken from following sources:

• Tribal Governments and Alaska Native Organizations
• Local Governments
• Environmental Organizations
• Corporations and Industry Groups
• General Public

Response to Comments
The Deepwater Horizon tragedy and the events of the 2010 summer have resulted and will continue to result in substantial organizational changes and new policies designed to improve regulatory
oversight of human safety and environmental hazards. The ramifications of the DWH event for activities in the Chukchi Sea are discussed in detail within Section IV.D.1. The DWH event, along with public comments, also precipitated the Very Large Oil Spill analysis within this Final SEIS. Historically, BOEMRE and its predecessor agency have completed six VLOS analyses for the Arctic; one for the Chukchi Sea and five for the Beaufort Sea.

**Issue 30. Coastal Zone Management programs and procedures.**

**Summary of Comments**

One commenter on the Draft SEIS stated that the District Court’s order to assess the potential impacts of gas development is a new requirement calling for assessment beyond that of the Sale 193 FEIS and, therefore, BOEMRE must prepare and submit to the State of Alaska a revised consistency determination for Lease Sale 193 with the Alaska Coastal Management Program (ACMP). The commenter asserted that a new component (a gas development scenario) has been added to the range of activities projected to result from the lease sale, and there is new information regarding potential impacts, which triggers the conditions for preparing a supplemental consistency review under 15 CFR 930.46(a)(2).

Another commenter on the Draft SEIS stated that in light of revisions to the ACMP, the concerns of villages may not be properly addressed.

On the Revised Draft SEIS, several commenters mentioned the need to update SEIS references to the ACMP, which met its sunset date (July 1, 2011) during the comment period. To this end, comments included the following:

- All references to the Alaska Coastal Management Plan should be removed considering the program met its sunset date.
- In light of the ACMP’s expiration, Federal agencies should allow additional opportunities for boroughs to give input to Federal agencies.

One commenter asserted the loss of the ACMP constitutes significant new information that is relevant to:

- Evaluating data gaps
- Considering lease sale alternatives
- Designing and requiring mitigation measures
- Analyzing the VLOS scenario
- Analyzing the natural gas development and production scenario

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Groups
- General Public

**Response to Comments**

**Consistency Review on Sale 193 FEIS.** BOEMRE submitted a Coastal Zone consistency determination to the State of Alaska, which concurred that Lease Sale 193 is consistent with the enforceable policies of the ACMP on October 30, 2007.
ACMP Sunset. The ACMP was established pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended (16 U.S.C. §§ 1451-1464). The CZMA does not require a State to have a coastal management program, but encourages coastal states to voluntarily develop comprehensive programs to manage and balance competing uses of and impacts to coastal resources. The ACMP is no longer in force. The State of Alaska did not pass legislation to extend the ACMP, allowing the ACMP to sunset at 12:01 AM, Alaska Standard Time on July 1, 2011. With the termination of the ACMP, there are no enforceable standards to base a consistency review of federal coastal development activities. No state or federal agency will take over or assume the function and responsibilities for coastal zone management in Alaska. BOEMRE has considered the commenter’s view and does not find the loss of the ACMP to represent any significant new information or changed circumstances that warrant further supplement of the SEIS.

The CZMA congressional authority for a coastal management program does not extend to a borough or other local government within the State of Alaska. Nonetheless, BOEMRE remains committed to working collaboratively with interested local governments on issues affecting coastal areas and communities.


Summary of Comments

Many comments expressed opinions on the role, if any, of Chukchi Sea hydrocarbon resources within the nation’s energy policy.

Comments supporting affirmation of the lease sale referred to one or more of the following themes:

- The federal government must do more to develop a balanced energy policy that creates jobs, helps stabilize energy prices, and reduces imports.
- The resource potential of the Alaskan OCS is world class and exceeds the combined resource estimates for the Atlantic and Pacific OCS. According to the resource estimates, including those performed by USGS, Alaska’s OCS may hold as much as 27 billion barrels of oil and 132 trillion cubic feet of natural gas.
- Developing Chukchi Sea resources would strengthen domestic energy security, help industries that rely on crude oil and natural gas, and alleviate energy price volatility, economic stagnation, and the high unemployment rate.
- High volumes of foreign energy imports transfer significant income to other countries, wealth that could be invested domestically.
- Shifting towards alternative sources of energy will take time and the nation requires additional domestic supply in the interim.
- Countries that are economically weakened have difficulty protecting their environment.
- The U.S. needs a constant supply of new discoveries to replace declining production and meet growing needs.
- Alaska OCS development is critical to maintaining a sufficient flow rate through TAPS to avoid corrosion, complex and costly maintenance, and premature decommissioning.
- Alaska OCS development would elongate the life of the TAPS pipeline, leading to lower pipeline tariffs, a more robust and lower cost service industry, reduction of certain refining costs, and longer-lived onshore facilities.
- TAPS has been identified as critical infrastructure for national security because of the transportation link that it provides to present and future development of crude oil resources in Alaska’s Arctic region.
• Access to the Alaska OCS could increase the feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48 States.
• It is possible to strike a balance in the Arctic between responsible oil and gas production and environmental, social, and cultural values.
• Rescinding the leases would allow a de facto moratorium to continue, without a corresponding benefit to the environment.

Many other comments objected to the pursuit of more hydrocarbon-based resources, often expressing a preference for various forms of renewable energy (e.g. solar, wind, algae, hydroelectric, geothermal, etc.) instead. For example:

• BOEMRE should work with the Department of Energy to develop a national energy policy that, over time, would result in a shift away from our reliance on oil and gas development in high-risk areas.

Some commenters rejected the notion that TAPS is in danger of decommissioning:

• The oil industry’s own data (used in a recent court decision in Alaska) states that TAPS is in no danger of shutting down and will operate until 2047.
• There is 50 years worth of oil in the Lower 48, and enough shale on the North Slope to keep the pipeline operating through 2074.

Several related comments stated that the oil industry produces a wide variety of negative externalities borne by ordinary citizens.

One comment suggested that BOEMRE should adopt a slower, phased approach that limits initial operation to one or two active lease sales at a time.

Another comment challenged the resource estimate for the Chukchi Sea Planning Area as fantastic, largely speculative, and subject to change. This comment also asserted that even if current estimates of recoverable volume prove correct, the nation’s annual dependence on foreign oil would be reduced by only single-digit percentage points.

**Sources of Comments**

• Tribal Governments and Alaska Native Organizations
• State Government
• Local Governments
• Environmental Organizations
• Corporations and Industry Groups
• General Public

**Response to Comments**

**Limited Scope of Analysis.** While national issues such as volatile energy prices, economic stagnation, high unemployment rate, dependence on imported energy, etc. are important, they exceed the scope of the environmental analysis in the SEIS. BOEMRE considers issues related to access to offshore energy supplies during development of each Five-Year Leasing Program.

**Resource Potential.** As acknowledged in the SEIS, BOEMRE’s current petroleum assessment indicates a mean technically recoverable oil resource of roughly 15 billion barrels (Bbbl) with a 5% chance of about 40 Bbbl (USDOI, MMS, 2006e). The mean undiscovered gas resources total 76.77 trillion cubic feet (Tcf) with a 5% chance of 209.53 Tcf. More detailed information on resource estimates is provided in the paragraphs below.
The 2006 and 2011 resource assessments of the Chukchi Sea, Beaufort Sea, and Hope Basin planning areas forecast identical quantities of undiscovered technically-recoverable resources. The technically-recoverable resources represent the recoverable hydrocarbon endowment partitioned among many hypothetical pools ranging in volume from very small to very large. Both the 2006 and 2011 BOEMRE studies forecast an average undiscovered endowment of 23.75 billion barrels of oil and natural gas liquids and 109.19 trillion cubic feet of gas, but ranging up to a maximum undiscovered potential (5% probability to exceed) of 53.17 billion barrels of oil and natural gas liquids and 247.19 trillion cubic feet of gas (source: http://www.alaska.boemre.gov/re/reports/2006Asmt/2006_Assessment_Risked_Tables.pdf). Therefore, the recoverable resource endowment could easily far exceed the quantities noted in the comment.

Only a fraction of the resource endowment will be economically recoverable, and this fraction fluctuates with assumptions for future price paths, development scenarios, costs, and other economic factors that vary with world economic conditions. The 2011 BOEMRE economic assessment used ranges of current price and cost scenarios, but the most representative model forecasts averages of 17.82 billion barrels and 50.15 trillion cubic feet of undiscovered economically-recoverable oil and gas (for the particular case where oil price = $110/bbl and gas price = $7.83/Mcf [gas discounted to 40% of oil value on an energy basis]; source: http://www.boemre.gov/revaldiv/ppt/2011PacificAAPGPresentation.pps).

The 2008 assessment of circum-Arctic petroleum resources by the U.S. Geological Survey (http://pubs.usgs.gov/fs/2008/3049/) concluded that the Arctic Alaska “assessment unit”, which combines offshore and onshore (North Slope) areas, offers a mean technically-recoverable resource endowment of 35.87 billion barrels of oil (and natural gas liquids) and 221.40 trillion cubic feet of gas. Although the reported quantities among these independent assessments over time differ in detail, they all conclude with a shared view that the Alaska Arctic offers great potential for undiscovered oil and gas resources.

Undiscovered Resources. While the Chukchi Sea Planning Area could contain large amounts of oil and gas (see estimate above), its resources are currently considered undiscovered. Undiscovered resource potential is not the same as proven reserves. Undiscovered resources have not been located and, when discovered, they must be feasible to develop to become producing fields. Reserves are proven oil and gas accumulations that are feasible to recover with a profit acceptable to the field operator. Typically, a large portion of the petroleum potential could occur in accumulations that are too small, too hard to identify, or too costly to develop. This portion of the resource potential is unlikely to become producing reserves, because companies will not purposely develop uneconomic projects. Additional information obtained through exploration seismic surveys and drilling in the Arctic OCS would increase our knowledge of the resource potential and support better informed decision making.

Other Inputs to TAPS. The amount of oil in the Lower 48 is not very relevant to the challenges of keeping TAPS operational. TAPS operator (Alyeska Pipeline Company) issued a report in June 2011 that discussed a number of problems with pipeline operation at flow rates below 500,000 barrels per day. Present flow is slightly over 600,000 barrels per day, so the problems will start within years, not decades. Petroleum assessments of the North Slope and adjacent OCS indicate that these areas have a very high potential for oil and gas fields. However, this petroleum potential is undiscovered and it will take aggressive leasing, exploration and development to produce real oil to fill TAPS. Lease Sale 193 is just the first step in the process to discover and develop new oil fields.

TAPS operator (Alyeska Pipeline Company) issued a report in June 2011 that discussed the challenges facing the pipeline system because of low flow rates. Current flow through TAPS is approximately 600,000 barrels per day (only 1/3 of the peak flow in 1988). A number of problems start to occur at flow rates less than 500,000 barrels per day and the pipeline may not be operational at
flow rates of 300,000 barrels per day or less. Production rates are dropping by approximately 5% per year, which means that TAPS could reach these design limits within the next 10-15 years unless new oil supplies are added. The Beaufort and Chukchi OCS provinces have the potential for very large oil fields that could keep TAPS in operation many decades into the future.

Development and Production. Evaluation of the potential effects of oil development and production was addressed in the Sale 193 FEIS and is incorporated by reference in the SEIS. The Sale 193 FEIS acknowledges the declining throughput of TAPS. Section V.B.8 of the cumulative analysis in the Sale 193 FEIS discusses the potential input to TAPS from Chukchi Sea oil production:

The scenario for new petroleum development in the Chukchi Sea was postulated in view of the existing infrastructure on the North Slope because it is likely that future projects in northern Alaska will be tied into these facilities. The TAPS is assumed to carry oil production from the Chukchi which could begin in 2020 (Table V-6). Peak oil production rate from the first offshore field is assumed to be approximately 225,000 bbl per day and would constitute a 25% increase to the current rate through TAPS. (Sale 193 FEIS, Section V.B.8., p. V-10)

As discussed in the Sale 193 FEIS and SEIS, BOEMRE does not expect full-scale natural gas production from the Chukchi Sea or available capacity in the proposed natural gas sales line until at least 2030. Natural gas production from the OCS would be expected to extend the productive life of such a pipeline.

Pace of Leasing. BOEMRE administers OCS leasing, exploration, and development and production as mandated by the OCSLA. Congress amended OCSLA in 1978 to provide for the “expedited exploration and development of the Outer Continental Shelf . . .” 43 U.S.C. 1802(1). Consequently, the pace of leasing is determined by the OCSLA provisions requiring 5-year planning intervals. Given this mandated planning interval, leasing, exploration, and development and production activities in the Arctic have proceeded slowly. Lease sales have been held in the Arctic OCS since 1979, and a total of 15 Arctic OCS lease sales have resulted in 2,351 leases. Of these, all leases from 5 lease sales in the Beaufort Sea Planning Area and 2 lease sales in the Chukchi Sea Planning Area have expired. There are 186 current leases remaining in the Beaufort Sea Planning Area and 487 current leases resulting from Lease Sale 193 in the Chukchi Sea Planning Area; the latter have been suspended pending a final decision and conclusion to this SEIS process. As a result of all leasing in the Arctic OCS since 1979, a total of 35 exploration wells (30 in the Beaufort Sea and 5 in the Chukchi Sea) have been drilled. Only one field—Northstar—has been developed and is producing oil, and one other field—Liberty—is being developed. The Northstar facility is not located within the Arctic OCS; it is in State waters. Therefore, given the existing requirement to assess leasing opportunities at 5-year intervals combined with the historically slow pace of development activities in the Arctic, BOEMRE is confident in its ability to manage resources safely and responsibly.

While the pace of leasing in the Arctic may be slow, and the approach of the Department to this region cautious, the notion that a de facto moratorium exists is false. BOEMRE, Alaska OCS Region and the Department of the Interior have proceeded expeditiously and in good faith while discharging their duties under the OCSLA.

Alternative Energy. Information on alternative energy initiatives is provided in responses to Issue Category 32, below.

Issue 32. Preference for energy alternatives and conservation.

Summary of Comments

Many comments expressed preferences for other means to meet energy demands, aside from development of offshore resources. Most of these comments suggested that the federal government invest in other energy sources (particularly renewable sources of energy such as solar, wind,
geothermal, tidal, etc) and/or increase its emphasis on energy conservation. Further, these comments suggested that renewable energy is an emerging industry that can provide good jobs for workers currently in the oil and gas industry, as well as others. Other comments expressed a preference for exhausting onshore oil and gas resources prior to venturing offshore.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- General Public

**Response to Comments**

Comments asserting a preference for other energy sources are beyond the scope of the current analysis. In accordance with the District Court remand, the SEIS provides in-depth analysis of the most viable natural gas development and production scenario for the Chukchi Sea, of a hypothetical VLOS scenario, and of incomplete information identified in the Sale 193 FEIS. Alternatives to OCS oil and gas leasing to meet the Nation’s energy needs is a programmatic issue, which was addressed as the No Action Alternative (Alternative 10) in the Final EIS for the 2007-2012 5-Year Program (USDOI, MMS, 2007c:Section IV.K). BOEMRE administers OCS leasing, exploration, and development as mandated by the OCS Lands Act. Congress amended OCS Lands Act in 1978 to provide for the “expedited exploration and development of the Outer Continental Shelf . . .” 43 U.S.C. 1802(1). On the Alaska North Slope, the Bureau of Land Management has mandated responsibility for the oil and gas program in the National Petroleum Reserve – Alaska under the Naval Petroleum Reserves Production Act and the Federal Land Policy and Management Act. The State of Alaska manages oil and gas leasing and operations on state lands of the North Slope.

While renewable energy sources currently play a role in meeting energy demands in this country, and will continue to do so in the future, such sources could not replace the energy supplied by oil and gas in the OCS. The DOI and BOEMRE continue to move forward on renewable energy. More information on the OCS Renewable Energy Program is available at: http://www.boemre.gov/offshore/RenewableEnergy/index.htm.

**Issue 33. Very Large Oil Spill (VLOS) Scenario**

**Summary of Comments**

BOEMRE received positive feedback for the decision to incorporate analysis of a Very Large Oil Spill (VLOS) within the SEIS. The treatment of spill response and cleanup in the SEIS proved to be the most controversial topic and is treated separately in Issue Category 35. Specific comments on the scenario itself generally took the form of either requests for additional information or requests for clarification:

- The SEIS should more clearly explain the definition of a VLOS and the volume of the VLOS being considered.
- A variety of technical comments were made on the AVALON/MERLIN software used to model a flow rate for the hypothetical VLOS.
- BOEMRE should follow all of the recommendations of the National Commission on the BP Deep Water Horizon Oil Spill and Off Shore Drilling, no mater what the water depth of a particular project.
- Failure to share information such as the GPS coordinates of the VLOS well breeds distrust.
One comment requested that BOEMRE clarify the term “known prospect,” and explain why BOEMRE chose this particular geologic formation and the limits of the analysis (e.g. if there is no oil in the formation, then there is no chance of VLOS).

Some comments requested that the SEIS do more to contextualize the risk of a VLOS. These comments asserted that, as written, the SEIS may overemphasize the potential for a VLOS, and decision makers may overweigh the risk of this low probability event. These comments went on to suggest the following changes to the SEIS:

- Make clear that regulatory standards exist that could prevent or mitigate an oil spill and that this hypothetical scenario assumes that everything that could go wrong, would go wrong.
- Clearly and succinctly define the VLOS scenario as extreme, entirely speculative, and exceedingly improbable.
- Highlight the extreme assumptions used to construct the VLOS scenario to better contextualize the probability of such an event occurring in the real world.
- Use the terminology “low frequency” rather than “low probability” to describe the likelihood of blowouts or VLOS events.
- Duplicate or at least summarize within Section IV.D the quantitative assessment/probabilities analysis contained within Appendix B.

BOEMRE was also asked to clarify whether the VLOS scenario is a “reasonably foreseeable impact” or a “remote and speculative impact”. Conversely, many comments referred to a VLOS in the Chukchi as an “inevitable” consequence of exploration there.

One comment stated that Table B-1 should include data from the DWH event, and that totals should be recalculated.

One comment found use of the term “any known prospect” confusing, as follows:

- The phrase could suggest to the reader that any prospect in Lease Sale 193 area has the potential for a VLOS of the type modeled.
- Other known and mapped prospects do not have the physical capacity to flow at the rate analyzed.

Another comment asserted that the VLOS scenario should be site-specific and “not use information from the Gulf.” The commenter states that the “flow rate estimates are 40,000 to 50,000 gallons or barrels off, as compared to actual drill plans for the Chukchi.” The suggestion is that it is like comparing apples to oranges.

One comment stated that the VLOS scenario should use analog reservoirs that are actually known to contain oil. This same comment notes that at the lease sale stage, information on what oil or gas reservoirs may produce during a VLOS are inherently speculative. Reservoirs will be better studied and understood by the time of exploratory drilling.

One comment criticized BOEMRE’s methodology for modeling the flow rate for the VLOS scenario. This comment requested modeled flow rates for three to four different types of oil.

Several comments suggested that the SEIS better emphasize the distinction between a VLOS and a WCD. They stated it should be made more clear that the VLOS discharge volume is being calculated solely for the purpose of determining the environmental effects of an uncontrolled oil well blowout, and that it has no direct relationship to the WCD considered in exploration plan scenarios.

Several commenters took issue with the length of time to stop the flow of oil posited by the VLOS scenario (i.e. pinpointing when the flow of oil would cease). Relevant comments include:
• It is important that the public also understand that the analysis presented in the SEIS does not take into consideration an operator’s ability to respond immediately to an emergency that results from a well control situation in the Chukchi Sea.

• The decision maker should understand that the VLOS scenario is not really the worst or most extreme case, because weather, ice, darkness and other constraints could prevent the completion of a relief well prior to winter setting in. It must be understood that late season relief well drilling may not be feasible; this argues for provision of a dedicated relief well vessel in close proximity to exploration wells.

• Use of the original vessel to drill a relief well should not be presented on equal terms with bringing in a second vessel. Immediate use of the original vessel to drill a relief well is not consistent with industry standards, which (following a blowout) require an examination of the rig before resumption of any drilling. Also, history shows that blowouts lead to rig evacuations and a rig that is unable to drill a relief well. These limitations should be noted.

• Regarding the relief well vessel, more explanation of “weather downtime” should be provided. BOEMRE should explain the “previous operations” that were considered, whether these are applicable in the exploration drilling context, and whether these limitations apply equally in late season drilling.

Many commenters insisted that BOEMRE analyze the missing or incomplete information regarding the effects of a VLOS. Some of these comments specifically invoked 40 CFR 1502.22. One of these comments asserts that the VLOS discussion does not acknowledge incomplete information relevant to the analysis, and therefore violates 40 CFR 1502.22.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

**Response to Comments**

**Defining the VLOS.** In order to inform the public and decision makers about the potential effects of OCS activities, past NEPA documents prepared by BOEMRE have analyzed a variety of hypothetical oil spills. Among other factors, these scenarios have varied by source and volume. BOEMRE’s NEPA documents have categorized oil spills of differing volumes by creating categories of “small”, “large” and “very large”, which are defined as <1,000 barrels (bbl), ≥1,000 bbl, and ≥150,000 bbl, respectively. At approximately 2.2 million bbls, the hypothetical oil spill analyzed in this SEIS falls clearly in the category of a very large oil spill (VLOS).

The purpose of including a VLOS scenario in this SEIS is stated in the first sentence of Section IV.D: to analyze “[the] potential environmental effects of a low-probability, high impacts event.” This exercise is consistent with a recommendation from an August 16, 2010 report from the Council on Environmental Quality pertaining to NEPA analysis of OCS activities. This report is described in relevant part within Section IV.D.1 of the SEIS. Specifically, CEQ recommended that BOEMRE “ensure that NEPA documents provide decision makers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities” on the OCS.
It is not necessary to clarify whether the VLOS scenario is a “reasonably foreseeable impact” or a remote and “speculative impact”. What is important in this NEPA document is to evaluate and communicate the potential environmental effects of such a scenario.

**Spill Duration.** It is acknowledged in Section IV.D.3 of the SEIS that the estimate of 74 days is “conservative”, as it does not take into consideration “the variety of other methods that would likely be employed to halt the spill within this period.”

Meanwhile, it is also acknowledged in Section IV.D.3 that, “The availability and effectiveness of [spill intervention and response] techniques may vary depending on the nature of the blowout as well as seasonal considerations, including the seasonal presence of sea ice.” In response to comments, this language has been enhanced to highlight the special considerations attendant to late season drilling. It should be noted that the adequacy of proposed spill response capabilities is evaluated on a plan-by-plan basis at the exploration plan or development and production plan phase. Those analyses account for seasonal considerations.

**Frequency of a VLOS.** Section IV.D.1 of the SEIS provides the public and decision maker with adequate context as to historical rates for well control incidents and oil spills on the OCS. Readers interested in a more in-depth treatment of this topic are referred to Appendix B of the SEIS. History clearly shows that such events are infrequent, yet possible. BOEMRE must reject commenter’s requests that the SEIS characterize a VLOS as either “inevitable” or “entirely speculative”.

Additional, prospective quantification of rates for Chukchi Sea development are outside the scope of this environmental effects analysis. It should be noted that past OCS incident rates are not a precisely accurate indication of future rates, especially in light of the additional safety measure developed in the wake of the DWH event. Rates could also vary by the particular activity and technology associated with each specific proposal. BOEMRE has included the percentages in addition to the actual numbers of OCS well control incidents releasing hydrocarbons (crude, condensate and drilling mud oil) in Section IV.D.1 and Appendix B, Section 1.1.

The VLOS analysis does not estimate the chance of a VLOS occurring but rather assumes a VLOS occurs for purposes of analysis. Appendix B, Section 1.3 states that the frequency of OCS well control incidents spilling fluids ≥ 150,000 bbl from 1971-2010 has not exceeded the frequencies used in the fault tree analysis for the Sale 193 FEIS oil spill analysis. The estimates of one or more large oil spills occurring from the proposed action and its alternatives in the Sale 193 FEIS using rates from the fault tree analysis remain valid when considering the OCS well control data from 1971-2010.

BOEMRE agrees that there could be subtle inferences regarding the terminology of frequency versus probability. The use of the term probability by BOEMRE is not meant to infer that efforts to reduce the chance of a VLOS occurring would not take place. Recent safety measures, implemented by both BOEMRE and industry, are intended to reduce the frequency or probability of a VLOS even further and are discussed in IV.D.1.

**Flow Rate Modeling Software.** The AVALON/MERLIN model used to estimate oil discharges from an uncontrolled well is a deterministic simulator that does not conduct Monte Carlo sampling of input probability distributions. However, consistent with the “worst-case” philosophy that governs VLOS and WCD determinations, the input values for key variables are designed to assess “high-side” cases that are constrained only by the limits of geological or physical reality. Many of the key input variables that are not proprietary are listed in table D-2 of SEIS Appendix D. In practice, the “worst-case” modeling philosophy cannot supersede obedience to the basic laws of physics as well as certain internal dependencies among variables that are also dictated by physics. For example, a black oil (no free gas) reservoir cannot be assumed to contain more dissolved gas than that permitted by the reservoir temperature, pressure, and certain fluid characteristics that ultimately control solubility. Oversaturation as a stable condition is not possible because any excess gas in the oil escapes from the...
solution state and bubbles out to form a free gas phase that gathers in a gas cap. If the presence of a gas cap were assumed at the VLOS well, it would subtract from the thickness of the oil column available to feed an oil discharge. Contact with a free gas column is disallowed at the VLOS well. Therefore, the Chukchi VLOS model assumes that any gas cap is distant and that the oil at the well is saturated, i.e., it contains the maximum possible quantity of dissolved gas. The assumption of saturation in turn drives higher discharge rates. At total (gas) saturation, physics dictates that the viscosity of the oil is minimized and this has the “worst-case” effect of maximizing oil discharge rate.

Because of the physical dependencies among these variables, one cannot just assume some value for oil viscosity that is even lower than the minimum value forecast by the pressure, temperature, and saturation conditions of the reservoir. Physical laws require this internal consistency and the AVALON/MERLIN model is in fact designed to test and consistency-check the correlations among interdependent input variables.

Operationally, the AVALON/MERLIN model divides the subsurface reservoir into many small cells that surround the VLOS wellbore. A simulation iteration begins with the extraction of a volume of fluid over a user-specified time increment (at the outset usually specified at 0.1 days, but possibly adjusted downward to 0.001 days if deemed useful based on model behavior) from the “initial” cell that is penetrated by the VLOS wellbore. The volume of fluid extracted over the specified time increment is dictated by the physical properties of the reservoir and the pore fluid as well as the frictional resistance to outflow imposed by the wellbore tubulars. The first extraction event immediately changes all of the properties (i.e., the initial model input variables) of the “initial” cell, mostly pressure and the pore fluid properties that are in turn controlled by pressure, temperature, and fluid composition. The fluid composition will change as gas exsolves in the reservoir and preferentially escapes to the wellbore. The changes in the “initial” cell will affect the adjoining cells in ways governed by physics. The effect of extracting fluid at the wellbore is mathematically spread throughout the entire cell network, which may cover thousands of acres. In the next iteration, a second volume of fluid is extracted from the initial cell over the same time increment, and the entire process of adjusting cell properties across the cell network is repeated. The iterations continue out to the end of the desired model discharge period, usually 180 days or greater. Cell size is determined by the user. Near the wellbore, cells ~200 ft along an edge typify the VLOS and WCD models to date. Small cells provide highly accurate answers, but may require very lengthy runs because of the vast numbers of cells if established at equally small dimensions throughout the network. A common modeling practice is to enlarge the dimensions of cells at increasing distances from the wellbore and toward pool boundaries where the incremental changes are much smaller than at the “initial” cell at the wellbore. A balance between required accuracy and reasonable run times is sought. The AVALON/MERLIN model offers two approaches to partitioning the reservoir into cells: 1) radial, where the cells are concentric about the wellbore; and 2) rectilinear, where the reservoir is partitioned into cubic or prismatic cells. Both approaches to reservoir partitioning are usually conducted as an internal cross-check and generally produce very similar results.

Volume of DWH Event. BOEMRE included the Deepwater Horizon well control incident in Table B-1, but not the volume. The footnote states that the final volume for the Deepwater Horizon that occurred on April 20, 2010 has not been determined by BOEMRE. Using the 4,900,000 bbls from McNutt et al. (2011), the volume spilled from well control incidents from 1971-2010 on the OCS was 4,901,828.85 bbl.

Location of VLOS Reservoir. The specific geographic location of the VLOS well is not revealed in the SEIS. This is because the VLOS model data that is provided in table D-2 of Appendix D of the SEIS, when coupled with the geographic location, would represent a breach of private information, akin to releasing a “trade secret,” that is held in trust by the BOEMRE. A critical part of the data set for the Chukchi Sea consists of seismic data that were gathered at great expense by industry entities in response to past promises of future lease sales. Without this data, no wells could have been drilled.
and the geology of the Chukchi Sea would today remain virtually unknown. The gathering of the costly seismic data represents a private investment and the information extracted from these data is classified as proprietary to the parties that paid for the data. A public disclosure of this information could cause grave financial harm to the data owners by destroying the value of the data and/or compromising the competitive advantage that was gained by the investment in gathering the data. For this reason, seismic data are even sometimes the targets of theft. From a regulatory standpoint, specific Federal laws forbid the disclosure (by either Federal employees with authorized access or others) of proprietary data to any parties other than the data owners. Severe criminal penalties to agency employees can result from intentional release of proprietary data (Outer Continental Shelf lands Act, as amended [43 U.S.C. 1331]; Federal Oil and Gas Royalty Management Act of 1982 [30 U.S.C. 1701]).

**Description of VLOS Reservoir.** A thorough description of how BOEMRE developed the VLOS scenario is provided in Section IV.D.2 of the SEIS. Additional background information on this exercise is available in Appendix D.

Commenters are correct in pointing out that very few known and mapped prospects in the Chukchi Sea have the potential, even in greatest geological extremity, to yield oil discharges approaching that of the VLOS model described in Appendix D. The Chukchi Sea VLOS is constructed as an extreme case that is based upon a single prospect that offers the rare combination of the potential (but unproven) characteristics that promote an extreme VLOS event, notably great reservoir thickness and high permeability. Although these key traits could be found at the VLOS prospect, neither of these key characteristics is likely to be realized as modeled at the selected prospect. And, at many prospects, it is simply geologically impossible to achieve the characteristics or discharge volumes of the SEIS VLOS. BOEMRE finds the existing language in the SEIS, which clearly refers to a single prospect, to be unambiguous. No confusion on this point was reported or observed at any public meetings.

The reservoir formation at the VLOS well is not revealed because when combined with other information that is provided in Appendix D could constitute a disclosure of proprietary data. However, the VLOS reservoir formation is associated with commercial production in the central North Slope of Alaska and some publicly-available analog data from that information source was incorporated into the VLOS model.

The VLOS prospect reservoir is unexplored except through seismic imaging. It is acknowledged in Appendix D that the prospect is not known to contain high-quality reservoir rocks or “flow units” capable of supporting flow of hydrocarbons to the wellbore. However, the reservoir formation is identified through seismic mapping and does offer substantial gross thickness in the capture volume at the VLOS prospect. Furthermore, the VLOS reservoir formation is known to include potential flow units at other sites in the greater Alaskan Arctic. Although the pore system characteristics of the reservoir formation are not known at the particular Chukchi Sea VLOS site, it seems likely that some part of the substantial gross reservoir formation thickness may include porous and permeable strata capable of flowing pore fluids to a wellbore. Flow rate is proportional to aggregate thickness of flow units, so a great gross thickness is a necessary first condition to achieving a high VLOS discharge rate. Secondly, as several commenters point out, the VLOS prospect reservoir formation is not known to contain hydrocarbons. However, the VLOS prospect is favorably located to receive migrating hydrocarbons from nearby areas of thermal generation of petroleum. These important geological risk factors are acknowledged to decrease the likelihood of a VLOS discharge but do not have any analytical role in establishing VLOS discharge volumes. The VLOS model assumes the condition that capable flow units that are saturated with oil are present within the prospect. Related discussions of issues related to probability and oil spills are offered in the responses to Issues 28, 33 and 34.
Flow Modeling. The VLOS scenario for the SEIS was created for a specific prospect in the Lease Sale 193 area of the Chukchi Sea (see Figure D-1, Appendix D of the SEIS). The geologic data base that supports the VLOS model was constructed from information gleaned from a seismic data network of ~100,000 line miles of two-dimensional seismic data, a localized three-dimensional seismic survey, the 5 wells drilled in the 1989-1991 phase of Chukchi Sea drilling, relevant wells onshore, and publicly-available data from producing oil fields in the Prudhoe Bay area. No data or blowout events from the Gulf of Mexico were used to construct the Chukchi Sea VLOS. In Appendix A of the Sale 193 FEIS, OCS oil spill statistics are used in a fault tree model to estimate the probabilities of oil spills occurring. The estimates include various size categories from platforms/rigs and pipelines based on the Lease Sale 193 exploration and development schedule. The oil discharge rates and the aggregate oil discharge over the maximum period (74 days) required to drill a relief well and “kill” the blowout well are both reported in barrels (1 barrel=42 U.S. gallons). These quantities (maximum rate, 61,672 bbls/day; 2,160,200 bbls over 74 days) represent extremely high but extremely improbable results from a locality-specific geological model that was designed to serve as a basis for evaluating a “worst-case” scenario for environmental harm.

The modeling of tubing hydraulics is primarily based upon the casing and open-hole designs for the well and the properties of the fluids ascending the wellbore. The lengths and roughness characteristics of the tubing components control the frictional opposition to fluid flow. The properties of the fluids evolve as they rise through the tubing in response to changes in pressure and temperature, primarily related to the exsolution of dissolved gas into a separate phase. The “tubing” model accounts for all of these variables. The Chukchi VLOS model assumed the presence of 9.625-inch-diameter casing (8.535 inches interior diameter) to an unspecified depth above an open-hole segment 11 inches in diameter (enlarged by washout from a drill diameter of 8.5 inches) and terminating at a total depth of 9,000 ft. The lengths of the cased-hole and open-hole wellbore segments for the tubing model are not provided because that information reveals the depth interval of the reservoir formation as interpreted from proprietary seismic data. The AVALON nodal analysis program offers a selection of six published industry-standard correlations for calculating the “tubing curves” (models for variation of fluid flow rate with flowing bottom-hole pressure) for vertical wellbores. The six correlation models for vertical wellbores include the following: Beggs & Brill (oil), Hagedorn & Brown (oil), Duns & Ross (oil), Orkiszewski, Gray & Ross (gas condensate reservoirs), and Cullender & Smith (gas reservoirs). There are also corresponding correlations for horizontal or inclined flow paths. The Chukchi Sea VLOS model utilized only the correlations for vertical tubing; the Beggs & Brill correlation for oil that is commonly used by industry is preferred. AVALON also provides a selection of correlations for predicting and generating the temperature- and pressure-variant physical properties of reservoir fluids. These include the published industry-standard correlations of Standing, Vazquez and Beggs, and Lasater. For VLOS models to date, Standing’s correlations have been preferred. Other correlations produce similar results, but some produce better matches to laboratory data for particular oil types (not available for the Chukchi VLOS model) and are preferentially adopted in such cases.

VLOS vs. WCD. A strong explanation of the differences between a VLOS scenario and a Worst Case Discharge (WCD) analysis is provided in the second paragraph of IV.D.2. This distinction was also emphasized at each public meeting explaining and soliciting comments on the Revised Draft SEIS. Additional emphasize of this point is not deemed necessary to include in the body of the document but will be provided as a response to comment below.

The concept behind the “VLOS” or very-large-oil-spill is similar to that driving the analysis of “WCD” or worst-case-discharge events in that they are intended to represent low-probability/high-volume events bearing extreme potential consequences. The VLOS analysis is conducted to provide a real-world basis for a release of a very large quantity of oil into the marine environment for the purpose of assessing environmental harm. It is recognized that the probability of a VLOS-scale
discharge event is very low and a consideration of probabilities is offered in Appendix B of the Final SEIS. The low “geological” chance that the exploration well will successfully locate a large oil accumulation, coupled with the observed low incidence rates for accidental discharges in the course of actual drilling operations, predicts a very small, but not impossibly small, chance for the occurrence of a VLOS event. But this consideration of probability is not, nor should it be, integrated into the VLOS model. The VLOS discharge quantity is “conditioned” upon the assumption that all of the necessary chain of events required to create the VLOS actually occur (successful geology, operational failures, oil escaping confinement measures, oil reaching the marine environment, etc.). The VLOS discharge quantity is therefore not “risked” or reduced in deference to the low probability for the occurrence of the event.

Incomplete Information. It is not necessary to conduct additional 1502.22 analysis of any incomplete information identified in the VLOS analysis. BOEMRE wrote the Final SEIS in compliance with the requirements of 40 CFR 1502.22. The types of procedural deficiencies within the Sale 193 FEIS that formed the basis for the second and third concerns of the District Court’s remand do not recur within the SEIS. There are no unexplained statements regarding incomplete information made within the VLOS analysis of the SEIS. BOEMRE found that any incomplete or missing information that could be relevant to “reasonably foreseeable significant adverse effects” from a VLOS is not “essential to a reasoned choice among alternatives.” Because there is no incomplete information “essential to a reasoned choice among alternatives,” determination of “whether the cost of obtaining the missing information is exorbitant, or the means of doing so unknown,” is not necessary as per the requirements of 1502.22.

To illustrate these points with an example from the Final SEIS, consider analysis of potential impacts to bowhead whales provided in Section IV.E.7. There, BOEMRE makes clear that there is a lack of detailed studies regarding the effects of an oil spill on free-ranging populations of marine mammals. Having identified this incomplete information, BOEMRE then thoroughly addresses its relevance to the decision-making process and eventually determines that the information is not essential to a reasoned choice among lease sale alternatives.

Issue 34. Oil Spill Trajectory Modeling

Summary of Comments

Several commenters found the VLOS analysis confusing, stating that it does not give a clear picture of what an oil spill would look like or how it would affect our ocean or coast. For instance, the scenario should provide more detail on what the oil plume would look like, as well as more detail (i.e. smaller numerical ranges) on how much coastline would be affected. For example:

- The SEIS should feature meaningful animations of where the oil spill would spread from various drilling sites, pipelines, and tankers (including those used for well testing, fuel hauling, and oil spill cleanup tankers).
- The VLOS trajectory modeling does not provide info regarding how a VLOS would impact coastal villages in the Northwest Arctic Borough.
- There is a need for geospatially explicit spill trajectory models in order to evaluate cumulative environmental impacts of a VLOS on these communities.

Several comments alluded to a need for VLOS scenario to include more information regarding surface circulation and currents. For example:

- The Arctic ocean is cold and hydrocarbons do not evaporate out of it. A spill would travel with the circulating currents, and effects would recur over the long-term.
- The SEIS should consider the strength and variety of currents in the Chukchi Sea.
• The VLOS scenario should consider the many different currents in the Chukchi Sea, as well as the variable ice conditions.

A couple of comments expressed concerns about Appendix B. Suggested changes to the Sea Ice subsection include:

• Second sentence should also note the negative impacts of ice.
• Provide a time estimate for use of tracking devices and then collecting or burning oil after meltout. Include examples.
• The statement “In first year ice, most of the oil spilled…” should be better explained and supported.

Other suggested changes include:

• Re: Appendix B, Section 3. Instead of modeling only 35 API oil, the document should model at least three to four types of oil.
• Re: Table B-4: The document should explain why “Meltout Spill” was only considered until May 31, when in fact ice can be present into July.
• Section 2.2 seems to alternate between mm and cm. Should clarify whether this is a mistake or a subtle distinction.
• The statement in Appendix B, Section 4.1 that “For the purposes of analysis the oil could freeze into ice and melt out in the Arctic spring or summer” is too simplistic. Explain whether other possibilities were considered, and what happens to oil and its movements during freeze-thaw cycles.
• The Appendix B, page 9 discussion of factors not explicitly considered by the OSRA model should be moved to the introductory portion of Section 4.1 in order to make more clear at the outset how the model works.
• Appendix B appears to conclude that when the OCS well control data from 1971–2010 are considered, the fault tree analysis used in the Sale 193 FEIS remains valid. There, the frequency of a VLOS in the Chukchi Sea was estimated at $3.9 \times 10^{-4}$ per well. This is highly relevant info that would help contextualize the VLOS analysis.
• The empirical rate of OCS incidents that have resulted in spills greater than 150k bbls is 1 in 41,781, or $2.39 \times 10^{-5}$ per well—this should be made available to the reader.
• Only approximately 20% of OCS well control incidents result in the release of any liquid hydrocarbons. This is the more relevant number for public review, as opposed to total “OCS well control incidents.” Since the focus of the VLOS analysis is on an actual spill, BOEMRE should revise the text accordingly.

One comment referenced a phrase in the Severe and Extreme Weather section of Section IV.D.2, which mentioned “episodes of severe storms characterized by strong winds (25 to 30 mph)…” The comment noted that much higher winds have been recorded at Barrow.

Other comments expressed a variety of general concerns with the way the VLOS analysis was conducted and presented, or made suggestions for improvement, as follows:

• The VLOS scenario needs to include more information regarding surface circulation and currents.
• BOEMRE should clarify what the analysis of “the percent of trajectories from a long duration VLOS contacting” a resource (as opposed to “the percent chance of a large spill contacting” a resource, as used in previous analyses) tells decision makers and the public about the actual behavior of a VLOS.
• Reciting spill model results by environmental resource fails to inform distinctions between overall environmental effects caused by spills occurring in different areas of the lease sale.

• The VLOS scenario’s discussion of shoreline oiling is inadequate. While it provides a composite of how much shoreline might be “discontinuously oiled” from a spill originating anywhere in the region under consideration, it does not provide sufficient information regarding environmental impacts from an oil spill originating in different areas.

• The VLOS analysis’ description of the size and shape of an oil spill is flawed because it does not disclose whether or how slicks will behave differently if they originate in different areas, and how this may differentially affect resources and species.

• The VLOS trajectory analysis is inadequate because it assumes that oil spills do not spread, cannot contact multiple locations at once, and stop moving after landfall.

• The VLOS analysis does not provide understandable, mapped information that the public can decipher.

• The trajectory analysis does not allow the public to understand how the spread of oil could unfold from drilling in different parts of the leased areas and in different seasons. This information is necessary for comparison of spatial leasing alternatives and analysis mitigation measures.

• The trajectories were only done with an assumption for a limited period of time after the oil was spilled.

Sources of Comments

• Tribal Governments and Alaska Native Organizations
• State Government
• Local Governments
• Environmental Organizations
• Corporations and Industry Groups
• General Public

Response to Comments

Additional Explanation. Appendix B of the Final SEIS incorporated by reference the introductory information about the oil spill trajectory model in the Sale 193 FEIS. For clarity, additional information from the Sale 193 FEIS has been included in Appendix B, Section 4 of the Final SEIS. In response to comments, a figure of a shallow (< 60 m) subsea blowout with a hypothetical oil plume has been included in Appendix B, Section 2.1. Appendix B now includes a detailed table (Table B-29) showing individual launch areas and land segments from which the Section IV.D.2, Table 5 Length of Discontinuous Shoreline oiling was compiled from. In response to comments, additional information regarding the fate and behavior of oil in ice is included in Appendix B of the Final SEIS.

Consideration of Ocean Currents. The SEIS discusses circulation and currents in Section III.A.3 Physical Oceanography and additional information on surface circulation and currents was added. The oil spill trajectory model also uses current direction and current speed, and ice motion speed and direction, over time and space from a general circulation model to calculate the oil spill trajectories. Through sampling without replacement, the spill trajectory analysis considers many different currents throughout the study area.

Impacts to NWAB. The VLOS trajectory model does provide information regarding how a VLOS model could impact coastal villages in the Northwest Arctic Borough (NWAB). Appendix B, Figure B-1 shows that the NWAB is within the study area used in the oil-spill trajectory analysis. Figure B-7
shows the individual land segments (47-61) used in the oil spill trajectory analysis within the NWAB. Table A.1-15 of the Sale 193 FEIS, which is incorporated by reference, lists the environmental resource areas used in the analysis of oil spill effects on subsistence resources of which ERA 5 and 13 are adjacent to the NWAB. All percent trajectories contacting less than 0.5% (one half of a percent) are not shown in the Appendix B, Tables B-7 through B-22. The document provides information on the NWAB and shows the percent trajectories contacting the NWAB is less than 0.5% for all launch areas 1 through 13. Additional discussion of the importance of subsistence and potential impacts to NWAB subsistence harvest patterns is provided within Issue Category 23.

Wind. The objective of the Final SEIS section referenced by the commenter is to describe severe and extreme weather conditions that could impact the disposition of sea-surface oil and oil-spill recovery efforts. Winds over the sea reaching 25 to 30 miles per hour during a storm are classified on the Beaufort Wind Force Scale as strong winds. These wind conditions cause rough seas and large waves of 8 to 13 feet and often occur during a severe storm. Severe storms are not necessarily defined only by the wind speed, but also consider precipitation and temperature, and can occur in winter and summer. However, it is wind speed that would be the storm feature relevant to the disposition of sea-surface oil in the event of an oil spill. The commenter is correct that much higher wind speeds have been recorded at Barrow; however the strongest storms do not occur with the same frequency. Such storms are described later in the same section of the Final SEIS that have wind speeds at or near gale force (31 to 45 miles per hour) with huge waves of 15 to 20 feet.

Effect of Cold. Appendix B, Section 2.2 discusses evaporation of oil under Arctic condition in which colder temperatures in open water slow, but do not stop, evaporation. Evaporation does not occur once oil is incorporated into sea ice. The results of the oil spill trajectory model are used to analyze how resources are differentially effected by a very large oil spill from different portions of the sale area and are discussed Oil Spill Trajectory Analysis in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15.

Oil Type. BOEMRE discussed in Section IV.D.2. Very Large Oil Spill (VLOS) Scenario that the oil discharged from the hypothetical well is estimated to be 35° API crude oil like that recovered at the Klondike 1 well. This type of crude oil is believed to represent the dominant (Triassic-sourced) petroleum system in the central Chukchi Sea. Appendix D, Section 8 contains a further discussion on oil type.

Melt-out Spill. For clarity, BOEMRE has changed the specific dates in the notes for Appendix B, Tables B-3 and B-4 to reflect spills into open water and spills melting out from sea ice.

Oil Spill Trajectory Model Results and Presentation. The differences in the oil spill trajectory model results by launch area provide information regarding impacts to environmental, social and economic resources from different portions of the Lease Sale 193 area. The Sale 193 Final SEIS includes summaries of environmental impacts at the end of each resource discussion within Section IV.E, within Section II.D., and within the Executive Summary.

Regarding requests for maps, the Sale 193 FEIS, Appendix A and the Final SEIS, Appendix B, Figures B-1 through B-10 show the study area, launch areas, environmental resource areas, land segments, grouped land segments and boundary segments. The Sale 193 FEIS, Appendix A, Tables A.1.12-16 provide detailed information on environmental resource areas and land segments.

The BOEMRE completed a careful and thorough trajectory analysis for a very large oil spill from 13 individual launch areas within the lease sale area for three different seasons. The trajectory analysis considered 84 environmental, economic and social resource areas, 126 individual land segments, 15 grouped land segments and 39 boundary segments to analyze the spatial components of the study area which are shown in Appendix B, Figures B-1 through B-10. Appendix B, Tables B-5 and B-6 show the discontinuous area contacted in square kilometers by a very large oil spill from each of the 13

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launch areas. The results of the oil spill trajectory model are used to analyze how resources are differentially effected by a very large oil spill from different portions of the sale area and are discussed within the Oil Spill Trajectory Analysis subsection in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15. Additional maps and/or animations are not deemed necessary in this document.

**Oil Spill Trajectory Model.** The VLOS trajectory analysis is not a single trajectory but rather thousands of trajectories launched from over 1,000 launch points and summarized for 13 launch areas, for three seasons, which collectively represent how a VLOS could spread over time from those areas. Appendix B, Tables B-5 and B-6, estimate the discontinuous area contacted over six time periods from the 13 launch areas. A collection of trajectories representing a VLOS can contact multiple locations. Although a trajectory stops after contacting a land segment, the length of the land segments (average 20 km) provide a conservative estimate of oil contacting shore, particularly with the low tidal elevation (10 cm) along the Chukchi Sea. The agency has reviewed the state of the art on modeling interactions between spilled oil and shorelines for the development of algorithms for oil spill risk analysis modeling (USDOI, MMS 2007).

**Differences Associated with Spill Location.** Tables B-5 and B-6 are not the slick’s total area estimated by adding up all the area through which linear trajectories pass. Appendix B, Section 4.4 states, “The cumulative area is discontinuous because it does not represent the entire area covered by the VLOS at any one time; rather it is a cumulative estimate of the area contacted by a VLOS over six time periods.” In other words, the discontinuous area can be considered as the area of influence of the very large oil spill within six time intervals. Appendix B, Tables B-5 and B-6 show that with the exception of LA09 most of the launch areas have a similar size discontinuous area contacted. A very large oil spill is estimated to cover a very large discontinuous area no matter where the origin of the very large oil spill began. The results of the oil spill trajectory model are used to analyze how resources are differentially affected by a very large oil spill from different portions of the sale area and are discussed within the Oil Spill Trajectory Analysis subsection in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15.

**Issue 35. Spill Response and Cleanup**

**Summary of Comments**

Many commenters took issue with the manner in which the SEIS addresses spill response and cleanup. These commenters fell within two general groups. The first asserted that the SEIS did not adequately analyze and acknowledge the inherent challenges of spill response and cleanup in the Arctic, particularly weather, ice, cold, darkness, lack of infrastructure, lack of experience, lack of proven technology, etc. Often, these comments requested a clear statement in the SEIS that there is no proven way to adequately clean up a spill in the Arctic. There was also a request for detailed information, including:

- An estimate of the downtime required to establish staging areas.
- An indication as to where the staging areas would be located, and whether supplies are already in place there.
- An estimate of the weather downtime for vessels travelling from Cook Inlet and Prince William Sound to the spill.
- An explanation of how a responder will get to the North Slope and where they will stay, accounting for logistics and responder downtime.
- An indication in the document that the number of vessels and responders would decrease exponentially as the spill continues and weather and ice become unfavorable.
• More information regarding potential locations for boom deployments, where response efforts should be prioritized, and the efficacy of dispersants and their impacts to the environment.

• Additional studies on dispersants and whether they would cause more harm than good if used in the Arctic.

Two related comments noted widespread concern about the lack of necessary infrastructure and the inability of agencies to provide critical data such as weather and ice forecasting—this does not inspire confidence among local people that exploration and development of the Lease 193 area can currently occur in a manner protective of the environment. One of these comments challenged the assumptions in the “Levels of Recovery and Cleanup Activities” as unrealistic, given the lack of infrastructure and harsh environment of the Arctic. This included assumptions regarding an “exponential” increase in the number of vessels and responders, the “five to ten staging areas,” the “15 to 20 skimming vessels,” the “thousands of responders,” etc. The comment suggested there is no way to mobilize this equipment, house and feed the people, etc.

The second general group of comments regarding spill response and cleanup criticized the SEIS for downplaying the role that spill response and cleanup can play in mitigating the adverse effects of a VLOS. It was asserted that, after all, intervention and response plans are required for OCS well approval, and operators may have an ability to immediately respond to an emergency. Also, this group of commenters found it confusing that the VLOS scenario does not adjust the overall spill volume or trajectory analysis to account for successful spill response and cleanup, and yet analyzed potential negative impacts that spill response and cleanup could have on environmental resources.

One comment (from EPA) specifically asked that BOEMRE update and emphasize the existing discussion of the responsibilities and activities of the Alaska Regional Response Team (RRT), including the development and implementation of the Arctic Sub-Area Plan.

A couple of comments expressed concerns about Appendix B:

• Specify “ice downtime” for stable ice to form before cleanup could commence.

• Paragraph 3 of Appendix B contains no mention of potential remodeling of under-ice surfaces in which oil could be released.

Source of Comments

• Tribal Governments and Alaska Native Organizations
• State Government
• Local Government
• Environmental Organizations
• Corporations and Industry Groups
• General Public

Response to Comments

Spill Response and Cleanup – Challenges. BOEMRE shares concerns regarding the many unique challenges operating in the Arctic and the potentially devastating effects of a catastrophic oil spill. While multiple methods for recovering and cleaning up spilled oil exist, severe weather and/or the presence of ice could interfere with or temporarily preclude each of these methods. This point is made clear in the SEIS, which references the 31 Arctic oil spill response research projects that BOEMRE has funded.

The VLOS scenario describes spill response activities in order to inform the environmental effects analysis in Section IV.E. BOEMRE provides reasonable estimates of quantities, timeframes,
locations, etc. to provide the public and the decision maker with a basic picture of what a response would look like, as well as to facilitate analysis potential impacts from spill response activities. The existing level of detail in the SEIS is sufficient to accomplish these goals. More precise estimates of weather downtimes, staging area locations, boom deployment locations, etc. are unnecessary in this document and could result in undue speculation and/or a loss of focus on the environmental effects analysis. Again, the purpose of including a VLOS scenario in this document is to analyze the potential environmental effects of a hypothetical VLOS. The purpose is not to plan response scenarios. Oil Spill Response Plans would be evaluated on a plan-be-plan basis at the Exploration Plan phase.

That said, BOEMRE will attempt to offer some additional factual information on spill response protocols. Boom deployment and response effort prioritization will be dependent on where oil will come to shore. Priority Protection Sites (PPS) have been identified in the Alaska Clean Seas Technical Manual which has been incorporated by reference into the North Slope Subarea Contingency Plan. Prioritization would be based on the time of the year the spill occurred and the resources that could impacted by oil entering the area.

Dispersants are not currently authorized for use in the Chukchi Sea by applicable contingency plans. Industry is required to have provisions to mount a spill response inclusive of the logistical support necessary to maintain a large scale continuing response. In addition to industry capabilities, both State and Federal response assets can be pulled into service as outlined in the Unified Plan and the North Slope and Northwest Arctic Subarea Contingency plans.

**Spill Response and Cleanup – Mitigation.** The Final SEIS makes clear that: regulatory standards exist to help prevent a spill; intervention and response plans are required for OCS well approval; well intervention techniques cure loss-of-well control events the vast majority of time without any oil being spilled; operators may have an ability to immediately respond to an oil spill; and spill response and cleanup can mitigate the adverse effects of a VLOS.

In addition to a detailed qualitative assessment of potential intervention and response techniques, Section IV.D.3 of the Final SEIS also mentions specific measures contained within recent applications for activities in the Alaska OCS.

As pointed out in several comments, the volume of the hypothetical VLOS is not adjusted to account for successful response and cleanup. This approach acknowledges the potential difficulties of responding to a spill under various conditions (i.e. cold, darkness, ice, wind) and furthers the goal of analyzing a low-probability, high impact event. And it does so without shifting the focus of this environmental effects document into a debate about the efficacy of spill response techniques. The SEIS mentions multiple times that the volume and trajectories of the VLOS scenario are not adjusted to assume successful spill response and cleanup; these explanations provide sufficient clarity on the issue.

Successful spill response and cleanup efforts would indeed help reduce the amount of spilled oil contacting or otherwise affecting valued resources. Yet it is also true that in the event of a spill, response and cleanup efforts can incidentally cause certain adverse impacts to environmental resources. These impacts are a foreseeable consequence of spill response and cleanup activities and are analyzed accordingly.

**Issue 36. Consideration of USGS Report**

**Summary of Comments**

Many commenters referenced a report released by USGS in June 2011 (subsequent to release of the Revised Draft SEIS but prior to the release of the Final SEIS). As described in new language
incorporated into Section I.G of this Final SEIS, the USGS report summarizes key existing scientific information, develops a rapid process to identify where knowledge gaps exist, and provides initial guidance for what research is needed to improve decision making.

This report was most often characterized by commenters as confirming the notion that critical questions remain unanswered because of a lack of scientific data, particularly about which areas of the Chukchi Sea are important to species that inhabit the region and when they use those areas.

Many commenters also asserted that the report’s conclusions and recommendations require the following actions:

- Suspension of leases until BOEMRE evaluates the findings of recent USGS report and produces a strategy for gathering additional information on whether, where, when and how to authorize oil and gas activities.
- Consideration, at the lease sale stage, of additional spatial information for species using Chukchi Sea
- Reconsideration of the requirements of 40 CFR 1502.22 and BOEMRE’s approach to analyzing missing information, taking any additional time to complete the SEIS if necessary.
- Reevaluation of the conclusions drawn by BOEMRE during the entire Lease Sale 193 process on whether certain information is relevant to potentially significant effects and whether the information is essential to making a reasoned choice.
- Procurement of additional information to determine potential hazards to subsistence livelihoods from oil and gas
- Consideration of local traditional knowledge is critical to research into the Arctic and oil and gas activities there.

Several additional commenters suggested the following:

- The SEIS does not reflect the USGS report conclusion that “the effects of climate change are anticipated to influence all components of the Arctic ecosystem, and the Arctic OCS energy activities may exacerbate those changes, unless careful analysis of risks and tradeoffs is conducted.”
- The SEIS does not analyze how sea ice conditions have changed throughout different areas of the lease sale area (including the Chukchi Polynya and Hanna Shoal), and how such changes could affect both biological impacts and risks to exploratory and production platforms.
- BOEMRE should partner with local, state, and federal entities to develop a research and monitoring plan that defines existing information and research needs through a data gap analysis; catalogs species, populations, and habitat; tracks physical factor affecting productivity, habitat, and migrations; increases knowledge of ecosystem interactions and trophic linkages and effects from human activities; and integrates data to identify sensitive habitat and processes.

**Source of Comments**

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public
Response to Comments

Gathering Information and Use of Traditional Knowledge. BOEMRE’s comprehensive, ongoing efforts to gather additional information about the ecosystem and people of the Chukchi Sea region is described in greater detail in other portions of this Appendix, particularly within Issue Categories 2 and 7. BOEMRE values traditional knowledge very highly and actively incorporates it into current and proposed studies, environmental analysis, and decision-making.

Data Gaps and the SEIS. Consideration of incomplete information and data gaps in the EIS context is governed by CEQ regulations at 40 CFR 1502.22. A detailed explanation of these requirements is provided in the introduction to Appendix A of this Final SEIS. While the USGS report provides valuable insight pertaining to the current state of scientific knowledge in the Arctic, it does not alter the procedural requirements of any CEQ regulations, including 40 CFR 1502.22. Thus, BOEMRE’s methodology in addressing incomplete information is not changed.

As is explained in Appendix A and depicted visually on page A2, the first step in a 40 CFR 1502.22 analysis entails consideration of whether a particular “data gap” must be addressed in an EIS. If the incomplete information is not “relevant to reasonably foreseeable significant adverse effects” from the proposed action, then the EIS need not address this information. Where information is indeed relevant to such impacts, the EIS must address that information. BOEMRE believes that the Sale 193 FEIS and Final SEIS for Lease Sale 193 discuss any and all incomplete or missing information meeting the threshold of “relevant to reasonably foreseeable significant adverse effects”. Recall that the Sale 193 FEIS contained hundreds of references to various forms of incomplete information—these statements are catalogued and further analyzed within Appendix A. Chapters III through V of the Final SEIS also discuss incomplete information wherever appropriate.

Evaluation of USGS Report. BOEMRE has examined the USGS report and finds it to contain valuable summary and synthesis regarding information strengths and weaknesses in the Arctic. BOEMRE will continue to consider the report’s recommendations, which will help guide ongoing and future efforts to collect additional information. The USGS report does not, however, alter BOEMRE’s assessment of whether current information is adequate to support a decision on Lease Sale 193. The Sale 193 FEIS and the Final SEIS contain sufficient information to support a reasoned choice among lease sale alternatives. This is explained in greater detail within Issue Categories 8 and 27.

Because BOEMRE finds the USGS report neither requires discussion of additional items of incomplete or missing information in the Final SEIS, nor alters the requirement of 40 CFR 1502.22, no changes to Appendix A or the Final SEIS’s general approach to incomplete or missing information have been made as a result of the USGS report.

Ongoing or Planned Studies. Table E-2 below catalogues various ongoing or planned studies that have been initiated, managed and/or funded by the BOEMRE Environmental Studies Program and/or the BOEMRE Technology Assessment and Research (TAR) Program. Results of the studies have been extracted and summarized for the Chukchi Sea only (No Beaufort Sea specific studies were included). Information in Table E-2 includes (1) the USGS Recommendation Number (from the report), (2) the key concept addressed by the the given recommendation number, (3) relevant ongoing and planned studies at BOEMRE, (4) recent relevant BOEMRE study reports, and finally (5) BOEMRE comments on the given recommendation. This table also demonstrates how these studies relate to the recommendations and identified data gaps of the USGS report.
Table E-2. Summary of BOEMRE review of recommendations (by Rec #) from the USGS Report, Circular 1370

<table>
<thead>
<tr>
<th>Rec. #</th>
<th>Key Concepts</th>
<th>Chukchi Sea: BOEMRE Ongoing/Planned Studies*</th>
<th>Chukchi Sea: Recent OCS Study Reports</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.01.B</td>
<td>Lack of Deepwater Arctic Data</td>
<td></td>
<td></td>
<td>• The deepwater in the Chukchi Sea Planning Area is outside of the Lease Sale 193 area.</td>
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<tr>
<td>2.01.C</td>
<td>Lack of publicly available recent 2D &amp; 3D seismic data</td>
<td></td>
<td></td>
<td>• Public release of seismic data is controlled by Federal laws and regulations. BOEMRE has access to all data.</td>
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<tr>
<td>2.02</td>
<td>Characterize Gas Hydrates</td>
<td></td>
<td></td>
<td>• See Technical Report: <a href="http://www.boemre.gov/revaldiv/GasHydrateFiles/HYDRATE.pdf">www.boemre.gov/revaldiv/GasHydrateFiles/HYDRATE.pdf</a> • RE regional addendum to the 2011 National Assessment of Oil and Gas Resources is forthcoming in 2012 • Current BOEMRE assessment of the Chukchi Sea is that gas hydrates are unlikely to exist on the OCS portion of continental shelf.</td>
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<td>2.03</td>
<td>Enhanced International Cooperation</td>
<td></td>
<td></td>
<td>• Arctic Council; SINTEF; Canada DFO. eg. see <a href="http://www.amap.no/oga">www.amap.no/oga</a></td>
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<tr>
<td>3.01</td>
<td>Large-scale Circulation</td>
<td>• Adaptation of Arctic Circulation Model (NT-08-02) • Surface Current Circulation High Frequency (HF) Radar Mapping in the Chukchi Sea (AK-09-06) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) • Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Hanna Shoal Ecosystem Study (AK-11-03)</td>
<td></td>
<td>• OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area • Also see BOEMRE funded NOPP study: Comprehensive Modelling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice-diminished Arctic None</td>
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<th>Rec. #</th>
<th>Key Concepts</th>
<th>Chukchi Sea: BOEMRE Ongoing/Planned Studies*</th>
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<th>Comments</th>
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</thead>
</table>
| 3.02  | Changing Ice Regime        | • Adaptation of Arctic Circulation Model (NT-08-02)  
• Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07)  
• Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04)  
• Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03)  
• COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
• Hanna Shoal Ecosystem Study (AK-11-03) | • OCS Study MMS 2008-021 Sea Ice-Ocean-Oilspill Modeling System (SIOMS) for the Nearshore Beaufort and Chukchi Seas: Parameterization and Improvement  
• OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
| 3.04  | Monitoring of Benthos      | • Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03)  
• Hanna Shoal Ecosystem Study (AK-11-03)  
• Population Assessment of Snow Crab, Chionoecetes opilio, in the Chukchi and Beaufort Seas Including Oil and Gas Lease Areas (AK-08-12-09) | • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
| 3.05.A| Wintering Distribution and Habitats | • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01)  
• Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• Migration and Habitat Use by Threatened Spectacled Eiders in the Eastern Chukchi Near and Offshore Environment (AK-09-03)  
• Population and Sources of Recruitment in Polar Bears (AK-05-02)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)  
• Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) | • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales  
• OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
| 3.05.B| Key Forage Species         | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• Trophic Links: Forage Fish, Their Prey, and Ice Seals in the Northeast Chukchi Sea (AK-08-12-05)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)  
• COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
• Hanna Shoal Ecosystem Study (AK-11-03) | • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
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<th>Rec. #</th>
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<th>Comments</th>
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<td>3.05.C</td>
<td>Telemetry Studies</td>
<td>• Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Demography and Behavior of Polar Bears Summering on Shore in Alaska (AK-09-05) • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) • Pinniped Movements and Foraging: Bearded Seals (AK-07-08) • Monitoring Marine Birds of Concern in the Eastern Chukchi Nearshore Area (Loons) (AK-07-04a) • Migration and Habitat Use by Threatened Spectacled Eiders in the Eastern Chukchi Near and Offshore Environment (AK-09-03) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)</td>
<td>• OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales</td>
<td>None</td>
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<td>3.06.A</td>
<td>Change in Coastal Geomorphology</td>
<td>• ShoreZone Mapping of the North Slope of Alaska (AK-11-07)</td>
<td>• Also see BOEMRE funded NOPP study: Toward a Predictive Model of Arctic Coastal Retreat in a Warming Climate</td>
<td>None</td>
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<td>3.06.B</td>
<td>Consequences of Hazing</td>
<td>• Pinniped Movements and Foraging: Bearded Seals (AK-07-08) • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting AK-08-04) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)</td>
<td>• OCS Study MMS 2007-055 Literature Review, Synthesis, and Design of Monitoring of Ambient Artificial Light Intensity on the OCS Regarding Potential Effects on Resident Marine Fauna BOEMRE Alaska OCS Region, Field Operations (FO)/Technology Assessment and Research (TAR) Renewable Energy Program (Atlantic)</td>
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<td>3.06.C</td>
<td>Integrate Local Traditional Knowledge</td>
<td>• Pinniped Movements and Foraging: Bearded Seals (AK-07-08) • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting AK-08-04) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)</td>
<td>• OCS Study MMS 2009-063 Traditional Knowledge Regarding Bowhead Whales in the Chukchi Sea near Wainwright, Alaska • OCS Study MMS 2009-007 Common Ravens (Corvus corax) Nesting on Alaska's North Slope Oil Fields</td>
<td>None</td>
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<td>3.07.A</td>
<td>Life History Stages of Marine Fish</td>
<td>• Current and Historic Distribution and Ecology of Demersal Fishes in the Chukchi Sea Planning Area (93-48-67)</td>
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### Key Concepts

#### 3.07.B Identify Biological Hotspots
- Hanna Shoal Ecosystem Study (AK-11-03)
- Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)
- COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04)
- COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02)
- COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)
- COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)
- Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)

#### 3.08 Subsistence Harvests
- Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a)
- COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04)

#### 4.01.A Development of Fully integrated regional climate models
- Adaptation of Arctic Circulation Model (NT-08-02)
- Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05)
- Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07)

#### 4.01.B Reduce Uncertainty of Storminess Projections
- COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)
- Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05)
- Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04)

#### 4.01.C Projecting Circulation Patterns
- Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07)
- Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05)
- Adaptation of Arctic Circulation Model (NT-08-02)
- COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)

### Chukchi Sea: Recent OCS Study Reports

- OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area
- OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska
- OCS Study MMS 2009-062 Mapping and Characterization of Recurring Spring Leads and Landfast Ice in the Beaufort and Chukchi Seas
- OCS Study MMS 2005-068 Also see BOEMRE funded NOPP study: Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice-diminished Arctic
- OCS Study MMS 2005-068 NOAA, US Army Corp of Engineers (USACE), and State of Alaska with lead responsibility
<table>
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<th>Comments</th>
</tr>
</thead>
</table>
| 4.01.D | Response of Species to Changes | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-06-03)  
• Current and Historic Distribution and Ecology of Demersal Fishes in the Chukchi Sea Planning Area (AK-93-46-87)  
• Population Connectivity and Larval Dispersal in Bering, Chukchi and Beaufort Sea Snow Crab Populations: Estimating Spatial Scales of Disturbance Impacts AK-08-12-06)  
• Hanna Shoal Ecosystem Study (AK-11-03)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) | • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales  
• OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
| 4.01.E | Track Trajectory Climate Change | • Adaptation of Arctic Circulation Model (NT-08-02)  
• COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
• Biogeochemical Assessment of the OCS Arctic Waters (AK-08-12-03)  
• Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) | • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
| 5.01 | Coordinated Organization of Spill Preparedness Data | • Physical and Chemical Analysis of Crude and Refined Oils: Lab and Mesoscale Oil Weathering (Proposed) | • OCS Study MMS 2008-033 Empirical Weathering Properties of Oil in Ice and Snow | TAR, USCG responsibility  
• There is a major Joint Industry Project on this topic.  
• Annual Arctic Marine Oilspill Program Technical Seminars (AMOP) |
| 5.02 | Develop Transparent Full-cycle Risk Model | | | None |
| 5.03 | Updated Spill Data, Reexamination of Statistical Approaches | • Updates to the Fault Tree for Oil-Spill Occurrence Estimators (AK-11-01)  
• Oil Spill Occurrence Estimators for Onshore Alaska and Canada North Slope Crude and Refined Oil Spills (AK-11-02)  
• Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) | • OCS Study BOEMRE 2011-030 Alternative Oil Spill Occurrence Estimators for the Beaufort and Chukchi Seas Fault Tree Method  
• OCS Study MMS 2008-036 Alternative Oil Spill Occurrence Estimators and Their Variability for the Chukchi Sea - Fault Tree Method | None |
| 5.04 | Understand Oil-in-Ice Weathering | • Physical and Chemical Analysis of Crude and Refined Oils: Lab and Mesoscale Oil Weathering (Proposed) | • OCS Study MMS 2008-033 Empirical Weathering Properties of Oil in Ice and Snow | TAR Research  
• There is a major Joint Industry Project on this topic. |
| 5.05 | Characterize Indigenous Microbial Populations in Water Column | | • OCS Study MMS 2004-061 Petroleum Hydrocarbon-Degrading Microbial Communities in Beaufort-Chukchi Sea Sediments | From 1975 through 2011, agency supported science has produced more than 60 papers, reports, or theses on aspects of microbial ecology and microbial oil degradation in primarily Arctic waters and sediments. |
| 5.06 | Improve physical oceanographic and meteorological data to help inform a wide variety of issues in the Arctic | • Hanna Shoal Ecosystem Study (AK-11-03)  
• Characterization of the Circulation on the Continental Shelf Areas of the Northeast Chukchi and Western Beaufort Seas (Proposed) | • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
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<tbody>
<tr>
<td>5.07</td>
<td>Application of Structured Decision Making Tools</td>
<td></td>
<td></td>
<td>• Complex mixed analytical and expert Bayesian Network models are opaque and are not transparent to decision-makers.</td>
</tr>
</tbody>
</table>
| 5.08   | Constraining estimates of oil reservoir volume and pressure patterns in the Arctic OCS |                                             |                                      | • 2011 National Assessment used the latest geologic and geophysical data  
• NTL 2010-06 mandates a BOEMRE Worst Case Discharge Estimate prior to drilling  
• BOEMRE has access to all OCS geophysical & geologic data.  
• Public release of data is controlled by statute and regulations.                                                                                                                                 |
| 5.09   | Field Test assets and Data Systems for spill response                        | USCG / NOAA / Regional Response Team responsibility  
• BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. | TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm | Topic included in annual call for Request for Proposals for the TAR Program |
| 5.10   | Response Gap Analysis                                                         |                                             |                                      | TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm |
| 5.11   | Develop Mechanical Recovery Systems Oil Under Ice                            | USCG / NOAA / Regional Response Team responsibility  
• BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. | TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm | Topic included in annual call for Request for Proposals for the TAR Program |
<p>| 5.12   | Forecasts Ice Coverage                                                       |                                             |                                      | NOAA is the responsible Federal agency                                                                                                            |</p>
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<tr>
<td>5.13</td>
<td>Define the Applicability of ISB</td>
<td>USCG / NOAA / Regional Response Team responsibility.</td>
<td>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at <a href="http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf">http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf</a> and <a href="http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm">http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</a></td>
<td>Topic included in annual call for Request for Proposals for the TAR Program</td>
</tr>
<tr>
<td>5.14.C</td>
<td>Improve Spill Plume Model</td>
<td>NOAA is the responsible Federal agency.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.15</td>
<td>Dispersants Effects Analysis</td>
<td>• Arctic Cod Pilot Genetics and Toxicity Study (AK-11-13a) • Arctic Cod Genetics and Toxicity Study (AK-11-13b)</td>
<td>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at <a href="http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf">http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf</a> and <a href="http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm">http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</a></td>
<td>Topic included in annual call for Request for Proposals for the TAR Program • There is a major Joint Industry Project on this topic.</td>
</tr>
<tr>
<td>5.16</td>
<td>Predict Effectiveness of Dispersant</td>
<td>USCG / NOAA / Regional Response Team responsibility.</td>
<td>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at <a href="http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf">http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf</a> and <a href="http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm">http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</a></td>
<td>EPA, USCG Responsibility Topic included in annual call for Request for Proposals for the TAR Program</td>
</tr>
<tr>
<td>5.17</td>
<td>Understand Toxic and Sublethal Effects of Dispersants</td>
<td>• Arctic Cod Pilot Genetics and Toxicity Study (AK-11-13a) • Arctic Cod Genetics and Toxicity Study (AK-11-13b)</td>
<td>TAR Program</td>
<td>Topic included in annual call for Request for Proposals for the TAR Program • There is a major Joint Industry Project on this topic.</td>
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</tbody>
</table>
| 5.18   | Define Impact of Chemical Herd | USCG / NOAA / Regional Response Team responsibility  
  • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. | TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm. | None |
| 5.19   | Test Remote-sensing operations for spill response | USCG / NOAA / Regional Response Team responsibility  
  • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. | TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm. | Topic included in annual call for Request for Proposals for the TAR Program. |
| 5.20   | Spill Protocols in Place |  | USCG / Regional Response Team responsibility  
  A Memorandum of Agreement is in place between the United States and Russia to address trans-boundary oil spill response issues. | |
| 5.21   | Identify Protocols for Spill Response Plan |  | USCG / Regional Response Team responsibility  
  A Memorandum of Agreement is in place between the United States and Russia to address trans-boundary oil spill response issues. | |
| 5.22   | Analyze NRDA metrics |  
  • Updates to the Fault Tree for Oil-Spill Occurrence Estimators (AK-11-01)  
  • Oil Spill Occurrence Estimators for Onshore Alaska and Canada North Slope Crude and Refined Oil Spills (AK-11-02)  
  • Workshop—Interagency Protocols for Immediate On-the-Scene Oil Spill Impact Science (AK-11-11)  
  • Maximum Credible Blowout Occurrence and Size Estimators for the Alaska OCS (AK-11-12) |  | NOAA is the responsible Federal agency. |
| 5.23   | Joint Study Planning |  
  • Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
  • Alaska Marine Science Symposium (AK-10-03)  
  • Conference Management and Reports on BOEMRE Results (AK-07-06) |  
  • OCS Study MMS 2007-002  
  Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area | None |
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</table>
| 5.24   | Build Distributed Biological Observatory | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
• Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-09-03)  
• Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Hanna Shoal Ecosystem Study (AK-11-03)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) | • Also see annual reports/posters at http://www.afsc.noaa.gov/nmml/cetacean/research/caepresearch.php?url=nmmlcaep1105 | None |
| 5.26   | Develop Collaboration of an Overall Science Plan | • Alaska Marine Science Symposium (AK-10-03)  
• Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Coastal Marine Institute in Alaska - 2008-2012 (AK-08-12)  
• Conference Management and Reports on BOEMRE Results (AK-07-06) | Ongoing collaboration with North Slope Science Initiative, LCC, USGS, USARC, UAF-CMI | |
| 6.01   | Synthesize the Literature on Effects of Anthropogenic Sound on Marine Mammals | • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) | None | |
| 6.02   | Validate Models Sound Propagation | | • Public release of data is controlled by Federal laws and regulations. | |
| 6.03   | Inventory Vessel Noise | | • No offshore oil-related MMPA permits for BOEMRE seismic permits prior to 2006 required measurement of ship noise  
• A database for ships used after this could be developed, but the locations of all ship activities are considered proprietary information and public release of data is controlled by Federal laws and regulations. | |
| 6.04   | Develop Database of Icebreaker Generated noise | | NOAA is the Federal agency with lead responsibility. | |
| 6.05   | Quantifies Aircraft Noise | | NOAA and FWS are the Federal Agencies with lead responsibility. | |
| 6.06   | Database of Ambient Ocean Noise | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)  
• Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) | | NOAA is the Federal agency with lead responsibility. |
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</table>
| 6.07.A | Distinguish Behavioral Effects of Sound | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) | | NOAA is the Federal agency with lead responsibility |
| 6.07.B | Make Inferences about Sound Thresholds for Populations | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) | | NOAA is the Federal agency with lead responsibility. |
| 6.08 | Bowhead Whale Synthesis for Anthropogenic Noise | • COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)  
• COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
• Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01)  
• Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea -Personnel Needs (AK-10-05)  
• Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea - Aircraft Needs (AK-11-06)  
• Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) | | NOAA is the Federal agency with lead responsibility  
• Public release of data is controlled by Federal laws and regulations. |
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</table>
| 6.09  | Understand Habitat Needs for Bowhead | - COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02)  
- COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a)  
- COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b)  
- Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01)  
- Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
- Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea - Personnel Needs (AK-10-05)  
- Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea - Aircraft Needs (AK-11-06)  
- Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
- Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) | - OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales  
- OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska  
- OCS Study MMS 2007-062 Quantitative Description of Potential Impacts of OCS Activities on Bowhead Whale Hunting Activities in the Beaufort Sea | None |
| 6.10  | Ensure Effective Mitigation to Subsistence Hunting | - Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a)  
- COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04) | - OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales  
- OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska  
- OCS Study MMS 2007-062 Quantitative Description of Potential Impacts of OCS Activities on Bowhead Whale Hunting Activities in the Beaufort Sea | None |
| 6.11  | Understand Sensitivity of Beluga Whales to Icebreaking | - COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) | - OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales  
- OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska  
- OCS Study MMS 2007-062 Quantitative Description of Potential Impacts of OCS Activities on Bowhead Whale Hunting Activities in the Beaufort Sea | Also see projects by North Slope Borough and Coastal Impact Assistance Program |
| 6.12  | Inventory Habitat Needs of Beluga Whale | - Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed)  
- Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) | - OCS Study MMS 2005-033 Distribution and Movements of Beluga Whales from the Eastern Chukchi Sea Stock During Summer and Early Autumn | None |
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</table>
| 6.13   | Understand Habitat Needs of Gray Whale | • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01)  
• Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed)  
• Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) | None |
| 6.14   | Reassess Polar Bear Distribution and Habitats | • Demography and Behavior of Polar Bears Summering on Shore in Alaska (AK-09-06)  
• Population and Sources of Recruitment in Polar Bears (AK-05-02) | None |
| 6.15   | Quantify Habitat Requirements of Ice Seals | • Pinniped Movements and Foraging: Bearded Seals (AK-07-08)  
• Trophic Links: Forage Fish, Their Prey, and Ice Seals in the Northeast Chukchi Sea (AK-08-12-05)  
• Ice Seal Movements and Foraging: Village Based Satellite Tracking and Acoustic Monitoring of Ringed, Bearded, and Spotted Seals (Proposed) | None |
| 6.16   | Study Vocalizations of Ice Seals | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) | None |
| 6.18   | Walrus Reactions to Sound | • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) | None |
| 6.19   | Inventory Habitat Needs of Pacific Walrus | • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) | None |
| 7.01   | Improved Access to Information | • Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Conference Management and Reports on BOEMRE Results (AK-07-06)  
• Coastal Marine Institute in Alaska - 2008-2012 (AK-08-12)  
• Alaska Marine Science Symposium (AK-10-03)  
• Alaska Environmental Studies Project Browser (AK-11-15) | OCS Study MMS 2009-030 Researching Technical Dialogue with Alaskan Coastal Communities: Analysis of the Social, Cultural, Linguistic, and Institutional Parameters of Public/Agency Communication Patterns  
OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska  
OCS Study MMS 2009-005 Eleventh Information Transfer Meeting - Final Proceedings October 28, 29, 30, 2008 | None |
| 7.02   | Develop a Cost/Benefit Analysis of Petroleum Activities | • Testing, Improvement, and New Alaska Data for MAG-PLAN (AK-08-10) | OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska  
OCS Study MMS 2006-020 North Slope Economy, 1965 - 2005 | None |
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| 7.03  | Develop a Body of Knowledge about Cumulative Impacts   | • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01)  
• Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02)  
• Marine Mammal/Physical Oceanography Synthesis (AK-11-05)  
• Alaska Environmental Studies Project Browser (AK-11-15) | • OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska | None     |
| 7.04  | Incorporate Climate Change Effects into Cumulative Analysis   | • Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07)  
• Adaptation of Arctic Circulation Model (NT-08-02)  
• Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) |                                                                                                           | None     |
Revised Draft SEIS

Public Hearing Transcripts

Kotzebue
Point Hope
Fairbanks
Barrow
Point Lay
Anchorage
Wainwright
Kotzebue
PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT
CHUKCHI SEA
BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT
Kotzebue, Alaska
Taken June 21, 2011
Commencing at 7:05 p.m.
Volume I - Pages 1 - 81, inclusive
Taken at
Northwest Arctic Borough Offices
Kotzebue, Alaska

Reported by:
Mary A. Vavrik, RMR

MIDNIGHT SUN COURT REPORTERS (907) 258-7100

DR. JIM KENDALL: Good evening. We are going to be a little bit informal tonight. Welcome to the Revised Draft Supplemental EIS for Lease Sale 193. That is a mouthful. And we are going to go into exactly what that is and how we are handling it a little bit later on, but we are going to do this a little bit differently.

So if you have been to our public hearings before and even our scoping meetings, we are going to try something new tonight to try to maximize the input.

Before we go any farther, I'd like to introduce the team here. Sitting up at the head table we have got Sharon Warren. Sharon is the project manager for this. She knows the document inside out and backwards. We have got Michael Routhier. Now Michael is the EIS coordinator for the project, so he knows it just as well as Sharon.

We have Mary Vavrik here. Mary is the court reporter. So every time we speak, we have to give our names so she can get it in the record. And you can see her hands. She's got her boxing gloves on, so let's not disappoint Mary.

Mike Haller, raise your hand. Community liaison for the Bureau of Ocean Energy Management, Regulation and Enforcement. Scott Blackburn, Scott, okay, he is a technical expert and technical writer for us. Steve

Scardino, he's from the Department of Interior Solicitor's Office, helps keep us out of trouble. And John Callahan for the Office of Public Affairs.

DR. JIM KENDALL: Before we do anything else, Earl, it's time for a blessing, please.

MR. EARL KINGIK: First of all, I would like to thank the people of Kotzebue for giving us a chance to be in your chambers. Thank you very much.

We all know the Lord's Prayer. We are going to ask for good health from our good Creator, the Dear Lord's Prayer.

(The Lord's Prayer was recited by all present.)

DR. JIM KENDALL: Thank you, Earl. Okay. A couple of ground rules here. We are going to probably the Elders speak first. And of course, that wouldn't happen to be you, Walter, would it? So when the time comes for that, Walter.

MR. WALTER SAMSON: I'm right behind this kid right here.

DR. JIM KENDALL: I'll give you the first opportunity to make comment if you would like. Also elected and appointed officials. I think that kind of includes you, as well. When we actually get to the comments stage of this, sometimes when we have 50 to 60 people, we have to limit it to two to three to four to
that we had failed to analyze the environmental impact of the sale.
And the three issues he wanted to address was satisfactory, but you failed to address three concerns telling the court case. There was an exhibit that was submitted that went through every single one. On how this started, how we got to where we are, and what we expect out of these discussions. And then we are going to visit Point Hope, Point Lay, Barrow. We are going to have a meeting in Fairbanks, as well as Anchorage. Okay. With that, I’d ask Sharon and Michael to come up. And as we get through the night, it’s going to be a lot less formal.

MS. SHARON WARREN: Thank you for coming here. And like Jim said, we are going to kind of go through this because we have been here before. The lease sales happened in 2008, and so we are going to walk you through why we have got to that point.

First of all, we want your comments on the Revised Draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193. We have a document on the table. If you haven’t received a copy, we have extra ones. We have them on CD, as well as there are some hard copies as well. I think there is one hard copy left, but we do have CDs for that.

five minutes, but with the crowd we have here, I don’t think we have to be that restrictive. We can talk five, six, seven minutes and we can always go back and revisit the issues.

And we are going to do something different. Once I have Sharon and Michael walk you through exactly why we are here, okay, so we all understand and we start from the same knowledge base, then if the crowd remains the same. I think we are going to pull the chairs around into a circle to try to encourage the dialogue. However, I have promised Mary that if we pull the chairs into a circle so we increase the dialogue, we have to give our names before each of us speaks, or I will pay for it. So I really appreciate that if we can try that little technique, but try to keep Mary happy for the court reporting.

Now, with that, before we get into the comment period, et cetera, let’s get to the meat of the matter. And that is why we are here. Okay. Those of us here -- Mary is a contractor to do the court reporting. We are from the Bureau of Ocean Energy Management, Regulation and Enforcement. We used to be called Minerals Management Service. We are responsible for the energy and mineral resources of the Outer Continental Shelf.

You are here, so you have kind of a vague understanding, some of you, and some of you a lot of understanding, on what a lease sale is, the process. But to make sure we are all on the same track, I’ve asked Michael and Sharon to do something a little bit different. Basically come up, go through some flip charts, starting with square one on how this started, how we got to where we are, and what we expect out of these discussions. And then we are going to visit Point Hope, Point Lay, Barrow. We are going to have a meeting in Fairbanks, as well as Anchorage. Okay.

At the court case. There was an exhibit that was submitted. It was like a 45-page exhibit that was submitted that went through everything that came out of our document that said where all the uncertainty was. And the judge said there is over 40 some pages that the plaintiffs have brought up. That’s pretty compelling that you need to go back and take a look at those things.

Lease Sale 193, was -- of course BOEMRE first did a -- it was Minerals Management Service. We did an environmental impact statement prior to having this sale. The sale was held in February of 2008, three years -- over three years ago. So that was when the sale was held. Six companies bid on the rights to explore oil and gas, and we offered 29.3 million acres, and only 2000 -- or 2,000,000 -- 2.8 million were leased through the lease sale.

Then what happened days before the lease sale, plaintiffs had sued to invalidate the lease sale. However, there wasn’t an injunction placed on the lease sale. Sometimes the actions are to place an injunction to stop the sale. That didn’t happen. So the sale went ahead and went forward. And that was the reason why we had the bid. But it still stayed in the District Court in Alaska in Anchorage.

And so in July of 2010 Judge Beistine made a ruling saying that your EIS was -- most of it was satisfactory, but you failed to address three concerns that the Court had in that EIS. And so he sent the document back to the agency to address those concerns. And the three issues he wanted to address was that we had failed to analyze the environmental impact of natural gas development despite industry interest and
So what we did in response to that court order, we drafted a supplemental environmental impact statement to address those three concerns. And some of you may have seen the copy of it because we released it in October, in the fall, and asked for public comments on it. And we held public hearings and government-to-government consultation on that document. We were here in Kotzebue, as well as Point Hope, Point Lay, Wainwright, Barrow and Anchorage. And so we did that document.

And then I’m going to let Mike explain what has happened, why that document never got finalized and where we’re at today.

MR. MICHAEL ROUTHIER: So normally in the NEPA process, you go from the draft EIS to the final EIS. Here it was a little bit different. We received over 150,000 comments on the draft EIS. Most of those asked us to provide some analysis of a very large oil spill. This is all happening in the wake of the Deepwater incident. It was on everyone’s mind. Everyone was thinking about it. We received a lot of comments on it.

So internally we sat down as an agency and decided that, hey, this is something that we should probably do. The result was the draft SEIS became a revised draft SEIS. In other words, we published a new draft SEIS. And it’s pretty similar to what we published in October, except that it includes now analysis of a very large oil spill scenario. And we are here tonight to record public comments on the document.

Might make sense to concentrate on the very large oil spill scenario, given that that’s a new piece of information, but we are open to talking about the rest of the document, as well.

So as far as the term very large oil spill, what does that mean? Well, in this process, in this NEPA process—again, NEPA is something that allows us to analyze environmental effects.

Very large oil spill is a hypothetical scenario that we analyzed. We developed a scenario with input from our geologists and our experts and figured out what’s the absolute biggest possible spill that could happen in the Chukchi Sea planning area.

Once we got that estimate from our geologists, we then turned over a scenario to our environmental analysts or scientists, our wildlife biologists and so forth. And they told us what types of environmental effects could occur were a scenario of that nature to happen.

One thing that we might like to make clear is the difference between a very large oil spill scenario, such as we have analyzed in this NEPA document, and a...
subsistence, where hunting is, the resources and everything else. And having traditional knowledge incorporated in that, in our document, to make sure that we capture the right information when we are analyzing is extremely helpful.

In addition to the public hearings, comments can be submitted either by mail and they can also be hand-delivered to our office, and/or they can go to our website. And there is a website that we have that you can go to and submit comments into regulations.gov. We have some handouts over there that walks you through how to submit comments using that -- from our website and how to get to the regulations.gov. And you can go actually right to the document and submit your comments on the website.

What happens next? Question nine is what happens after those hearings. So we have the hearings. What do we do with your information? We take the information that we get, we consider those comments, and we are going to finalize the -- the document. So we'll have a final SEIS.

We are on a Court-mandated deadline. Okay. Beistline, the District Court judge, issued an order on the 19th of May and said agency and Secretary of the Interior, you need -- the Secretary needs to make his decision by October 3rd of this year. And the decision is

maximum the input, so if you would like -- and let's think about this for second. If we move stuff and put the chairs in a circle so we can see each other and comment, how does that sound?

UNIDENTIFIED SPEAKER: Good.

MR. JIM KENDALL: We’ve never done it before, so let's give it a shot.

MR. WALTER SAMPSON: What's the time frame from the time the second draft is -- gets in the process before the decision is made to go or no-go?

MS. SHARON WARREN: The draft -- we are out for public comment.

MR. WALTER SAMPSON: What I'm asking is the time frame from the second draft EIS through the process from when that decision is made to either go ahead or no-go.

MS. SHARON WARREN: Okay. So the comment period closes on July 11th. So we will have July 11th, from that time frame on until the first part of September. And during that process, we are going to be analyzing those comments. We are going to be giving them to our analysts. It will go through internal review by our office, by the Solicitor's office. There is a lot of people that review and respond, make sure that we are responding to the comments, that we have addressed all the
substantive comments that we have got, and then it will be
finalized and be out in the public.

So from July 11th, the next time you will see it will be a final SEIS around the first part of September.

Okay?

DR. JIM KENDALL: That was a good question to ask because after all those steps, if we would have an exploration plan that was deemed submitted, then we have a whole bunch of other steps, review an exploration plan, deem it submitted, we have more NEPA to do. Things don’t happen overnight, which is good. We have more time to do it right. So that’s what we would like. So before we actually start more comments, get the chairs up.

Remember, I have a deal with Mary here that if she can’t hear you, I’m in trouble. And we have to state our name before we make the comments. Get closer if you can.

MR. WALTER SAMPSON: So you will be the interpreter, I’m assuming.

DR. JIM KENDALL: Me?

MR. WALTER SAMPSON: Yeah.

DR. JIM KENDALL: In what way?

MR. WALTER SAMPSON: Because I’m going to speak in my language.

DR. JIM KENDALL: I just moved to Alaska.

about in today’s world. Cost of energy is high. We have some of the communities that are paying nine to $15 a gallon for fuel. That’s a pricey price of fuel. But also at the same time there is people who have some concerns in regards to what is happening to this point. That’s why I’m glad you folks are here to provide additional information as to what has transpired to this point when people used on the initial environmental impact statement. But one thing I would hate to see is courts making decisions for all of us. And I think that’s a bad -- bad part to have someone make the decision for you.

As a public official, I will not comment on where the borough is until we get the final information from -- through our legal counsel in regards to where our position is. But as -- as assemblymen who have to consult with our legal folks, with our staff and in regards to the environmental impact statement second draft. Then we can make a -- or we can give a position statement at that point in time.

So we have got some meetings that are coming up, and one of the issues that are -- will be on the table is the resolution that the North Slope folks have with the eight points. And we certainly are going to address that resolution.

The original resolution that we submitted early on, which basically objects to what was happening, is a moot resolution. I call it a moot resolution because that is outdated, and we certainly will be reconsidering the resolution that Arctic Slope has in place. But unless we -- we can say that this is the information that’s been provided to us from our staff, from our legal counsel, this is a position that we have as an assembly. So that’s all I -- that’s how far I’m going at this point. But as we go through the process of dialogue, certainly I will make additional comments.

DR. JIM KENDALL: Thank you. Do we have any other elected officials in the room?

MR. DEAN WESTLAKE: I’m Dean Nunathraaq Victor Westlake. I’m proud to say that I’m a borough assemblyman and represent, among others, the City of Kotzebue and the Northwest Arctic Borough School District, both of which signed resolutions in support of offshore development of the Chukchi Sea. So unlike Walter where he’s the borough president, I do have my constituents I do have to answer for.

And I’m going to stop right there because I really, really appreciate Earl Kingik coming down here from Point Hope. Good friend of mine. I’m so glad you are here, Earl, so thank you for making the time to come down. It really means a lot to me.
You know, I started looking at the offshore
development of the United States, and I was surprised to
find that there are currently 3,848 producing oil wells
offshore on federal leases in the Gulf of Mexico and
another 8,000 or so within the State waters off Louisiana.
And we come to the development of all federal waters since
1960, and somewhere in the 58,375 exploration and/or
production wells drilled, we here in Alaska are counted.
They have done it before out here. So we are not new to
this.

In the past, we have had no ill effects from
this exploration. However, it does not -- does not --
absolutely does not lessen our concern about what goes on
out there. We depend on the Chukchi Sea and what it
brings to our dining table. It is very important to us.
But like anything that we do out here, we can only do our
best to safeguard against anything and not be ruled by
fear.

In reading Mr. Etkins' analysis of oil spill
rates, I was surprised to find that there is roughly
16,000 barrels of year of crude oil naturally seeping into
the Arctic. Sixteen thousand barrels of crude oil seeping
naturally into the Arctic. That seems like a lot of crude
oil to me. While I don't know and wouldn't know
anything about drilling offshore, I can't help but wonder
statement you made there is we don't know how far it's
going to go. But by golly, the only reason we have got
what we have now, this whole borough, is because of
resource development out there.

I can't go hunting anymore anywhere without
gasoline. I mean, it's a simple fact. And I need it
to -- its symbiotic for me because I need my subsistence
lifestyle. I mean, most all of us in this room, our food
comes in out on the land or the sea. So thank you.

DR. JIM KENDALL: Other elected officials?
Sir, and your name, please?
MR. PATRICK SAVOK: My name is Patrick
Savok, and I'm a Northwest Arctic Borough assemblyman
representing Kotzebue. First off, welcome. I share a lot
of the key points as the president and assembly member
Westlake here. I also share a lot of the same issues that
Earl has because the only information that I've really got
about all this was from an e-mail group that I've got with
Earl. I met a female with him, and I was added to this
group to really get in tune of what was going on.

I was called this afternoon and approached this
evening about this meeting, so I was caught unaware of
what was going on, and didn't have time to brush up on
some of the aspects here, but two things that really
concern me, as the president said, was getting
justification from the legal system on how we can live our
lives here from people who don't come here.

You know, if you are not here, you don't see
what we are doing, but you need that oil. You will see
how much we need that oil. And I think it needs to be
echoed even further for those folks that don't come here,
as you said, those superior people above you, on the need
for that oil, but also the need for our subsistence
lifestyles.

I, too, am a hunter. I, too, am confined to
feed my five children and my wife by a high price of
gasoline. When we look at these types of operations that
have happened in the past, and we do see the seepage of
oil in our country, I, too, wonder if maybe some of the --
some of the release of that oil will maybe bring that down
because we have seen it in so many different areas.
However, having it in the middle of the ocean really
concerns me because the fact is it is our refrigerator,
our freezer to a great extent there. But I do understand
that we need that oil.

And I think that's as far as I'm going to go
with my comments.

DR. JIM KENDALL: Thank you, sir.
Appreciate it. Now, Earl, you have been mentioned a
couple of times, and you started us out with a blessing,
and we greatly appreciate it. Would you mind kicking the
MR. EARL KINZIE: Dr. Kendall, I'd rather let the community members here in Kotzebue do their comments because I'll have my time in Point Hope. I'll have my time in Barrow. I just want to listen right now.

DR. JIM KENDALL: Okay. Then, in that case, Walter, we started on your side of the room. So the gentleman to your right, if you care to make a comment, what I would suggest is we go around the room. You can comment or you can pass. And then we will keep going around the room until we run out of things to say. That way everybody has a chance to speak, they have multiple times to speak. And someone may say something that someone else wants to comment on. And I think that's fine, too.

So if you don't mind, you can state your name and say something, or you can pass. That's up to you.

MR. ANDY BAKER: Andy Baker. And I just -- I agree with what Walter and Pat and Dean, they have all said it. It's -- we have got a big balance we have got to figure out. We need the economic development. We need the jobs. We need the -- the benefits, but on the other hand, we need to maintain our subsistence lifestyle. So how do we do it? We can't -- we can't have one without the other anymore. We can't go hunting on $10 a gallon gas. We can't afford to buy the gas, so it's a vicious cycle, and just would like to figure out how we are able to do both and see more of your presentation on where we go.

DR. JIM KENDALL: Thank you for your comment. And I'll echo something that Sharon said. If you have time in the next few days to weeks to look at that document, any -- and you looked at the section on subsistence and you found something that was missing, send it in and tell us because we know how important that is, the subsistence, traditional knowledge. If we are missing the boat, tell us. Even if it's just writing it on a piece of paper and dumping it in the mailbox with our address or regulations.gov, et cetera.

So if we can continue around the room. Ma'am?

MS. LISA PEKICH: I'm Lisa Pekich. I'm with ConocoPhillips. And I'm, like Earl, just here to listen. I'm not from Kotzebue, and just wanted to hear the comments from the community, as well. Pass.

MR. COLE SCHAEFFER: I don't think they should be allowed to do that.

MS. LISA PEKICH: I'll be commenting in Anchorage. I know that.

MR. COLE SCHAEFFER: My name is Cole Schaeffer. I'm the presidency [sic] of Kikiktagruk Inupiat Corporation, the village corporation here in Kotzebue. And I have a number of issues that I have with the DEIS. To start with, I don't like the science that's being compared, and particularly the stuff that they are using in the Gulf in terms of pressures and that type of thing because those are unrealistic in our neck of the woods. We're not nearly as deep. There is a number of issues with just the way that they are going about making comparisons.

So if you are going to do a supplemental EIS, you should do it in a realistic sense and not take bits and pieces from other places because, you know, drilling 5,000 feet deep in the ocean and the pressures that you are dealing with and the pressures underneath that where the oil is at is completely different than drilling at 250 feet. And the same thing, you don't have the ice conditions in the south like they did that we got up here. So the technology on the other side of this is a concern for me and making sure that we have the right kind of technologies if there is a spill.

And we don't have any really proven technology. There is a lot of design technology that will work in skimmer systems and remote ROVs and stuff like that, but there is nothing that's really ever had to be proven for a big spill, so -- I've done a little bit of research on what kind of pressures you are looking at and they are not nearly as bad as the stuff that was in the Gulf, but there still could be high flow rates. So there are some issues there.

And the concerns for the high flow rates and spills like that is because of our subsistence lifestyle. We live off the mammals from the sea and the fish. So those are key to our survival here.

But we also recognize that in order for us to move forward with our people, we have to have an economic base, you know. And if the State and the Feds and we don't get off our butts and figure out what we are going to do, we are not going to have a pipeline that's going to be flowing in 15 years. It's going to have too much wax built up because there is not enough flow through it. So we are going to have to do something.

Whether we get it out there or whether we get it off ANWR or wherever else there might be, we are going to have to do something; otherwise we're going to have to change the way that that pipeline and the infrastructure up there works because it's not going to work the way it's designed.

We are not nearly at capacity now. We are not going to be in ten years. We are going to be so far below
capacity that there's going to be all kinds of wax built
up on that system. So there's a number of issues there
that we have to look at, and we've got to look at it as a
whole because ultimately we have got to design a system
that's going to work for everybody. We have to be
sensitive to the environment, and if there is impacts,
then we have to be able to adjust and regulate based on
that. But we also have to keep moving forward because
it's not just Alaska. It's the whole U.S.

We are in an energy crisis, and if we don't
figure out how to quit depending on foreign oil, all they
have to do is have one more hiccup and our whole economic
ingine in the U.S. is in the toilet. It will get tanked.

So we really have to -- you know, from the
Secretary's position, he's got to find a solution that
will work up here but, you know, we have to look at
investing in our own backyard. There is lots of oil. I
mean, you see what they are doing in the Dakotas and
stuff. There is lots of opportunities for finding some of
this stuff. You know, we probably have the biggest
resource of natural gas sitting out there, as well, and we
are not tapping into that.

So you know, I'm not pro development, but I'm
not opposed to development as long as it's done smartly.
And if there is issues, as long as we have ways to deal

with those issues, then we are okay because you can change
tings so that our environment is protected. But we also
have to have an economic base. We have got to have cheap
energy.

I would challenge any of you guys that live
either in Anchorage or south to come live up here for a
winter and see how much it really costs to live here. And
when you have a $1,000 stove oil bill a month, you start
thinking about how critical energy is. And right now
energy is a commodity. And to us it can't be. It has to
be a necessity for survival. And because of the way the
economic system works here, it is a commodity for sale.

So we need to look at -- we either have to have
so much out there that it doesn't become an issue anymore
or you have to change the system so that you don't have to
depend on it anymore. And we are not there yet in this
country. And we are not ready to go to alternative
energies as part of America's solution.

So this is the next best thing is to look at
where there is close opportunities and we have to take
advantage of them.

Thank you for your time.

DR. JIM KENDALL: Thank you, Sir.

MR. TOM FIELDS: My name is Tom Fields.

I'm from this area. I think it would be okay if you look

for oil on the land, but if you went into the ocean, look
what happened down there in Louisiana. I think if you are
at ten feet of ice and it happened underneath, that would
ruin everything. We have a nonprofit corporation here
called Maniilaq.

And there was a prophet that lived here about
150 years ago. He gave a number of predictions about this
area and what's going to happen. And one of them was a
whale is going to surface in the town of Ambler to get
away from the dirty ocean, and when that happens the day
will be cracked in half. We don't know if he's talking
about earthquake, atomic bomb or whatever, but when that
happens, that spill happens, there goes your subsistence
lifestyle. So I say don't give up the lifestyle. You
know, burn coal, get energy from the sun or the wind.

DR. JIM KENDALL: Thank you, Ma'am.

MS. SUSAN BUCKWELL: I'll pass.

DR. JIM KENDALL: Ma'am.

MS. MARCI JOHNSON: My name is Marci
Johnson. I'm a biologist with the National Park Service
here. And two of our National Parklands in the region are
coastal, and so we are involved with getting some baseline
research, learning about coastal lagoons, doing some
coastal mapping and trying to get preparedness for oil
spill response. And so we are certainly very interested

in this. And I just heard of this meeting a few hours
ago, so I haven't had a chance to look into it for a
couple items of interest for myself. So I'll have to read
it and submit something on-line.

DR. JIM KENDALL: That's great. Each.

MR. ZACH STEVENSON: Sure. I want to
thank you all for coming up here far from home to be in
our beautiful community. I spoke with you earlier this
afternoon on behalf of the borough. For those who weren't
here earlier today, I was a little concerned that I had
only learned about this meeting at 4:30 yesterday
afternoon in leaving the office and would have liked more
time to get the word out to our community. It's really a
important issue.

My responsibility here, funded through BORENNE,
Federal funding, is to develop an atlas that will be
stored here at the borough and available to the assembly
to help look at what areas are important for subsistence
in our region, as well as what areas are important for
resource development.

I think, as others have voiced, we face a
razor's edge issue here of keeping our subsistence economy
or subsistence resources strong, but also developing the
natural resources to keep our economy strong. We need to
do both. It's not a question of if or how, but -- or if,
but how do we do it right. And that’s really the question
we are trying to address in this project here now.

That said, I’m not in a position to comment on
behalf of the borough or the planning department. As an
individual, however, I do feel the need for engagement.
Really engaging those communities that could potentially
be impacted by this project for better or worse is
critically important. And I provided you the names of the
seven villages that are currently working with our project
funded through BOEMRE.

So I, as an individual, continue to do the hard
work of getting the word out because I think the IRAs and
the city governments can go a long way in helping you
connect with folks in the local communities.

Again, thank you for your time in coming here.
And I want to thank the community, as well, for sharing
your thoughts on the important issue.

DR. JIM KENDALL: Sir, you have another
chance, if you would like.

MR. PATRICK SAVOK: Pass.

MR. DEAN WESTLAKE: Actually, ACM. Are
you aware of the Alaska Coastal Management? Is that going
to have any effect out in what you do now if it goes away?

DR. JIM KENDALL: Not really, but --

MR. JOHN CALLAHAN: We still have the same

through the government-to-government consultations through
the tribal side. As far as the other part, policy-wise we
can decide to put in more, but legally we are not required
to. Just the lawyer answer.

MR. DEAN WESTLAKE: And I understand that.
I mean, it -- we are all in flux right now because we are
wondering how this goes, and I was wondering maybe there was
going to be an avenue that’s going to be opened up. So
thank you.

DR. JIM KENDALL: Ma’am, would you like to
speak or --

MS. KARMEN MONIGOLD: Sure. My name is
Karmen Monigold. I’m from Kotzebue. I work for the
borough and I just started, so a lot of the history behind
any of this I really don’t know. But I want to the
ConocoPhillips oil meeting. Was that last week? Won a
bunch of door prizes. People were really upset with me.

But I spoke there about how this is going to
affect our spirituality if there is an oil spill. And I
asked directly what are you putting into alternative
energy, renewable energy. And they started talking about
nonrenewable energy.

And I said, no, what about renewable energy
because I look at my children who I’m starting to get to
take out in the ocean, and we are going oceanic hunting,
two young daughters, both interested in the environment.
and the ocean in college. And I say, you guys are the
 generation that need to start looking at these other
   processes that will be able to take care of the needs of
   the communities that you live in.

   So again, we are here to hear community
   concerns. I have reviewed the document. We will be
   putting some formal comments together in writing to supply
   by July 11, and we will also be giving a written statement
   at the end of the month when you have your Anchorage
   meeting.

   Generally as a company we support the NEPA
   process. It’s very thorough. There is -- every stage of
   the way in your five-year plan, in your leasing document,
   and then again in the exploration phase there is a NEPA
   process. And in most cases it’s a full-blown
   environmental impact statement. Some cases may call
   for an environmental assessment. But every stage allows
   public comment, public input. The companies try to
   provide as much data as we have.

   As a company, ConocoPhillips has spent the last
   four summers, this being the fourth, out in the Chukchi
   gathering data on a local basis on these leases. A lot of
   that is voluntary. We do that to gather data to
   understand more about what the environment is like, where

we are going, what we are going to do, and how our actions
would impact.

   We understand strongly that there are big
crises about spill response and about having a spill out
there, and we understand why the communities and people
are concerned about that because it is a risk. And we are
trying to do everything we can in the prevention mode to
put together a plan that shows that we will have the kit
of equipment available in the event something goes wrong.
But more importantly, we are putting a lot of energy into
prevention measures, into ways that we can prevent any
type of accident from occurring.

   I think the other thing is we do learn a lot
going to communities about their own traditional
knowledge, things that we as Western-style educated people
don’t hit on and we don’t understand. And by going out
and working in some of the communities around wildlife
captures, things to do with studies out there, we have
people on the vessels that are from the communities
helping us, and we learn more about the area as an
explorer.

   And the final thing I would like to say is the
timing. Alaska is a very unique place. It’s a precious
place. I’ve lived here my whole life. I was raised north
of Anchorage in an area called Chugiaq from the time I was
six years old, and I consider it my home, too. I consider
it a very special place.

   So when we go out to put plans in, there is a
thorough review of those plans. And in addition, if you
compare it to an analog or another project like maybe in
the Gulf of Mexico or somewhere else, typically they go
through the lease sale and, within a year, six months to a
year, those companies are out drilling on those leases.

   In this case, we are coming up on year four
because the sale was in February of 2008. And I think
between our company and the other companies that want to
operate out there, yes, the court system has been used to
push things back, but companies have been patient in
trying to understand what the concerns are and trying to
address those concerns before we get out there to do the
work.

   And we also recognize that you will never make
everyone happy, that everything you do, there are still
people that have philosophical differences. And I respect
that because that’s what makes our country great is that
we can go out in a meeting like this, some people agree,
some don’t disagree; but you hope at the end of the day,
you look at the science that’s available, you evaluate the
risks, and you come up with a very safe plan to go out and
do the operation.
So as a company we will be moving forward to supply these applications, work with the communities, understand the issues, and we hope to be able to go out and look for this resource during the summer of 2013. That's our goal.

Thank you for the opportunity to comment tonight. And like I said, I'll be giving more comments at future meetings.

DR. JIM KENDALL: One little sidebar here. Three individuals have now mentioned renewable energy, so I just want to point out that our bureau, the Bureau of Ocean Energy Management, Regulation and Enforcement, BOEMRE, is also responsible for renewable energy on the Outer Continental Shelf in terms of wind, wave, current, even solar.

And right now, maybe even this week -- I know there is a lot of meetings going on on the East Coast looking at where you could put wind farms, where you should not put wind farms. Also the Pacific Northwest there are some states, I think Oregon and Washington and maybe California are looking at wave generators. So we're pushing that through. Again, though, it's driven by where the energy is needed, what technology is available.

So I don't want to eat up too much time on that, but we're moving in that direction we will take comments.

MR. WALTER SAMPSON: Yes. I'm going to start.

So you see, it's important that the Bush era should be wiped out and the new Obama era should come forward and deal with what we have to deal with.

I had a chance to go down to Deep Horizon [sic]. It was sad. It was sad to see people down there. How sad it will be if our ocean ends up the same way. There is 30,000 people cleaning up that oil field -- oil spill. They got airports, they got equipment to do cleanup but up here in the Arctic, we are not ready. We are not ready for any kind of activity in the Arctic. We are not prepared.

The Alaska Coastal Zone Management Plan has still got to be in place. We need to look forward to that because there is going to be community involvement. Coast Guard will be looking for a deep harbor. There is a lot of things going to be happening in the Arctic, not only the oil field, but the tourist ships will be coming in.

The transportation route will be open to the Europe and to the Russian side.

So you see, we people in the Arctic, we need to protect our way of life. We need to be involved any kind of decision they are going to be making.

Thank you very much, Kotzebue, for giving me a chance to speak here. Thank you.
of life, we are going to sit on the table with you to be part of a design that will help us, as well. And that's basically what's happening today.

We have been provided information by oil industry, a lot of information, a lot of information that pertains to what's happening, a lot of information that's been requested by interest groups. Oil in -- oil drilling has occurred up north in the past. At what point have we responded to any of that with some of the issues that's before us? Not really. But the change of communication and change of providing information certainly has -- has made a change.

What's happening in the Arctic, not only in Alaska Arctic, but also in Greenlandic waters, the drilling that's occurring on their shores in the Arctic with the support of their people that's occurring today. They see the partnership, the benefits that they see for their people. We heard from past testimony from past information. Yes, we want to listen to. We want to partner with you. We want to work with you.

That's the opportunity that I see for my children. We are not going to be around for too many years. It's the children that will be provided that opportunity. And not only that, what we are doing today is we

MR. COLE SCHAEFFER: I don't think you

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are planning for them, which hopefully they can nurture down the road to even make that plan better as to how things will happen in the Arctic. So it's critically important for all of us to be part of a process in designing what's happening in the Arctic.

I've gone to Shell meetings. I've gone to Conoco meetings. I've gone to some oil industry meetings in general. Information is there. Information has been provided. We have been told they want to partner with us. We have been told they want to work with us, an opportunity for us to make sure that the issues that are in place be incorporated into a design of a plan.

Any concerns that we -- you may have, make sure that input is in place so it can be incorporated into that design. That way if something should happen, I wouldn't be able to point a finger at BEHME or oil industry. All I would say is well, we messed up. Let's fix the problem.

And I think that's -- that's an opportunity that we have today. That's my personal views for now. Thank you.

DR. JIM KENDALL: Thank you, sir. Sir, would you like to take another chance?

MR. ANDY BAKER: I'll pass for now.

MS. LISA PEKICH: I'll pass.

MR. COLE SCHAEFFER: I don't think you

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should allow her to pass a second time.

DR. JIM KENDALL: At least we have got a nice, communicative, humorous group here. That's good.

He wouldn't admit that he was that Walter Sampson. He was messing with me.

MR. COLE SCHAEFFER: Walter hit on a good point, and that is that we have to look at our future generations. And if we don't find an economic base for them, Anchorage is going to get bigger and Fairbanks is going to get bigger.

We already have an outward migration of people from the villages because we just don't have the infrastructure or the low energy cost to build economic development here in rural Alaska. So if we don't look at that, our villages are going to get smaller and our urban centers are going to get bigger. So we have got to find a balance that works for us as a people as well as the rest of the country.

And Walter is correct, there are a number of not only oil companies, but even environmental groups that want to partner with us to make sure this is done right. They don't want it to happen in some cases, but history has proven that we will move forward. So the question is how do you -- how do you move forward and, instead of being the problem, be part of the solution. And that's

what Walter is getting at.

And even the environmental groups that are opposed to drilling and stuff are starting to realize that. And ultimately, as a community and as a people in the U.S., we will have to be able to make decisions that will better our future generations, so it's important that these processes work.

So your guys' visit here today is really important because it helps start that process. Thank you.

MR. TOM FIELDS: I think what Karmen said, the spirituality of things here, we lead the world. I think, in suicide per capita up here, and we pay, what, six, $700 for a round trip to Anchorage. You can go to New York for 300 bucks round trip. You know, 11, $12 for a gallon of milk here. So the people here are really hurting, and it's not fair because they own the land, or supposedly did before it became parks and whatever. And yet they are paying the most price.

And then the environmental changes, global warming. The record, I think, for snow used to be 40-some inches here. Two or three years ago they got 150, or something like that. That shows you the changes. And I have been gone for a while, and I came back and I can see the ocean rising. And I mentioned this man in Maniilaq. He talked about Noorvik flooding. Noorvik is on a hill up

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the river, and if it floods up there, that's a lot of water that's got to go all over the place here. And there is no way -- it scared me for that gentleman to say we are getting ready, we will do it right, and don't worry, we will save it. Why think that way, you know? Because you can't save it. I mean, you are going to dig through ten feet of ice to get to a broken well? There's no way you can do that.

I just say drill on the land and deal with that. Don't go into the ocean, man, because the ocean is life blood of the world. We are 70 percent water. That's why we are comfortable, you know, living next to the ocean. That's it.

DR. JIM KENDALL: Thank you. Ma'am, you have another opportunity.

MS. SUSAN BUCKNELL: I'll pass.

DR. JIM KENDALL: Park Service colleague?

MS. MARCI JOHNSON: Park Service aside, I wondered if I could ask a question. It's a big document so it might take me a minute to find it in there, but it seems, hearing talks about the planning and the process from the industry side also, I -- does this environmental impact statement -- this statement, does it process or consider, you know, the cleanups of spill for a tanker or the pipe -- in a planning for a pipeline route, as well.

or is it just directed towards the exploratory drill sites right now?

MR. MICHAEL ROUTHIER: The scenario that we analyzed is a blowout during exploration drilling. And our analysis is an environmental effects analysis. So it focuses on how the animals and the waters and things like that would be impacted. We -- this document isn't about a full analysis of all the different spill techniques. We discuss them, we identify them, we describe them, we talk about how they might be used. But this is more of an environmental effects document, not an engineering document. So we don't go into great detail on that because right now we are still at the lease sale stage.

We don't know where an exploration well would be drilled. I mean, we could hear companies talking, proposing a couple different sites, but we don't know exactly where they would drill. We don't know where any platforms would be, any pipelines would be located. It's still fairly early in the process. So at this stage, we are more focusing on the environmental impacts. DR. JIM KENDALL: That hit on something very important. If the lease is affirmed by the Secretary, then there is an exploration plan, correct, Mike?

MR. MICHAEL ROUTHIER: Yes.

supplements a final -- we did a final environmental impact statement for the sale, and that took into consideration a spill from a pipeline and from a production. And so this -- this document supplements the one that we did in 2007. So the one in 2007 would discuss those things.

MR. COLE SCHAEFFER: I want to comment on that because you guys, in your analysis you put in 60,000 barrels of spill, and there is no way that the -- that area can produce that kind of pressure. So why would you put that in there?

MS. SHARON WARREN: Because our geologists, actually, when they were looking at the hypothetical and looking at the reservoir area of the Chukchi Sea and appendix D of the document explains how they came out with the flow rate. And the flow rate is -- is what was the driver of the spill -- I mean, this hypothetical spill. So it -- you talk about the Deepwater Horizon.

MR. COLE SCHAEFFER: But when you look at the science of it and you take the science from whether it's oil companies or anybody else that's actually doing the drilling and you look at what they say the flow rates are, you are 40- to 50,000 gallons or barrels off.

MS. SHARON WARREN: I guess that's what I would ask you --
MR. COLE SCHAEFFER: That's why there is science there.

MS. SHARON WARREN: That's what I would ask you to do. Appendix D explains how the agency came up with the hypothetical, what they used, what the geologists used, what the resource specialists used and how they gain that. So after you -- if you read that, if we have missed something based on what they are saying in there --

MR. COLE SCHAEFFER: But in your analysis you are comparing apples to oranges, and you can't do that. You can't take the Gulf spill and use that as your example because it's a whole different environment. And that's what you are doing. You are comparing apples to oranges.

MR. MICHAEL ROUTHIER: Like when I discussed the public comments we got on the draft SEIS, part of the desire on behalf of a lot of people who commented was to see the really catastrophic scenario. So when we decided to do this very large oil spill scenario, we didn't want to get into a situation where we analyzed, say, a specific well and then someone would come back and say, well, there could be something bigger out there. We want to make sure we captured something very catastrophic.

So our geologists, they looked at an actual place in the Chukchi Sea, a place that does exist. But

MR. PATRICK SAVOK: He was mentioning the location of the sale, the lease blocks?

MR. JOHN CALLAHAN: Patrick, the reason why we don't know the location of the wells, as you said earlier, is because we are not at that stage yet where the companies tell us exactly where in their tracts they are going to drill. That comes later. So we will know exactly where they are going to do it. We just don't know yet. We're not at that stage in the process.

MR. MICHAEL ROUTHIER: We're trying to cover the entire lease sale area right now. Only later will companies be able to propose specific locations, dots on a map.

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MR. MICHAEL ROUTHIER: We're trying to cover the entire lease sale area right now. Only later will companies be able to propose specific locations, dots on a map.
occurred. We have leases out there. We have 487 leases out there. And of those 487 leases, just when we are analyzing -- so if you step back and you look at the lease sale area, it was 29.3 million acres that we were looking at offering. I can -- well, in fact, that's what the map was was sale 193. The alternative 4 that was selected at the time of the sale offered 29.3 million acres. So out of that entire area that we -- that we are considering, we don't know -- let's just take back in time -- we don't know where exploration activity would happen in this huge area. So when we did this very large oil spill analysis, it's to take -- it's a hypothetical. It's to consider -- it's like in the middle of the Chukchi Sea planning area, which is a very large planning area, and so that way it can build on this is -- this is what the biggest would be based on the information that our geologists had using information from wells that were drilled before, using information from reservoir, using information from seismic data that's been collected out there, going -- you know, kind of looking at different things. So it is based on data, but it's still hypothetical because you don't know. So that's why that was selected to say, okay, at the lease sale stage, we don't know where companies are going to go actually out and drill. Soon when we are looking at this area, it's kind of like in the central area of the Chukchi planning area so that we can do an analysis of here is what would happen if there was an oil spill based on Alaska information, based on the Chukchi Sea planning area information. And that's what we were looking at when we did that. As we go through, you know, as -- there is four -- the OCS Lands Act cause -- provides for four process. We have the five-year program. We have -- and then in the five-year program there is lease sales that the Secretary decides, and then -- and Bruce brought this up. Then the next stage is the lease sale stage, which is where we are at now. And then after that stage if the leases are issued and they are able to go out there, there is an exploration stage. And at the exploration stage that's when companies will come in on their leases and provide the exploration. There is a notice to lessees, No. 6, that was out there based on the Deepwater Horizon that says, companies, you need to provide us a worst-case discharge when you go out there, a blowout description of what you can do. That has to be included as part of their exploration plan. So that's why we are saying this very large oil spill is a scenario, but when you get to the exploration stage, they are going to do what they call worst-case discharge, which is going to be specific to a well, specific to the pressures in that well and, in all likelihood it is expected it will be much less than the hypothetical. So when we go through our NEPA review, we look at an environmental impact statement. So we do an environmental impact statement for the sale. When we get to the exploration stage, we are going to do another NEPA review, and in that NEPA review we are going to start out with an environmental assessment. And we are going to tier to the environmental impact statement that has already been done, and we are going to look at that based on the environmental assessment and to say, okay, are there any -- is there significant impacts that we did not address in the environmental impact statement. Okay. So this environmental impact statement, we are looking at a very large oil spill. So when we do the environmental assessment on the exploration plan and we look back saying, oh, no, no, we took those in consideration. We know that the significant effects are going to be -- there is no new significant effects that we as an agency have not already addressed. And so we would then stop at the environmental assessment.
is pumped out of under the water. So there is still time
to review --

MS. SHARON WARREN: Right.

MR. WALTER SAMPSON: -- what needs to be reviewed down the road.

MS. SHARON WARREN: Right. And there is -- and with this four-stage process, each stage there
can be changes. Things can be conditioned on certain things. We have the regulations. And yes, things are
being looked at specifically each time, even at a development stage. You are going to look at, you know, the environmental review. It's going to look at the pipelines, everything else, very specific to that project.

Lots of public involvement, you know, and comments on how how it would be.

Sometimes those development plans and the environmental impact statement can take years to review and also to get the information on where the project is going to be. You know, there is -- there has been a lot of times that you know, in 30 years -- look at it this way. In 30 years that we have had the Outer Continental Shelf, we have one development project that we share with the State of Alaska, and that's Northstar. Liberty is not on line yet. That's it.

There has been exploration wells drilled. More

But we have said enough. We need to go back. Zach, we stopped at you. Did you have anything else you want to wanted comment or question on, please? Sorry to interrupt.

MR. ZACH STEVENSON: These are more two -- more procedural questions. And I wouldn't consider them necessarily public comments as much as perhaps BOEMRE might be able to help me understand. To what extent is through BOEMRE and Department of Interior able to provide more consultation, given the Administration's support for government-to-government relations now, increasing that effort? For example, if there were to be an interest at the village level for getting some consultation with BOEMRE about the proposed lease sale and the NEPA process, are there resources available to provide for that? That was my first question.

And secondarily, along those same lines, were there interest from the borough to bring you back here to provide more information on what you are sharing this evening, is that capacity there?

MR. ZACH STEVENSON: You mean capacity in what way?

MR. ZACH STEVENSON: To share information on the public comment process, the potential alternatives and ways in which the public can engage the comment period
I might save it till I read this because it takes years and years, if at all, to ever recover. So --

DR. JIM KENDALL: This is very awkward for the communities, we understand.

MS. SHARON WARREN: So we will definitely do what we can in the time that we have and come back out here. I don't have a problem at all. I like coming out here.

MR. ZACH STEVENSON: Thank you.

MR. PATRICK SAVOK: Okay. I guess what I'd request, then, due to the lack of time, constraints and everybody's meetings, KOTZ Radio. Let everybody know what's going on. Give them a brief synopsis. Let them know the game plan and give them the website for comments. That will save me a lot of time with my constituent base, as well as Walter and Dean, I'm sure, as well as everybody else in the room where everybody who has computer would like to comment would be able to comment to share their views.

MS. SHARON WARREN: Oh, you haven't. We have the comment period till July 11th. Today is the solstice. So we are going to be in hearings until the 30th of June, so there is an additional 11 days out there that -- fly back. We try to keep away from the 4th of July because, you know -- and plus coming out when you're doing subsistence, too, we know also that people are out there doing subsistence.

DR. JIM KENDALL: Earl.
whenever are beginning to happen.

But we in the Arctic in the coastline, we are worried about our wildlife, our garden we love the most. We don't want nothing to happen to the garden we love the most. I look at it on this GIS, where the next airport that can transport a jet. The only jet we could land is Kotzebue and Barrow and Red Dog. We don't have anything like that.

But North Slope Borough has been training all these young people to do the oil spill response training, you know. They got hazardous -- whatever they call it, that class they have to take. We are preparing our young people to do that. We are preparing our young people to go to Ilisagvik College and to get training because when they first start coming around, we weren't ready. We were not ready. They were moving too fast. So we had to call time out, time out where we could be able to sit at a table with CLBMRK or Shell Oil or ConocoPhillips to talk about our future, our way of life, and how they could work together.

And I thank you. You did a good job, Kendall, and I mentioned to you when I meet with you a couple weeks ago -- was it two weeks ago.

MR. JIM KENDALL: I think so.

MR. EARL KINGIK: KOTZ is available, you
but --

DR. JIM KENDALL: That's close enough.

MR. BRUCE ST. PIERRE: What I can say, it does float. It's lighter than water, so if it was to spill, it would come out of the well. But the issue with cold water is that it congeals more. It gets more. And it holds it in a thicker lens. It does not spread as quickly. Like the Gulf of Mexico, we have warmer water. We get a quicker spread rate of the oil and more evaporation because you have more -- higher temperatures in the atmosphere and the sun. But it generally does stay tighter because of the cold water.

MS. SUSAN BUCKNELL: You are saying 100 percent of it will float to the surface?

MR. BRUCE ST. PIERRE: Oil is lighter than water, so it does come up. And unless you apply a dispersant -- dispersants are designed to entrain oil and put it back in the water column. And they used dispersants also in the Gulf. And that's a method by which molecules gather around the oil molecule and weigh it down, essentially and make it heavier than water.

MS. SUSAN BUCKNELL: So there are portions of the oil that will not float?

DR. JIM KENDALL: Some of it will dissolve, I think you are getting at, that a small part will dissolve.

MR. BRUCE ST. PIERRE: There's some, once it comes up, will evaporate. It's higher end fractions. In general, I would make the statement that most oil will come up and it's lighter than water.

MS. SUSAN BUCKNELL: Most of it. Okay. And I'm just thinking I've heard people comment about that it is shallow in -- where these leases are, and so some people, that makes them think that that's -- like where the walrus -- the clam beds are that the walrus feeds on and the marine life is in that shallow water, and that's why it's a different --

DR. JIM KENDALL: It's in the document.

MS. SUSAN BUCKNELL: The fact that it's shallow water raises a different set of problems than you have had in the Gulf of Mexico. Does that make sense?

DR. JIM KENDALL: It's in the document. I was conferring with Mike, but that kind of discussion is in the document.

MS. SUSAN BUCKNELL: That's why it's a layered question. That's what I'm trying to get around.

So when we are looking at this document, how would we know where to look? Would that be in parts of people's comments or would that be in the scientific analysis? How do we go about finding --

The final SEIS will put what people have commented on, but this document is our analysis -- analysts and our biologists and oceanographers and everything else preparing this document and analyzing it. It's what our agency has put together of taking the science that is out there and putting it into a document.

So there is a section called Description of the Environment. That's in Chapter 3 that explains the environment out there. Again, this supplements the final EIS. So sometimes it will refer you back to the Sale 193 final EIS, and if it does, that final EIS is on our website. It was done in 2007, and it is on our website.

So you may have to be comparing two documents because there will be a description and it will say go to final EIS that was done, and they will have it there.

And then the consequences, it brings in the consequences in Chapter 4 concerning how taking the information from the affected environment and what -- and the spill and how it was -- what the consequences are and those environmental effects.

MS. SUSAN BUCKNELL: Thank you very much. That helps. And if someone was having difficulty finding their way through the document or finding what they were trying to find in either of those documents, is there a resource?

MS. SHARON WARREN: Uh-huh. You can call our office. The phone number is 334-5200. And you can either ask for Mike Routhier or myself, and we would be happy to find -- find it in the document for you.

MS. SUSAN BUCKNELL: Thank you very much.

DR. JIM KENDALL: Going around the room. We have still got time and there is still coffee and still goodies. We're not going to leave here until everybody feels they have had an equal time to speak.

MS. KARMEN MONIGOLD: When was this published? When was it ready?

MS. SHARON WARREN: This document was published May -- it came out to the public May 21 -- actually, we sent it out in the mail -- what day did we send it out in the mail?

MR. MICHAEL ROUTHIER: Around the 21st.

MS. SHARON WARREN: Of May.

MS. KARMEN MONIGOLD: You sent it to --

MS. SHARON WARREN: We have a mailing list, and it went to quite a number of places that we have.

DR. JIM KENDALL: Including the communities and on the website.

MS. SHARON WARREN: Tribal organizations.
We have posted on the website.

MR. PATRICK SAVOK: This is digital form?

MS. SHARON WARREN: Yes, it's in digital form as well.

MR. PATRICK SAVOK: I'm a digital guy.

MS. SHARON WARREN: It's in digital form.

What I found out is people will download it off the website, but some people like to use the tool to put little notes on to mark up and everything. You can't do that on the one you download from the website because it's protected. But if you use the disk and you want to use the tools for making little notes or whatever to yourself as you are reviewing it, you can do that with the disk.

MR. PATRICK SAVOK: I guess I'll go a step further. If you guys could leave a few extra copies because we can't even download it, it's so big.

MS. SHARON WARREN: Scott brought some extras.

DR. JIM KENDALL: They are yours.

MS. SHARON WARREN: And if anybody needs any more, when we get back to Anchorage, if you find out somebody needs a copy of it, just let us know. We will get it out in the mail as quickly as we can, even if we need to express mail it out to the communities, the fastest way to get it out to folks.

Mr. Bruce St. Pierre: I had another point based on the question that was asked about walrus. There has been a number of studies done by the federal government, and they have also gone back through kind of their archives and looked at what's been done in the Beaufort and the Chukchi, and a lot of those are categorized in their websites. But in addition, the companies -- at least two of the companies that are looking to go out there, ConocoPhillips and Shell, we have done also studies. I mentioned that in my first comments.

And we have a lot of those studies starting to come out starting back in '06, '07, '08. And there is specific information -- if you are interested in walrus, there is work that's been done on walrus movements, migratory patterns, feeding areas, those kind of things, specific to those gray blocks you see on the map. Those are the lease areas. And to a couple of areas that are of interest to the different companies. So there was work done, and those studies are starting to come out. We can provide those. When you come to our community meetings, we like to be able to roll that out.

And also in addition to that, the State of Alaska specifically has done a walrus tagging program where they tagged a number of walrus to watch them in their movements. And so there is some information out there, and there is also information about bowheads, some of the ice seals, different offshore birds, the benthic communities, which are the things that live down in the mudline. And you are right, it's pretty shallow. Generally all the way across the Chukchi it's about 140, 150 feet in depth. So there is information there about what walrus do, how they follow the ice, areas they like to feed that might help your listeners.

MS. SHARON WARREN: And also to that, on our website, we have -- we have an environmental studies program, and so on our website we have the listing of completed studies, ongoing studies, and that people can visit the website and look to see what studies have been done out there, what's ongoing right now because it's continual ongoing studies. And it's also available.

DR. JIM KENDALL: Still have time. I don't want to be a nag. Walter?

MR. WALTER SAMPSON: I'm done. I said my piece.

DR. JIM KENDALL: Earl?

MR. EARL KINGIK: Done.

DR. JIM KENDALL: Okay. Well, then, on behalf of my BOEMRE colleagues, I would like to thank the community of Kotzebue for letting us host this meeting. I want to thank you for all your comments. These are real important. And you are going to see us more often. My motto is early and often. And we need to come up here because you are part of the process. This is your home, your land, and we want to be part of it. There is others that want to be part of it. But this is your home. And so be it. Anything else?

Walter, as ranking government person here, would you like to make one parting comment?

MR. WALTER SAMPSON: No.

DR. JIM KENDALL: No. Thank you very much.

(Proceedings adjourned at 8:51 p.m.)
REPORTER'S CERTIFICATE

I, MARY A. VAVRIK, RMR, Notary Public in and for the State of Alaska do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that the proceedings were reported stenographically by me and later transcribed under my direction by computer transcription; that the foregoing is a true record of the proceedings taken at that time; and that I am not a party to nor have I any interest in the outcome of the action herein contained.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my seal this ____ day of ______________ 2011.

MARY A. VAVRIK,
Registered Merit Reporter
Notary Public for Alaska

My Commission Expires: November 5, 2012
Good evening. Excuse me for being a little bit late. We were over at the office speaking with the council, and we had an incredibly good discussion. We would like that to continue.

My name is Jim Kendall. I am the new Regional Director for the Alaska office of the Bureau of Ocean Energy Management, Regulation and Enforcement. And I'd like to introduce some folks that came with me who are then going to describe why we're here tonight and why we're interrupting your week.

First of all, taking notes is Mary Vavrik. Yes.

MS. DORCUS ROCK: First, we need [inaudible] --

DR. JIM KENDALL: I was going to do that right after. That's good.

MS. DORCUS ROCK: That's mostly what they usually do.

DR. JIM KENDALL: Then let's do that first. Thank you for reminding me. Would you mind giving us the blessing, please.

(Blessing offered by Dorcus Rock.)

DR. JIM KENDALL: Thank you for reminding me. Next time I'll remember that we do the blessing before we introduce people. So thank you very much.

That's the way it should be.

Again, Mary Vavrik will be taking notes tonight so we have a recording of what everyone says. So please state your name before you make your comments. Also we have Mike Haller. Mike Haller is our community liaison. He helps me understand how to work better with the communities, and that's what I'm here for tonight. We also have John Callahan. John, put up your hand. John is from our Office of Public Affairs. We have Steve Scordino.

MR. STEVE SCORDINO: I'm right behind you.

DR. JIM KENDALL: He's right behind me.

Steve is an expert on environmental compliance, and he is here to take comments and understand what people are concerned with in terms of environmental compliance. And we have got Scott Blackburn. Scott is a technical editor and also a technology person that helps work on the document.

Now, sitting up front are two individuals that know the document better than anybody else. We have got Sharon Warren, who is the project manager. She is to make sure that the document goes from beginning to end. Okay. And sitting next to her is Michael Routhier. Now, Routhier, Michael, is the EIS coordinator. He gets all the parts and pieces together and makes sure all the
the Court says, but you didn’t analyze the environmental
effect for allowing them to produce the gas. So he said
to go back and take a look at that.

Another thing that the Court said that we failed
to do was to determine whether the information identified
by the agency was relevant or essential under federal
regulations. The plaintiffs submitted in court about a --
I think it was like a 45-page document of everywhere the
agency analysts had said there was uncertainty, we don’t
know, things are unknown. Well, when that is done, the
regulations -- there is a requirement that when that is
done, that the agency has to follow the regulations and
determine whether the cost of obtaining the missing
information was exorbitant or the means of doing so was
unknown. So they said you didn’t do that. You made all
these statements in here that things were missing, but you
didn’t follow the regulations when you did that.

So we went back. And what we did in response to
the court order, we drafted a supplemental environmental
impact statement to address the three concerns that was
in - - and it was in draft form. That’s when we came out
here - - and we released it in October of last year, and we
came out here in the communities in November to have
government-to-government meetings, as well as public
hearings. And we came here to Point Hope, as well, to
show you what we did of how to address the order.

Before the lease
sale, there was litigation. There was plaintiffs that
sued to invalidate the lease sale. And what the -- what
they alleged was -- in the litigation was that we didn’t
do a good enough job on the EIS, on the environmental
impact statement that was done prior to the sale. We
didn’t do a good enough job on it. So they sued us. The
sale went ahead because in litigation, you have to ask the
Court to stop the sale, and the plaintiffs didn’t ask the
Court to stop the sale. So the sale happened, and the
leases were issued.

In July of 2010, the District Court in Alaska,
which is in Anchorage, Judge Beistline, he issued a ruling
that said, for the most part, the EIS was satisfactory,
but you missed three issues. And so the judge said,
agency, you go back and you need to redo those three
issues in the document.

And the three issues that the Court wanted us to
address in the EIS, they said that we failed to analyze
the environmental impact statement of natural gas
development despite industry interest and specific lease
incentives for such development. So when we offered for
lease these tracts of land, we included in the sale notice
as incentive for the companies to produce the gas. And so
the Court says, but you didn’t analyze the environmental

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CD disks available if you are -- have it on disk, and we
also have it on our website. So there is three ways that
you can get a copy of it. If you don’t have a copy of it
and you want it, please let us know and we will make sure
that you get a copy of it.

What was Lease Sale 193? It was the Chukchi Sea
lease sale. And prior to us doing the lease sale in
February of 2008, we did an environmental impact
statement. And that is a document similar -- you know,
through the National Environmental Policy Act process, and
we did a document to assess the environmental impacts
concerning holding a lease sale in Chukchi Sea.

The sale was held in 2008. And over here I have
a map of the area. This was the area that was in the Sale
193 area. It’s outlined here. And these were the leases
that were issued to six of the oil companies. We offered
29.3 million acres. So we offered this on a much larger
area for lease, and only 2.8 million acres was leased.
And these are these little blocks. And after the meeting,
you are welcome to come up and take a look at the map
and/or we can answer questions from the --

MR. JOHN CALLAHAN: There are also maps on
the sides there.

MS. SHARON WARREN: Okay. So then what
happened? So the lease sale was held in February of 2008,
And we also -- we came out here to get comments, not only from all the communities. We got about 150,000 comments on the draft supplemental EIS, and we took a look at those comments. And I’ll let Mike explain why the draft supplemental EIS that we did in October was not finalized, because once you do a draft, then you receive comments and then you do your -- you do a final supplemental EIS. That’s the process. And so Mike will explain why we didn’t do a final based on the previous draft.

MR. MICHAEL ROUTHIER: Like Sharon said, in the NEPA process you usually come out with a draft document, you go and hold meetings, you get comments and usually produce a final environmental impact statement some short time later. This process was a little bit different. We did the draft. We came out for the meetings. We invited comments. We received over 150,000 comments. And something special about those comments was a common theme amongst many of those 150,000 comments.

Many of the commenters said, this is great, you looked at the specific issues that the judge told you to look at but, hey, Deepwater Horizon just happened and there is nothing in this document about a very large oil spill. That’s what we are really concerned about. This document wouldn’t be sufficient without a very large oil spill analysis.

MS. SHARON WARREN: So we’re here tonight to get your input on this document. As I said, it’s a revised draft supplemental impact statement. It has -- it carries forward the information from the previous one. Some of the comments that we received, we made some changes in the document based on those comments, as well as had an analysis on the very large oil spill.

It’s a supplement. We did a final environmental impact statement prior to the sale that was done in 2007. So you will see references in this document to that other EIS because we did -- we did take that EIS and redo that EIS. We supplemented it. So we added to it. And so there may be references that you see.

MR. JACK SCHAFFER: Did you bring any EIS statements?
MS. SHARON WARREN: Yes. We have CDs, and we may have some hard copies with us.

MR. JACK SCHAFFER: Can you give them to some of us?

MS. SHARON WARREN: Yes, yes. Some of you may have been on the mailing list that we sent out, but if you were not, we have them here available.

MS. SHARON WARREN: Do you have the hard copies?

MR. MICHAEL HALLER: We have some of them. We will work on that.

MS. SHARON WARREN: We will get them out before the end of the hearing. We have hard copies with us and we have disks of that document with us.

MR. JACK SCHAFFER: You are talking about that document, so aren't people wanting to look at it while you are talking about it?

MS. SHARON WARREN: You want to look here. Okay.

MR. JACK SCHAFFER: Is there somebody that wants to look at it?

MS. SHARON WARREN: Here is one here if somebody wants to... DR. JIM KENDALL: Comments are not due for a few weeks yet, so there is time.

Dr. Jim Kendall: Thank you, Sharon. Now, a couple of things here just they have already said, but I'm going to remind you. No decisions have been made yet. The Secretary of the Interior has to make those decisions. What we have to do is make sure that we have a good document and all the concerns and issues of the communities put together and taken to the

Secretary so he can make the best decision. That's why we need your help.

And we were talking in the office just a little while ago with Caroline, and it's all about communication. And I'm a big believer in that. And that was the whole subject of our meeting. And sometimes I get accused of being a frustrated teacher because I like to call on folks, but I'm not quite that bad.

But what we came up with in our last meeting -- and Earl was helping and Earl was helping a few minutes ago to get organized -- is we need people to come closer. And I would like to get as many chairs up here as we can and sort of form a semi-circle so we make sure everybody has a chance to speak. We will go from person to person and you can have a comment, you can pass, and then we are going to do it again. And we will stay here as long as we need to so everybody feels they have had a chance to speak and maybe several times to speak because one of your friends or neighbors may say something that reminds you, you need to mention this.

So we want to make sure when we end tonight everybody feels they have got their views on the table and that everybody has heard everybody's views. And so this is where I would like some help. We are going to move the chairs up here so everybody can move closer, and then we
are going to start with the community Elders and elected officials. So Caroline and Earl, I may need your help to help identify who should speak in those two groups, and then we will open it up to everybody. So I’m asking that you all come up here and move closer. And that’s where I’m the teacher that says please don’t sit in the back of the room because I can’t hear you or see you. So please, can we come up here and move chairs.

(Off the record.)

MR. EARL KINGIK: It’s time for you guys to talk about a very important issue. I can start off with the organization I work with. I work for Alaska Wilderness League. I have been fighting this issue for a long time. It’s important that the government gets to listen to you guys. We have got a recording secretary. We have got a translator. So this will give you the idea of what this issue is all about.

A great honor is being in front of us, our President, Caroline Cannon. And it’s another great honor to speak in front of ASRC Energy Services CEO. And it’s a great honor to speak in front of the Elders and my fellow Point Hopers.

Your voice is needed to reverse this bad Bush Administration lease sale that happened in 2008. Our recommendation is no leases drilling or exploration needed to continue keeping that up. We need to continue living our way of life. There is alternative energies that could be developed. There is other ways of making money. We got corporations that could do business with our president of ASRC Energy Service to do development in land and stay away from our ocean, the ocean that provides us with food for thousands of years. Our corporation, ASRC, could be a big help in our way of life.

But still, we have to watch what we are doing because it’s your kids’ future. Your kids are the ones that will be affected. It’s not going to happen right away. It’s going to happen after me and my relatives pass away. And you have to come forward for your children and your grandchildren to continue our way of life in Point Hope Alaska. Thank you.

DR. JIM KENDALL: Thank you, Earl. Okay. What I would like to do now is first ask the village Elders if they would like to make some comments. I believe that’s appropriate. I don’t want to force anybody to make comments, but you are welcome to make some comments, if you would like.

UNIDENTIFIED SPEAKER: Why didn’t you start with the Elders if you were going to be appropriate?

DR. JIM KENDALL: That’s what I’m trying to do now, sir. Earl was helping me. He was at the meeting last night, and he’s helping me change the tone of activities to occur in the Chukchi Sea. Given the risks, the Obama Administration should not affirm Chukchi Lease Sale 193, nor let any exploratory drilling in the area go forward. There is a lot of other issues, but I’ll read the high points.

There is no proven technology to clean up an oil spill in the Arctic conditions with cold temperatures, low visibility, broken sea ice and high winds. Little baseline science exists for measuring the effects of an oil spill on the Arctic ecosystem and mammals central to our way of life. We are part of the ecosystem, and we should be proud that Mother Nature has given us to be part of that ecosystem of the world.

With the nearest Coast Guard station 1,000 miles away, Arctic communities are not capable of responding to a major oil spill along the Chukchi coast. The Inupiat people have lived off the Arctic Ocean for thousands of years. The Chukchi Sea is a viable source of food for our communities and an oil spill or disturbance of marine mammals and fish could devastate our way of life.

Come and testify and let these government people understand how important our way of life is. We have been living here for thousands of years. The garden has provided food for us. Springtime, year-round cycle, we need to continue keeping that up. We need to continue...
animals around. Although we were afraid that we might lose our animals, look at -- look at what happened now. Our animals are still around, the caribou where the pipeline is built. But this offshore drilling is something else, you know. Even that Exxon oil spill after what happened, people are still trying to hunt and fish and then they still find that grease, you know, in their rivers, in the oceans. That's why, I don't know, these oil rigs make me flinch every time I see one. Thank you.

DR. JIM KENDALL: We will come back. If you want to interrupt at any time, please let us know.

MR. LEO KINNEEVAUK: (Speaking in Inupiaq.)

DR. JIM KENDALL: Thank you very much.

And that was recorded. Thank you sir. Now, I'd like to -- unless there are anymore -- thank you, Leo. I would then like to -- Dorcus is maybe speaking later, unless you want to try again.

MS. DORCUS ROCK: He's right. I know we need jobs here, too, but we also know there is going to be development going on, but that really scares me, too, because we -- that's how we survive with is our Eskimo food, and you all know that for thousands of years. I'm not -- (speaking in Inupiaq.)

situation two years ago. All those people that was outside protesting against the 193 lease sale because the Elders said no to the big Project Chariot and no to this lease sale. And I still oppose it. Thank you very much.

DR. JIM KENDALL: Are there any other Elders that would like to speak? And we will be here as long as we need to, so if you think of something afterwards, you are welcome to jump in. Anyone else? Any Elder? Elected officials?

MR. RONALD OVIOK, SR.: (Speaking in Inupiaq.) One thing I'd like to add is what you have is the government controls today, but one drop of oil could become a big problem for our animals. Thank you.

DR. JIM KENDALL: Any other elected officials that would like to speak before we go to the list?

MR. JACK SCHAEFER: I'm a council member representing Point Hope through our regional federally recognized tribal government known as the Inupiat Community of the Arctic Slope. That tribal government was formed in 1971 in response to Alaska Native Claims Settlement Act and as a region for the Arctic Slope, as a government.

And we are a government like any other government. The United States government is a government that has responsibilities, and so do we. There are federally recognized tribes that perform governmental functions. There are -- more than half of all the tribes in the United States have self-governance, have direct funding from the federal government, not through the BIA and regional offices. And so they perform these governmental functions in place of the federal government, whether it be wildlife, EPA, those governmental functions like any other government.

And we have that responsibility in performing those functions for our members, and our constitutions reflect that for the well-being of our membership. And so we have this obligation and duty, and there are other tribal governments that have the same thing like the federal government, its responsibility towards its toward its membership and its well-being of the membership.

And I guess that's a good start to indicate what our responsibilities are. We are not just blowing hot air. And we do have these functions and responsibilities that we have to address in regards to whatever may be missing or whatever needs to be done, like any other government.

Is there any type of revenue sharing? Is there -- how are we going to benefit through something that we haven't addressed yet and haven't been
acknowledged in regards to governmental functions? 

Taxation? Local employment? Tribal employment rights? 

These functions have to be recognized by the federal 
government and the State of Alaska. And so it's very 
difficult for us tribal governments to, you know, respond 
to things and continuously try to keep track of what all 
has taken place. But we have been in the court for a very 
long time, as George Kingik just said. 

And there have been several cases that involve 
our governmental functions and our concerns in regards to 
subsistence that have not been resolved. And so you know, 
governmental functions are very -- you know, it's a real 
thing. I guess, you know, this can go on as time goes on. 

Thank you.

DR. JIM KENDALL: Thank you, sir.

MS. ERMA HUNNICUTT: (Speaking in 

Inupiaq.)

DR. JIM KENDALL: Thank you. Again, 
before we go to any of the list I have, any other 
community Elders or elected officials?

MR. MICHAEL HALLER: Could you let Dorcus 
translate that?

MS. DORCUS ROCK: (Translation by Dorcus 
Rock.) She was saying that when money comes in and so 
forth, it's good, but it's also that we have to remember 

try to protect our rights to subsistence, our rights to 
the ownership of the ocean in regards to title. And I 
will mention these for the record. This is one tribal 
government that went through this. There were several 
that had went through this. The Inupiat Community of the 
Arctic Slope, Native Village of Gambell, Native Village of 
Akutan, Nome Eskimo Community, Native Village of Eyak.

Over the years since the '70s -- and I'll just 
mention one in regards to subsistence, People versus 
People versus Gambell versus Hodel, Ninth Circuit Court, 
1985. Gambell 2. People versus Gambell versus Hodel, 

This statement more or less came out of a 
Vermont law school last March in regards to discussions of 
offshore between the United States and Canada, the Inuit 
and Greenland trying to talk about oil and gas offshore. 
And so there was a mention of these court cases that 
indicated that the subsistence issues have not been 
resolved.

And so that, you know, gives you a little bit of 
glimpse that was mentioned to the White House Ocean 
Policy Group a couple weeks ago, but I don't know if they 
understood what I was saying because I didn't refer to the 

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Is there a different sign-in sheet than this one?

DR. JIM KENDALL: We had several to find out who is here. And everyone is going to get a chance to speak. Looking at you, Caroline, would you like to make a comment?

MS. CAROLINE CANNON: I’m just observing.

DR. JIM KENDALL: You are absolutely correct. Michelle W. Cannon. Michelle. She’s not here.

UNIDENTIFIED SPEAKER: Mitchell.

DR. JIM KENDALL: Okay. I’m sorry. I can’t hear too well and I can’t see too well, either.

Margaret Oktollik.

MS. MARGARET OKTOLLIK: No.


MS. SALLY KILLIVUK: I say in this world, this land is my land and this land is your land. There is two different things about it. You guys love to eat your food; we love to eat ours. And you guys don’t like to let nobody touch your stuff; we don’t like to let our things be touched, too. Like they always say, you know, you have to share and give. How are we going to do that if they take that away from us? What we are supposed to do? You

Not against it or for it, but work with it so our people can see and hear what’s going on with industry. We need to make sure what they say they are doing is really what they are doing. With that said, if that should happen, I want to see our people trained, working and be involved so we aren’t left out. If not me working, it would be someone else, probably from the Outside. So I’m happy to be working. Thank you.

DR. JIM KENDALL: Thank you very much.

Next on the list, I see your name again, Ron. Is there anything else you would like to add? No? Okay. We will come back. Dorcus, your name was on the list. You want to make additional comments?

MS. DORCUS ROCK: (Shakes head.)


Okay. Can you help me with this name here? I think there is someone that’s written down here as Peter. Okay. I’ve got a no. Then we are back to the very beginning again.

Now, that’s the sign-in sheets that sort of got away from us.

Mr. ROY FILE: You know, I signed a piece of paper right after Bessie did. Can I look at that thing right there? Did you deliberately skip me?

DR. JIM KENDALL: It might have been an accident. I apologize. I want everybody to speak. Let’s...
side or the other?

DR. JIM KENDALL: Personally, I cannot.

My job is to provide information to the Secretary of the Interior so he makes the decision.

MR. ROY FILE: That's what I wanted to -- that's what I wanted to know. Thank you.

DR. JIM KENDALL: You are more than welcome. And I apologize for reading it wrong.

MR. ROY FILE: That's okay. Just don't let it happen again. We have got to have some fun here.

DR. JIM KENDALL: I have gone through the list. Did anybody sign the list that wanted to speak that didn't? Because then we are going to go to phase two.

Yes, ma'am.

MS. AGGIE FRANKSON-HENRY: Good evening.

I wrote my name on the list, and I said yes. This is Aggie Frankson-Henry. And this is to J.F. Bennett, Chief Branch of Environmental Assessment, Bureau of Ocean Energy Management, Regulation and Enforcement in Herndon, Virginia; cc to Michael Haller, Community Liaison, Alaska Region, Bureau of Ocean Energy Management, Regulation and Enforcement of Anchorage, Alaska. And I wrote this today.

As you see here in this map, all the gray spots, those are lease sales that's been sold. Our ocean has been sold. They are colored in red, but you don't see it in red. State of Alaska, the corporations do not have a piece of dime, not even a penny. If this goes through to the vessels, we don't see anything unless it lands on shore. And then the North Slope Borough will tax them. That's for your information.

For the record, I am Aggie Frankson-Henry, a tribal secretary and tribal member of the Native Village of Point Hope. I am opposing the Bureau of Ocean Energy Management, Regulation and Enforcement, BOEMRE, decision on the proposed actions for multi-sale EIS for the Chukchi Sea, sales 193, 212 and 221 and Beaufort Sea's lease sales 209 and 217. And I support alternative one, Beaufort and Chukchi Sea no lease sale.

And I'm opposing the National Pollutant Discharge Elimination (NPDES) permit, a permit to discharge of toxic drilling muds and other harmful pollutants into the water within the decision of the proposed actions for multiple sale EIS for the Chukchi Sea sales 212 and 221 and Beaufort Sea lease sale 209 and 217.

As a representative for the tribe, it's of best interest of restoring courage, stand up for our children's future and their next generation to have the opportunity to utilize our subsistence resources. This time I will stand. This time I will voice for the good in which the people of Point Hope, are blessed with.

I come from an economic distressed community who relies 70 percent on subsistence resources to maintain a healthy diet. The majority in distress is our children. Our boundary is rich in herbs, berries, plants, naturally grown dietary supplements for a healthy living environment for our people and animals that relies on these natural resources.

As we the people realize today, what really matters is the well-being of our children's future and subsistence resources that will be impacted to strive to sustain traditional knowledge, traditional lifestyle, cultural heritage, cultural land use which industry poses a potential damage to our environment in the Arctic Slope.

The Inupiat people has political rights, and we must argue that it is misleading to obstruct the settlement given to the Inupiat people by political or personal gain of regret in our backyard of the proposed 2012-2017 Outer Continental Shelf oil and gas lease program settled by the companies' permits without even giving the Inupiat the right to vote by the people of the North Slope Borough communities.

We have the right to voice, to meet freely for the well-being of the residents of the people in the coastal communities, whether it be by...
Thank you very much. I happen.

Crime against humanity. And there is no money that can ultimately devastation to Inupiat human is to become a
devastation to the ecosystem, devastation to the -- all
offshore drilling, no matter what profit for who.

I just want to say that I'm against all
lease sale.

I oppose the Chukchi Sea and Beaufort Sea
planning areas oil and gas lease sale 209, 212, 217 and
221. I support alternative one, Beaufort and Chukchi Sea
no lease sale.

Thank you. I'm Aggie Frankson-Henry.

DR. JIM KENDALL: Thank you. Thank you.
Thank you very much. Next on the list I've got Leah
Frankson. She came late. Is that you hiding back there?

MS. LEAH FRANKSON: I didn't prepare
anything. I just want to say that I'm against all
offshore drilling, no matter what profit for who.

Devastation to the ecosystem, devastation to the -- all
animals and fish and mammals, devastation to environment,
ultimately devastation to Inupiat human is to become a
crime against humanity. And there is no money that can
fix that, take that away, or change that once that
happens.

DR. JIM KENDALL: Thank you very much. I
have another name here. I believe it's -- I'm sorry. I
keep living our subsistence lifestyle. My son wants to
grow to a man into a father and teach his kids how to hunt
and to live the Inupiat way. Thank you.

DR. JIM KENDALL: Thank you very much.

Now, according to the list, which is not perfect, I’ve hit
everyone who either didn’t mark yes or no or marked yes.
So now we are going to open it up to the floor because I
want to make sure everybody has an opportunity to speak.
So first I’m going to ask for volunteers. And then if we
don’t -- when we are out of volunteers, I’m going to go to
each individual person to ask you again if you would like
the opportunity to speak and tell us what you think. I
want everybody to have that option.

So does anyone want to raise their hand and make
a comment before I start going to everybody individually?
just to make sure we are not missing something, because we
need your help.

MS. LILLIAN A. LANE: I’d like to sign in,
if I could.

I, too, like my uma, wasn’t prepared to -- and
have comments, but I jotted a few things. My name is
Lillian A. Lane. I’m a resident of Point Hope, born and
raised. Love to eat everything my father, my brothers, my
neighbors have caught and put on my table. Therefore, I
oppose any gas, oil leases out in the ocean seas. Just

We are going to be repetitive on some of the
things that they said because they are important. Our
ocean that’s out there is unpredictable. We have our
dagvag, the current that is very strong, and it comes from
every direction out there. Supposing something happened?
How are they going to contain their spills? Those are the
things that we want to hear. What are you going to do to
do your -- your best to convince us that there is not
going to be an oil spill? Those are the things I want to
hear, but in a deep -- at the very -- at the -- but
overall, I know that since she mentioned -- Aggie
mentioned that we won’t even get a penny out of it, not a
penny. Go -- go earn your dime someplace else, not in our
ocean.

A lot of times -- another lady said it doesn’t
matter about the money. Money doesn’t matter. The food
is more important than money right now. As we speak, it
is more than money because if we try and buy stuff, it’s
really spendy. But I want to also add that the unseen is
a mystery to all of us. That mystery is our ocean. We
only take what it gives us. We only take what it gives
us. The animals give themselves to us to provide for us.
So we take as much as it gives us. If anything should
happen, we won’t have anything. I’m afraid of that. We
won’t have anything.
put on this earth for our use, our bodily use. And it says if we disturb the land, it's going to disrupt the cycle. I see disruption. I see disruption if they do go out there. And I hope and heartily hope the committee will really consider and take to heart, once again, to really think this through and not think of it's going to bring us a lot of money because it's a federal thing. This is going to bring us a lot of money, which it does. Right now today our money really isn't there at all.

Thank you for this opportunity for me to speak during this time, and I thank all the people that stood up and speak on behalf of Point Hope. And I'd like to -- I'd like to say that if they are going to drill out there, they need to think of all the factors that would be affected before they do any drilling. Taikku. Thank you.

DR. JIM KENDALL: Thank you very much.

Now, what I would like to do is I'm going to start with this end of the room and go around and touch base with everybody to make sure everybody feels comfortable and has an opportunity. Sir, would you like to say anything?

Your name, please.

MS. RICHARD CANNON, SR.: My name is Richard Cannon, Senior. Before I say one word, I'm going to pray and ask God to give me the right words to say. Heavenly Father, creator of all things, I ask to pray and ask God to give me the right words to say. My name is Richard Cannon, Senior. Before I say one word, I'm going to pray and ask God to give me the right words to say.

Heavenly Father, creator of all things, I ask to pray and ask God to give me the right words to say. My name is Richard Cannon, Senior. Before I say one word, I'm going to pray and ask God to give me the right words to say.

Now, I didn't say go ahead to me. Are they going to pay off? Maybe it might begin to pay off. I'll just leave it at that. My name is Richard Cannon, Senior. And I'm pretty much against offshore drilling, any kind of drilling.

DR. JIM KENDALL: Thank you very much.

Ma'am, another opportunity? Jack?

MR. JACK SCHAFFER: Sure. I always have a lot of things to say. And I hope you continue to come around and come around. I have been at this for a long time, also, you know. I -- I have been President of the Native Village back in '93 or so. years, and we have been talking about oil and gas for a long time. I sat around...
I don't know if that was done. There was a government accountability report, a GAO report that was published in 2002, No. 357 on the restoration of Prudhoe Bay. And companies ignored, companies changed their name, companies filed for bankruptcy, companies walked away.

The State of Alaska got furious and said, this is not true. I don't believe your report.

And so that's one thing that we keep trying that we have been saying over time is that we are promised that restoration will be done and they will clean it up, that the animals will be able to go through there again. Noiqtut has to purchase three, four, five times as much fuel to go after caribou now from years back.

And this restoration hasn't really been done, apparently. I did see something on the news that there was some work that was being done, but I don't know to what extent. You know, promises have to be kept. You have to do what you need to do. And if you are going to say you are going to do something, then you better do it. And if you walk away, then how can we trust these companies that are saying that they can do it in an environmentally safe way? We are only talking about exploration and leases. I don't know to what extent that we go in regards to impacts and at what stage.

There was discussion whether it's going to be...
But everything migrates, as far as I understand. All the animals in the ocean, even their food migrates. Migrate meaning that, you know, they travel from the lower oceans up — go up through our area and then continue on over to Canada and Greenland because of the currents. They follow the current. I’ve never seen — and also I’ve always heard from my Elders when we are out hunting we — we can’t see any animals when the current is from the west, only seals and polar bear. That’s all.

But every once in a while when the whales are migrating — this statement is not true either because some the whales always come back because they can’t continue on, no water. They’ll come back. I caught one of those kind in my whaling years in Point Hope.

And another thing I have a problem with is our — we deem that it’s our ocean, but State and federal own that ocean, and they right now they are opening it up to tourist ships going through all the way around up north across Canada, Greenland, everywhere. And that’s something that, you know, we have seen and read about in the Lower 48. A lot of animals get hit by the props. And also there is a lot of fishing going on. They make a line, International Date Line for the other countries not to come in, but they still come in and go over that because there is nobody out there really leasing the area.

And so when those nets are out there, any kind of animal will get caught in those nets and die, can’t swim no more.

Anyway, thank you.

DR. JIM KENDALL: Thank you very much.
SIR, ANOTHER OPPORTUNITY, SIR? WOULD YOU LIKE TO MAKE ANOTHER COMMENT?
UNIDENTIFIED SPEAKER: I pass.
DR. JIM KENDALL: Ma’am, you are welcome to.

MS. LEAH FRANKSON: My name is Leah Frankson. When I first heard about the leasing, the sale, and I made a comment on my Facebook about how people don’t understand how the effects would be because it’s not them, you know. It’s not them being affected. And I said, you know, how would they feel if — if they didn’t — if they couldn’t eat shrimp no more, if they couldn’t eat that. And then sure enough, I look what happened to them down there, those shrimp — shrimpers down there. The shrimpers, they are still being affected by what happened.

You know, I look at what happened in Valdez. That wasn’t even a pipe. That wasn’t a — that was just a boat. 25 years they couldn’t be fishing, toxic waters.

Those are places that are connected that have infrastructure or relief, you know. There is no infrastructure set up here, nothing. Thousands of miles out, there is nothing.

And even if there was, you would add on to the noise pollution. They track all of the pollution that in this pristine environment that they don’t even know what might happen. They don’t even know what could happen to — to the ecosystem.

For the federal government to sell it in the first place seems wrong to give some one person, one group, one entity profit, and when it could affect so much, it could devastate so much. And I have to say, to me, to allow that it looks like a crime against humanity. Humans, humans here, my family, is eating from the ocean. My family is eating from the ocean. Everybody up here.

And it’s not the first time the federal government almost let things happen. I was reading that book on Howard Rock and how they almost got approved to do nuclear bomb to change the land so they could, you know — to test it, to test — to test up here. Even there was EPA back then, almost allow it. And what would have happened if they did? We wouldn’t be here if they did.

Together we stand up and they said no. And they are standing up and they are saying no to this, no matter your profits. Thank you.

MS. LILY TUZROYLUKE: Lily Tuzroyluke for
That's why we didn't see our caribou migrated this last year. There was a lot of traffic because of people up north were impacted by a lot of studies through the airway. A lot of helicopters, planes. All that, we are going to be seeing that here. And when they come in, we need to try to get some taxes going so that we can at least get a piece of -- get a dime. If they come here and put their equipment on our land, we need to make sure that we -- we invest from that. It's going to hurt us. We know. We know once -- once they -- because the leases are sold.

Those that are marked up there in the map in gray are supposed to be red. BOEMRE, or former MMS, sold those leases to the oil companies, and they are still looking for people -- I mean, companies to buy those other leases. But that's our backyard. We were told when we were children never to mess with the ocean because it's very dangerous, never to even go out there and -- and put your feet in the water because the current can take you away. We have to respect the ocean. I was trained to respect the ocean. And I'm trying to tell my children to respect the ocean so that they, too, will be blessed when they go out to harvest.

Mammals, animals, foul in the air -- we like to eat eider duck. We like to eat kumars. We like to eat fish, whales, seals because we are blessed.

MS. AGGIE FRANKSON-HENRY: I'm Aggie Frankson-Henry. I'm a Tikigaqmiu. I'm from Point Hope.

If you, but the department that they work for, their employees were found guilty for taking bribes from oil companies. From oil companies. You stated earlier when this gentleman asked, he asked what is your -- what is your stance on this issue, and you said that you are neutral. You said that you are neutral, that you have to take consideration from both sides.

I want to know what assurances happens -- what assurance you can give me or the people here that the same corruptions is not going to be happening again. I know that there is certain steps that you have been taking, but I just wanted to bring that issue up since that is a concern.

You are here to talk about the supplemental environmental impact statement, and you spoke to the Native village earlier about grading -- upgrading, and it is my belief that your EIS is flawed. It's extremely flawed.

You take a lot of studies. You do a lot of studies on all the various animals. We have -- at our office, we have requested information under Freedom of Information Act. I don't know -- we asked for the information. The first one is between the oil companies and between BOEMRE, formerly MMS. There is boxes and boxes of animal studies, tons of animal studies saying how the seismic testing, how the exploratory and the explorations, how that will affect the animals.

But where I see the gaps -- and this is where the traditional knowledge would come in -- is that you say how insensitive the animals are, how a bowhead can take up to X number of vessels, this volume up to an avalanche -- I think it's the decibels equal to a volcano eruption, avalanche, and bowhead can withstand that amount of decibels, but as whalers and the experts here, the men and the women here that do whaling, know that bowhead hearing is very sensitive. It's very sensitive.

The other -- the other major flaw that I see, and I'm glad that you have here with you, is you have an editor of the EIS that's -- yes. There he is. You take all of the studies. You take these scientists to find out how this would impact the animals. Yes, and that is important. But you don't look at how or it will impact the human population and how it will impact the culture.

It seems in our previous -- in previous sites, things like Exxon, the Deepwater Horizon and other places around the world, like the major deltas where there has been oil development, it devastates the people. It devastates the people. That's the truth.

And you say that you are here to get the facts, to find the truth, and the truth is that this will devastate us. This will devastate us. So I just want to -- I cannot urge enough that you have to dedicate -- you dedicate scientists to look at animals. You need to look at the people that are going to be impacted.

That's all. Thank you.

DR. JIM KENDALL: All very good comments.

Thank you. Ma'am, would you like an opportunity? No?

Okay. I'm going to come around the table. I don't want anyone to be forgotten before I continue on. Ma'am, would you like another opportunity?

MS. AGGIE FRANKSON-HENRY: I'm Aggie Frankson-Henry. I'm a Tikigaqmiu. I'm from Point Hope.

As we all know that our ocean provides -- God provides for us. Like my Aunt Anna say, that they are given to us when our fathers, grandfathers, uncles, relatives go out to harvest a marine mammal, even the fowl of the air, the fish in the ocean, it's bountiful. We are blessed. And knowing that, within this time period, we will be impacted. Be ready.

There may be a lot of traffic in the air. That's why we didn't see our caribou migrated this last
We know that the NPRA is not in this map up here, too. How many leases have been sold in the NPRA? Our neighbors up north, they are going to be seeing a big change. They are going to be highly regulated. They are going to be so polluted that they will ask us how. What did we do? What did you say to them to prevent this from happening? We stand up and we said no.

And it's so hard to see our culture, our traditional way of life in front of us, knowing it might not be there anymore five to ten years from now because we won't be able to celebrate the whale. But we love to eat the bowhead whale, the beluga whale. We are whalers. And we harvest because we were taught by our fathers, our grandfathers, our mothers, our grandmothers, and our forefathers. We are a rich community. God blessed our land with a lot of berries every season. There may be times when there is a drought.

As we see today on the news, the violent storms, the flooding that's going on in the Lower 48, their vegetation, their animals, their land is being taken from disaster through Mother Nature. And now look at us today. That's where all -- you know, we are -- and also in Japan, the big earthquake that happened, and now we are afraid of the radiation that may come into our waters and that we may be affected, too.

The United States is hurting. Maybe it's because we are almost against Israel. We need to pray for Israel so that we will be blessed, so God will have us in our favor. Today here in the Arctic Slope, that's what we do. Because God has blessed us with these resources in the oceans, in the sea, in the rivers, and in the air.

And I hope and pray that the decisionmaker listen to our comments. We know that this was done from the other previous President of the United States, but the President today, Obama, we know that his term is almost over, but he's given us the opportunity to speak with the federal government with government-to-government consultation, executive order 175131 so that we can have a voice in our community.

We are Tikigagmius. We will always say our voice. Thank you.

Dr. Jim Kendall: Thank you for your offer to help people with the regs.gov. Thank you very much. That was very helpful. Sir, would you like an opportunity? Back to the Elder table, anyone like to make another comment?

Mr. Leo Kinneveaak: I wish -- I was wishing that the sea mammals and the animals that would be affected by these offshore drilling activities were here to testify with you, you know. It is meaningful because they provide -- they provide us the food from the ocean.

And my question is, who will make the final decision on what's going to happen after all the impact statements are taken care of and the testimonies?

Dr. Jim Kendall: The Secretary of the Interior.

Mr. Leo Kinneveaak: Is it the federal government?

Dr. Jim Kendall: Yes.

Mr. Leo Kinneveaak: -- or the United States Supreme Court or MMS?

Dr. Jim Kendall: No. It's the Secretary of the Interior, Ken Salazar. He makes the final decision.

Mr. Leo Kinneveaak: Ken Salazar?

Dr. Jim Kendall: Yes, sir.

Ms. Dorcus Rock: I oppose on the lease sale. Too, and the reason on that is I was thinking about it. I read this one book about those Indians when the...
Mr. Earl Kingik: It's been a long battle since 2008. A lot of things happened between 2008 and now. A lot of meetings, a lot of planning, a lot of development talk. Our corporation, ASRC, our cousins, Olgoonik Corporation, and other corporations are getting involved with oil development without your guys' knowledge.

We don't know what's been happening, but we would like to ask the government to do investigation on.

Mr. Earl Kingik: Thank you very much.

Dr. Jim Kendall: Thank you.
Washington, D.C., we have many meetings with them. And we have meetings with Senators and Congressmen. We got friends that always happen get votes to fight against the offshore activity in the Arctic.

So you see, we are not alone because the tribe is very powerful. We have got a Constitution of the United States, thanks to Jackson [sic]. We foster and protect our way of life. We got to understand that. We got to stick together. Without to sticking together, things will happen. When we stick together, things always happen in a good way.

Just remember, Point Hope should say no, no, no to offshore activity. Thank you.

DR. JIM KENDALL: Thank you, Earl. I'm not going to forget this side of the room. Ma'am?

MS. LILLIAN LANE: Lillian Lane. Call me Anna. As I was sitting here and wondering what else I should say, my mom called me. She just came back from Kotzebue. She's doing well, praise God. She said I had other plans to do something else tonight, and that was church. I love to go to church. And Mom said there was a very important meeting that's going on. You need to go and voice. You need to go voice. You need to go say something.

So when she put that on me, I had no choice but to come here and say what my heart says, wants me to say. Like others, my freezers are filled with ducks, muktuk, walrus, oogruk, agvik, seal oil.

I don't want to -- I don't want to see seas on account of man-made mistake, technical mistake. I love to eat my mikigaq, I love to eat my meat.

I told myself I'm just going to say a few words, and that will be it. But right now, my heart is speaking. Ever since the Man of No Color has set foot on our society, there has been changes. Majority of the time it's bad changes. They have hurt our people, physical, mentally, spiritually. We are tired of being pushed around, being told what to do. Enough is enough.

Our brave men who set their -- set themselves out in the ocean to catch what they could catch -- and they have been very successful this year. God has blessed us mightily. Once again, I -- from the bottom of my heart, from the bottom of my heart we plead and we beg that you don't allow to do this to us. They have done enough to us.

You folks out there don't know what it's like to live out here. You have to come out here and live it, to understand what we go through.

Like my boy, he's out there hunting right now. I encourage him to go hunting. I want my freezers filled as much as I can get. We not only feed ourselves, but for the community. We share. This is a sharing community.

We give first and take whatever is left over. And still our freezers are full, whether they be in the ice cellar or the new freezers.

I don't know what else I can say more because to beg and plead, I don't usually beg or plead, but this time I am. I am. I don't beg or plead. It's for the good of our people.

But thank you for coming again and listening to our comments. And I hope they really take it to heart and understand, truly understand where we are coming from before they make this decision whether to do it or not to do it.

Thank you, Lillian Lane.

MS. EVA LONG: I know I said no to that paper. I'm Eva Long and I'm against offshore whaling [sic]. Thank you. Offshore drilling. I like whaling.

MS. CAROLINE CANNON: First of all, I want to say my name is Caroline Cannon. And tonight I wanted to listen because it's the people that gives us direction as leaders what to say. We carry the message behind our back. And I just want to commend everyone tonight for speaking from your hearts. Many times I carry that luggage.

When I leave from here with the plane and I get to Kotzebue, there is times I visualize an oil rig. There is times I visualize black ice. There is times I cry. I ask many times, why me? Why me? There is leaders in the community with many long knowledge, wisdom. A gift that can reach out to the people in English or in Inupiaq.

There are many times I miss my children's birthdays, anniversaries, but tonight I am very pleased to hear; tonight I am so blessed because it's the same message.

We envision the ocean with the rigs. I have a little reminder from a friend from Valdez, a jar full of their rocks with the oil, the black oil, and they just dug that not too long ago. That is my reminder I keep in my room. We are blessed with three whales this year. We had the opportunity to see many things happening within our -- in our -- in front of us. A lot of joy.

And yet we know how damaging it can be if there is one drop -- one drop oil -- I mean, oil drop. We know how damaging that can be. That can be forever.

I grew up with five brothers, so I never really had a chance to put five gallons into our tank. But one time my brothers weren't home. Mom said I had to go put stove oil in our tank, and I cooveed. I spilled. I cooveed, and I saw that oil go straight to the snow.
mentors, the people before us, our Elders, that were vocal
that liked to say their piece, our mentors that protected
our land, our ocean. They cared. There is many -- and
yet at that time they cared, but they weren't -- they
weren't given compensation. No meeting fees.
A lot of times we have to travel with what
little we have in our pocket. If you go to D.C., you
can't get anywhere without a cab. There are hotels. You
think it's ridiculous here in Alaska; $200 a night in
Anchorage during the summer rate! It's 3-, $400 over
there. What little money you have, if they put you in
a -- in a hotel, you're going to see little critters
because we can't afford that. We can't afford that
lifestyle. But it's critical that we have a voice.
I just want to say thank you. Thank you for
opening the doors because these doors were shut before.
Believe me, they were shut. There are open doors now.
There is opportunities for Native tribes to get up and
speak and to be recognized. Sometimes you feel like you
are walking the trail by yourself when you don't have
nothing. But it has to be heard. You have to be heard
irregardless.

Remember the big issue about those coupons on
the beds not too long ago? Many times we have to sleep in
a hotel that's not even worth it. Don't want to even get

We need to include them. I don't have -- I don't know
their -- their background. I know the walrus is crucial
to them, to Savoonga and Diomede for the covering of the
boat. That's all I know. But at one time they used to
come here with boats to celebrate with us.

There is a lot of issues that were said tonight,
a lot of critical ones, but I just want to commend --
commend the BOEMRE -- sometimes we say bummer. But thanks
for taking this time and giving us the adequate time as
you go around a circle. I heard many, many, many
heartfelt testimonials coming from your heart because I
feel like this is one of the last meetings that's going to
occur. We have to exercise our rights as human beings.
I don't want my great-grandkids to go to the
library and say oh, my amua did this. Did they really do
this? No. I want them to have that opportunity to
practice what we do today.

I just thank you all for saying and coming and
saying your piece. I felt it tonight like never before.
But I stress that you need to go to the other villages,
in the villages that I mentioned that are being impacted. I
know July is just around the corner, but it's critical
that they be heard. None needs to be one station, one
area. They have whaling communities in that area.

Climate change is one thing that we are seeing

rapidly. And that five gallons was valuable to my
parents. That little drop was valuable to our household.
And it broke my heart. I couldn't contain it. It spill.
It went directly to the ground.

So knowing that, at that time I didn't know that
that would educate me, somewhat help me to know how
crucial or how -- how the materials is as a liquid.
So I just want to say that I am so blessed to
hear people coming forward. I'm always speaking them out.
I'm not trying to put myself up, but when I visit Elders
and they bless me, keep on, keep on. And we are facing
our own people. Our own people.

It's hard, but tonight is a critical meeting.
We have schedules which we shared with -- we had a meeting
with the group earlier. And we shared that our
calendar -- our subsistence way of life evolves on the
weather. We can't program and say we are going to catch
oogruk in two weeks. We can't program this and say we
are going to go with this. We have to do it while it's
available, while it's here. A lot of us want to be out
there, but I'm glad that we have some people here. Many
times we had meetings, and there is only a handful.
And I envision our rich heritage, our culture
and the live berries if we don't speak up when it's
already too late. But I'm so grateful that we had

inside the blankets because that's how it looks.
Sometimes it's filthy. Who in their right mind would
travel for five or six days?

There are times you can barely get 300. People
think we make money. We don't. We are a tribal
government with very little. I know someone had made a
comment many times in our meetings that it's just like
pennies. But you know what? The reward is so big when
you land a whale, the reward is so great when you have
that celebration, when you recognize that child that was
born this year, when you see an Elder crying from their
heart, quuyah. The reward is so great.

Many times we speak. We testify over and over
and over again. But it's through your prayers that we are
able to stand firm. Our mentors and our God (Speaking in
Inupiaq), the whaling captains, the umialiks back in the
day. But with honor, with respect. And it is because of
them we are standing here today.

I get curious many times as I travel, why aren't
they including the coastal villages such as Savoonga,
Gambell, Kivalina? Because it's those three villages,
when they see me on the road or when they see me in the
airport or wherever, they come and thank me. They don't
go to their villages to go get their -- to get their
public comments, but they are -- they are being impacted.
And the ocean -- you guys eat, too. Like the fish, like the shrimp, crabs. You guys eat those things, too. It hurts you peoples, too. Not only us, because you love to eat those things, too. And I -- you know, common sense that you have to use, too.

But I respect each and every one of you guys and the ones that are fighting for us, like Caroline and Oktollik, to fight for us. And we are making them strong to respect them. We pay for them to help us. But they are -- they are doing their best, but we pray for them to be strong for us because we can't do it. And I respect them, for them peoples to doing that for us. And you know, we said no.

And thank you.


Well, it's getting late but, then, again, I want to make sure everybody feels their voice was heard. This is important. So is there anybody else that would like to raise their hand and say something? I mean, I don't want to exclude anyone.

MR. JACK SCHAFFER: We heard a lot that was said earlier. There were a lot of points that were made, and really valid points. We need jobs. We need
this oil. We don’t like being poor. We expect to be respected. Treat us like everyone else. This is not Ecuador. Those people had their oil stolen right from under them. They had to go to the UN. So did we. And the UN combined Ecuador and us together in regards to discrimination against indigenous peoples. Five transnational corporations through their resolution that they passed in 1989 and did their investigation, and we responded.

Our issue was Prudhoe Bay at that time. We didn’t get a chance to talk about offshore, but we did indicate what our impacts were with that Prudhoe Bay. The impacts on those animals that live up there, the birds that live up there, the migratory life. And we were very thorough about the impacts that had taken place back then. There were 200 holes in that Trans-Alaska Pipeline back then. And the person who blew the whistle was persecuted. And this was testified before.

But getting back to jobs, oil, opportunities, business, and they talk about that place up there. I have been working for a village corporation since 1983. I had to be involved with title recovery in regards to those people that had filed for Native allotments as their own from the federal government. They almost did not get any of their allotments on the coast because the federal government has told me this is valuable for oil and gas. And that is reserved to the United States. And if you have got evidence otherwise, please provide it to us. Naturally, we did, but they made that statement. So there is oil here on shore.

In 1980, the Alaska Lands Interest Conservation Lands Act [sic] ANILCA they call it, mandated an inventory of every square inch of Alaska. What minerals are there? What oil is there? Did they let us know? No, they didn’t let us know where everything is. They want to -- they wanted us not to know because of this competitive arrangement, competition, intellectual property. But we have oil here. We need to know in order to make a clear decision.

Is it really the end of the world when there is more than 50 years of oil in the Lower 48 for the whole country? Tar sands and shale oil. What about Prudhoe Bay, the Shuik formation, the shale there, which will last and keep that pipeline alive through 2074 at 660,000 barrels a day then.

And we got this impression that was hitting us hard in the year 2000 during the Bush Administration’s last phases. This is a crisis. We got no oil. What are we going to do? And a couple of Senators and Congressmen stand up and say, hey, wait a minute. There is 62,000,000 acres that are leased now. And you are not even touching it? And you want to go offshore over there? You want to go offshore in California? We said no to that. But you still want to do it, and yet you have 62,000,000 acres sitting right there leased, and it’s not being developed.

What’s wrong with this picture? Is there a national security issue? Is there a problem? There is all this controversial propaganda, whatever, that’s being pressed upon us without true facts as to exactly what is there. Naturally we brought it up to the oil companies when they come in our doors and we close the door and they sit around and talk and have tea with us, business. And we say, hey, wait a minute, there is oil right there. How come you don’t want that? There is nothing there. It’s over there, but not here. Which is a finite lie. And why did they lie? Because that oil over there is free. There is no tax.

As a matter of fact, there was incentives until Obama said, hey, wait a minute, there is something wrong with this picture. We are paying you guys to take this oil, you know. How are we going to deal with our deficit? So we have all this oil on shore, and these oil companies running around with their temptation, that apple. And they are even picking on our leadership, our business and saying that’s the only way to go when we haven’t really got a clear picture what we really are -- what we really have here.

This area is the largest oil patch in the world. We are sitting on a bowl. The edge of the bowl is Point Hope, Wainwright, Point Lay. And it’s being sucked from the middle, not from the edge. And we are left with nothing, because it’s being stolen from over here from next door way far away. They really should deal with what there is now and what you can deal with now and quit messing around with stuff that we can’t deal with. There is no technology to clean up oil in broken ice.

Did you see those pictures from the Norway study, from the Canadian Mackenzie study? Those ice were far apart from each other, lots of water, no wind. Great job. We can do it. I looked at satellite photos all year looking at the ice formations. We had a tough year. All the way from Barrow to here, that ice really moved around. There would have been no way to clean up. We just finally lost some of this ice just recently. It’s been stuck for a while.

Our businesses have opportunities, but they are being abused by oil companies for gold instead of silver, as a figure of speech. The technology is not for the offshore yet, but the technology sure is for onshore. If the federal government has told me this is valuable for
oil and gas, then let's deal with it here before we even go offshore. Work on that technology because the technology has not changed through Arctic research, through the National Science Foundation, over the years has not changed at all. They have to be forced into it or something to come out with a way to deal with this. I don't know if you remember the Santa Barbara accident in the '60s, but the depth of that accident is the very same depth as that -- those areas over there, 150 feet deep. And when that thing leaked, it tore the ground, and you can't plug a torn ground. And how fast did that oil spread in 150 feet of water versus a mile? I went fast. Did they actually clean it up? Did they plug it? That's what we are faced with here. This is shallow water, and there is talk about weakening and streamlining regulations on shallow water. That was on the news today. That's what they want to do. But it's shallow water. It's like an hourglass. And I don't see how that was missed. But at the same time, there is oil on shore outside of the petroleum reserve. Our businesses should have control over that. That was why they were formed with that relationship with the federal government under this forceful Alaska Native Claims Settlement Act, with that partnership arrangement for the economic opportunity for that corporation and ours.

federal government that we have a national security problem. This is an urgent issue. We need this oil. But at the same time, we are hearing these other things, which nobody really knows about. I mean, I have to beg to Google to get that information and see and talk to other people to see what's going on while we still haven't seen what ANILCA has provided on that mandate of inventory of the land. So there isn't -- we have no oil. It's just that there was interest that was shown. When you look at those technical reports that were done in the '70s, you notice that there is an interesting trend in regards to location. Nome, Kotzebue, Cook Inlet, Aleutians. And who did them? KPMG, an accounting company. Are they trustworthy? What did they focus on? Were their biological studies accurate? And how much did they focus on that?

There are over 50 technical reports that were provided by your website that I tried to look through. There were three for the Navarin Basin, maybe one or two for the Nome area, one or two for Kotzebue, about 20-some-odd for the Beaufort, maybe six for the Hope Basin, Point Hope area. The Point Hope area was focusing on Kotzebue information because we refused to cooperate. So there is technical missing information. Whether -- you know, I mean, that information needs to be looked at and taken seriously. In regards to technical knowledge or intellectual knowledge or intellectual property, Brown & Associates, who is your contractor, had only gone to Point Lay for the Hope basin sale 193. They did not get information from Wainwright or Point Hope for the Hope basin sale 193. Point Lay was the only source for EPA. I don't know if Brown & Associates worked for anyone else, but they did admit to EPA -- admit that what they got when they started talking about their permits, water, air.

We have the right for taxation. The situation that we are faced with doesn't make any sense. The State is literally trying to give away its oil because of this offshore situation. And the governor is getting whipped for trying to do it. Say, hey, wait a minute, man, you are giving it away. We are paying 80 cents on the dollar for you to drill oil. We are reimbursing you 80 cents on the dollar here in Alaska on shore. And we are willing to give you even more. And that's when the governor got slapped around.

But I truly believe that there is oil here on shore. I don't know why they are not going after that. It's safer. For all we know, it's more than what ANWR
DR. JIM KENDALL: Leo, do you want to say something?

DR. JIM KENDALL: They send us. And I from him.

DR. JIM KENDALL: Yes. I know it's late, and people have been here a long time. And we probably --

MS. AGGIE FRANKSON-HENRY: Aggie Frankson-Henry, for the record. My question is on seismic testing. When did they start seismic testing in the Chukchi Sea and Bering Sea? Who gave them the permits to do seismic testing? What effects does it have on -- on people, on the Inupiat people? And what effects does it have on the marine mammals? What marine mammals die from seismic testing? Those are my questions because we rely on those resources, and the marine mammals rely on those resources such as plankton and all the other bottomless sea creatures. I see pictures of seismic testing and what it does in the bottomless ocean floor.

And why can't people look back when they are doing seismic testing? Is it -- is it caused by radiation? What is the scientific knowledge of scientific testing and the effects it has and the impact it has within the coastal communities of the Arctic Slope?

We need to know about seismic testing. We need to know these, and we need these answers back in black and white. Like from -- like -- we need to hear also from the input of the environmental impact statements, the final decisionmaker, his comments on our comments. We haven't -- you know, it's -- it's really important. It's really important to know because we know how many decibels -- how many decibels does it -- does it impact...
the marine mammals? How many decibels does it take to
impact the creatures in the bottom of the sea? Does it do
something to the bowhead whale's stomach, seismic testing?
Does it pop the drum, eardrums of the seals?
It's like standing -- to me it would be standing
in this building with a lot of speakers in a concert,
maybe even more. I don't know how many -- I mean, put
that by a whale. Let us have a picture of all those
speakers that, you know, that affects the marine mammals.
We need to know these things. Who gives them the right to
do seismic testing? How come they never come to our
community so that we can oppose seismic testing along the
coastal communities? These are important. And we know
that offshore development, if it doesn't come, you know --
Our mayor -- I support the mayor of the North
Slope Borough. He's getting really worried now within his
statements in the -- in the newspapers today in -- in AdN
or Arctic Sounder, you know, with -- what do they call
that? It's within the communities along the -- the Arctic
and the other communities within that one, that the State
of Alaska did not pass or it didn't go into -- the coastal
management zone. Yes. No, that's --
Can BOEMRE try to help us and ask the governor
or go to the State of Alaska to encourage them that we
need to be heard, the coastal communities within the
Hope went to court three years in a row and lost three
animals for seismic activities. Native Village of Point
authorizations for incidental take and the impacts on
National Marine Fisheries Service on addressing impacts
Seismic, now that it was touched on. There is an
exemption for the U.S. Fish & Wildlife Service and the
National Marine Fisheries Service on addressing impacts
and having public hearings and doing something about their
authorizations for incidental take and the impacts on
animals for seismic activities. Native Village of Point
Hope went to court three years in a row and lost three
years in a row because when the judge made a decision, the
season was over and it was moot.
But seismic testing has started in the '70s.
And then it continued on for a nine-year program from 1980
to 1989. And they did 2-D seismic from the Canadian
border all the way to Point Hope, every square inch. At
that very same time we were dealing with the United
Nations on the impacts of animals also doing one on Red
Dog Mine. There was something like seven out of ten seals
that were sinking in the winter. They were skinny. They
don't sink, but they were malnourished. And we reported
that to the UN and then we were distracted by this Project
Chariot issue cleanup. So we were never able to follow
through on that issue.
Now, it took a while for them to recover. And
now we have gone through another three years of the
seismic stuff. And there is still more to go.
Someone had asked in one of the earlier hearings
a couple years ago to define seismic. And that person
went home and looked in the dictionary and found out that
the definition of seismic is earth shattering. So it's --
you know, it's hard to deal with this as if we are talking
to numb people that can't hear or are numb to this and
don't respond.
One employee out of NMFS did admit that he was
you know -- and whale. They indicated, well, I don't agree with this agreement.

Nevertheless, there is this agreement in 2006, which I personally feel is something that's not legal. That delegation of authority was done for the purposes of providing funding and providing a better way of managing animals and having a cooperative agreement with the State to manage these animals.

But what did they do instead? They go ahead and do the same thing on the side to allow industry to create these impacts which we can't deal with in a legal position. And so part of this food chain is broken and we are way behind on this intellectual property. The information in regards to the Chukchi Sea as to what impacts have taken place now as from those seismic tests and allowing it to recover is something that needs to be done so that we can continue to survive.

You know, everyone said that -- that we get our food from the ocean. Go buy a steak at the store. It's $24 a pound. And meat is something that you like, unless you are a vegetarian. And if you are a vegetarian, you got black eyes like an Indian. And I got to have meat. I have to have meat. I just have to do it. Otherwise I'm a 98-pound weakling. And we have no other way. We don't have any other way.
the governor of Alaska. amended that coastal zone management program while he was in regards to local control, local decisionmaking that aren't we active on this coastal zone management program government and higher than the State of Alaska? And why didn't we get any input. They didn't have any input. It was done by these oil companies to look at other areas which are in their interest and not in ours because they get this for free. There is nothing that's in our interest at all. We don't get a single dime out of it. There is probably one or two people from this community that will work there that has any training at all, and no one else.

We had seen recently that for the second year in a row since we started to look at this that Yukon River people cannot get salmon for subsistence purposes, and that's because of commercial fisheries bycatch. And we did explain this and indicate that that was a problem, both to Salazar when he came to Barrow that there is this full faith and credit issue that needs to be addressed in regards to what happens to other people has to be respected by us also in regards to whatever judicial rulings had taken place. We treat everybody the same. This is the United States.

There is so much influx from the Lower 48, both onshore and offshore in oil and gas development. There is a lot of oil out there that can be developed elsewhere we shouldn't even be talking about it. The discussion should have died when we said and when you agreed and when others agreed that you can't clean up oil in ice. End of conversation. But it's still going on today, you know.

The State, on this whole process is to, you know, doing an inventory. And it shouldn't be focusing on the State. We asked the previous hearing who is responsible for this. There were other states. Rhode Island said no to offshore, and the federal government honored that. But did that happen to Alaska? No. The governor said, come on down. We welcome you. And that's -- that's the situation we are in. The governor gave his blessings.

The State is involved. They have this arrangement with the federal government. What happened to the tribes that are on the equal level of the federal government and higher than the State of Alaska? And why aren't we active on this coastal zone management program in regards to local control, local decisionmaking that Governor Murkowski, Frank Murkowski, killed when he amended that coastal zone management program while he was the governor of Alaska.

important, and it's a responsibility for the federal government in regarding and maintaining the optimum sustained yield of all species and to step in when that delegation of authority has been betrayed or failed by a state.

We had seen recently that for the second year in a row since we started to look at this that Yukon River people cannot get salmon for subsistence purposes, and that's because of commercial fisheries bycatch. And we did explain this and indicate that that was a problem, both to Salazar when he came to Barrow that there is this full faith and credit issue that needs to be addressed in regards to what happens to other people has to be respected by us also in regards to whatever judicial rulings had taken place. We treat everybody the same. This is the United States.

So this -- really need to look at this whole picture and take another look and take another approach and avoid this dictation or forceful arrangement that is done by these oil companies to look at other areas which are in their interest and not in ours because they get this for free. There is nothing that's in our interest at all. We don't get a single dime out of it. There is probably one or two people from this community that will work there that has any training at all, and no one else.

And there is publications or statements staying that we are going to lose this coastal zone management program. It's going to die on the 30th, and local people won't have any input. They didn't have any input. It was killed by Frank Murkowski. And the tribes had that right. And Santa Barbara brought that forth in a lawsuit, coastal zone management program. We had an issue here. We had a spill. We want control over that, not the State of California. And they won. And that's a community, Santa Barbara. And we are a tribe. Tribes have that authority. There is only 1.5 million dollars that was appropriated for the State of Alaska under this coastal zone program. We should have the same amount at least, but that's not even close to covering what we have to do in order to assess what we are dealing with. Thanks.

DR. JIM KENDALL: Thank you, Jack. Okay. I see we got a study group here, which is good. I'm glad to see that. I've got someone taking pictures here. Is there anyone else that we have missed? Going once, going twice. Caroline, would you like to make a final comment before we close the meeting?

MS. CAROLINE CANNON: I can.

DR. JIM KENDALL: Absolutely. The floor is yours.
Everywhere you look, regardless how tired they were, they had a smile. And it's just to refresh. Now they are doing the oogruk hunting. They are going to get the skins ready. It's an all-year-long process. We will celebrate Thanksgiving, the first rush ice, Christmas. And it just evolves all year. And yet there is times that we never landed a whale. And that circle is incomplete when that occurs.

Yes, it's a blessing when Barrow sends, you know, how many boxes of muktuk and kuak. Or when you go up there and they bless you, you got to pay $2 a pound of excess weight just to help an elder because that's their meat. It's our vitamin. It's our minerals. And if anything happened to the ocean, that's why we speak. That's why we come to these meetings because it's there near to our heart. And we are speaking on the little ones, on their behalf.

But I feel that there has been some improvements in this area, that the communication will get better, but we can't do without the other. You need to hear us out.

And I felt this evening that everybody expressed their thoughts, and I appreciate your time. And you take that offer that Peggy gave. Go to her home. Go look at her freezer. See what we are talking about. Go to the store before you leave. Go to that freezer section and see how much a pound of meat.

And I happened to be in D.C. when there was a snowstorm. They call it a snowstorm, one inch of snow. I'm like, oh, my goodness. They are shutting down the city for that? And we have storms that go for days. They have no clue. So it's critical that we talk about these things. When we have those storms, there's no way an airplane or a chopper or a submarine or ship that's going to come within hours. We know that. Sometimes we have patients in that clinic 48 hours because of that. We know firsthand what it's like to live in this harsh Arctic environment, as they say.

Again, thank you. Thank you and have a nice trip back.

Ms. Caroline Cannon: Very, very productive meeting. I think everybody was heard.

Everybody had the opportunity. Normally when we hold these meetings, a plane is either waiting for them or what. And I just feel this is all the good. We have finally been heard, and many trips to D.C. We met with Echohawk. We have had invitations to Salazar to come to our community. We have given invitations to Michael Bromwich and many high official people in D.C. to get a firsthand look like we are talking about to educate them and then let them see what is so valuable to us, why it's so important that they hear us out.

It's one thing when people do come into their community and hold a meeting, but when they stay overnight, it means much. At least you can see what we are talking about, get a feel of what we are talking about. So I'd really express my thanks, and I'm hoping that many meetings will come forth.

And one thing that we always try to say and stress is please respect our calendar year. Respect. We will show respect. You will receive respect. But we just ask that you work -- it works vice versa.

And these invitations are from our heart.

Please go see and look and feel what we are talking about. You know, we have -- we just had a three-day feast.

DR. JIM KENDALL: Thank you very much, Ms. Cannon. And on behalf of the team for BOEMRE that came to visit, I want to thank the Native Village of Point Hope and the Elders for allowing us to come visit. Thank you for participating. Everything you said has been recorded. This is very, very important.

And we are going to do our best to bring this together, and when we pass the information up, we will do our best to make sure it's extremely accurate. So thank you very much. And have a good evening, which is just about over. It's now nighttime, almost tomorrow morning.

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And even just to look at that graveyard as you take off at the airport, there is whale bones. And our ancestors did this before our time. It is surrounded with whale bones. Our loved ones that are put away are surrounded by whale bones. So everything -- that's why it's so -- that's why it's critical that we speak on behalf of the marine mammals. We throw one jaw back to the ocean because it belongs there. These were set before us. Our ancestors placed these in place for us to practice. And it's 2011, and we still continue practicing. I'm sorry. The head. That's how tired I am. I wasn't feeling well, but besides the point.

We still carry through these traditions. We go out there. The men are out there around the clock. The ice condition has changed, but the dances, the practice, are still strong because we were given direct orders by our umilliks, the whaling captains. Some things have changed a little but, you know, when you know it in your heart, it's in your blood, it will never go away.

That's why I express at our meetings, traditional knowledge must be recognized. It's so critical that they use and recognize traditional knowledge because I think we could go a long ways. We have our experts just like the rest of science. They have their
1 So thank you very, very much.
2 (Proceedings adjourned at 11:00 p.m.)
PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT
CHUKCHI SEA
BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT
Fairbanks, Alaska
Taken June 23, 2011
Commencing at 7:05 p.m.
Volume I - Pages 1 - 107, inclusive
Taken at
Westmark Hotel
Gold Room
813 Noble Street
Fairbanks, Alaska

Reported by:
Mary A. Vavrik, RMR

BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

We have Mike Haller here.
MR. MICHAEL HALLER: Right here.
DR. JIM KENDALL: Mike is our liaison for
Native communities. We've got John Callahan. John, he's
from our Office of Public Affairs. Steve Scordino, I
believe, is still out front. He is an environmental
compliance subject matter expert and an expert for other
things. We have got Scott Blackburn. Scott is also out
there. He is our technical editor for the document.
And the other two individuals sitting up here
are extremely key to this. We have got Sharon Warren.
Sharon is the project manager for this. She knows the
document inside out and backwards. It's her job to put it
together. Next to her is Michael Routhier. Michael is
the actual coordinator of the document, so he gets the
pieces and puts it together from all the scientists, and
Sharon makes sure it all flows. That's who is here.
We are doing this a little bit different	onight. Usually we just open up the mike and have people
speak. But to make sure we are starting from the exact
same place, we are going to take about the first five or
ten minutes to tell you exactly what this is. There are
times when people think that this document is the decision
document. This EIS that Sharon is going to speak about,
it's not a decision document. It's information we pass to
We will ask, though, to please keep your comments to three to five minutes. We are hoping that a lot of you will have something to say. That's what this meeting is for, to get information from the different stakeholders in the process and make sure their concerns and input go into the document. So I want everybody to speak and we want to make sure people or an individual or two don't monopolize the entire conversation. Everybody has a chance here. Okay?

Now, with that, I would like Sharon to walk you through the process of why we're here. Sharon just reminded me, please. If you have got cell phones, turn them off or at least put them on the buzz thing. That's what I do. When I'm told to turn it off, I put it on buzz or vibrate.

With that, Sharon, take it away.

MS. SHARON WARREN: Thank you again for coming. Can everybody hear me all right? All right.

Excellent. Why are we here today? We are here today to get your comments on the specific document that's out there. It's the Revised Draft Supplemental Environmental Impact Statement for Chukchi Sea sale 193. And what is sale 193? In 2007 we did an environmental impact statement and sale 193 in the Chukchi Sea was held in February of 2008. And six companies received leases from...
And I'm going to turn it over to Mike to so he can explain what we did next.

MR. MICHAEL ROUTHIER: So in most EIS processes, you go out with a draft to invite public comment, hold some meetings, and we look at those public comments and develop a final EIS. Here, like Sharon said, we received over 150,000 comments, and we noticed a recurring theme of many of those comments was -- and again, this is on the heels of the Deepwater Horizon event. That theme was you guys need to assess the possibility of a very large oil spill in the Arctic as a result of this lease sale.

So as an agency, we sat down and considered our options and decided that, yes, it would be appropriate to analyze a very large oil spill scenario in our EIS. To ensure that it received the full amount of analysis it warranted, we decided to do that in our EIS. And because this was a very substantial new piece of analysis, we decided that we were going to need to republish the draft EIS because this contains so much new information.

That's basically the document that brings us today. We republished the original draft SEIS, including the very large oil spill scenario and are now publishing this as a revised draft supplemental environmental impact statement. And tonight we're here to solicit and record public comments on the document to get people's feedback on whether the document is sufficient. And we will then take those comments, incorporate them into our final SEIS, and send that on to the eventual decisionmaker.

So we mentioned that one of the main drivers of this revised document was the very large oil spill scenario, so we want to talk a little bit more about what that is. Basically we asked our expert geologists what the biggest oil spill possible in the Chukchi Sea planning area could be. This is a purely hypothetical event. We are not talking about a specific plan to drill. This is purely hypothetical and a scenario to inform our environmental analysis.

The very large oil spill is a term that is different than the term which you might hear elsewhere, which is worst-case discharge. Whereas a very large oil spill is a tool in our NEPA analysis, the worst-case discharge is something specifically required by our regulations to be included in any exploration plan.

So if this lease sale were to be affirmed or affirmed in part and a company were to, down the road, submit an exploration plan to actually do drilling in the Chukchi Sea, that proposed exploration plan would have to include a worst-case discharge. That's a different analysis.

It would incorporate a lot of additional information, such as what kind of well is it, where is the well, what reservoir, what kind of oil, what kind of technology would be used, what kind of safety precautions would be taken and so forth. And it's that subsequent analysis that would inform the decision on, okay, what kind of oil spill response plan would be required if that exploration were to go forward.

MS. SHARON WARREN: Again, the input that we need tonight from you and until July 11th when we have a public comment period open is to have your comments on this document that we have out there, this revised draft supplemental environmental impact statement for sale 193. There is a 45-day comment period. This was released out to the public on the 21st of May. And so the comment period closes on July 12th.

There is a website that you can go to to click on and submit your comments. We are using regulations.gov for the comments, and we have some handouts that we will put out here so that you know how to go to our website and where to click on to submit your comments. And that's what we are asking. That's why we're here tonight, to get your views.

So the next thing is, what happens after these hearings? As Mike says, we will take these comments, incorporate them, and do and make a final supplemental EIS. We are on a court deadline. We are mandated by the Court. This document is still in litigation. The Court issued an order on the 19th of May and said, however you want to do it, in addition to doing the court order items that he had as concerns and to do this, he wants the Secretary to make his decision on whether to reaffirm the sale, modify the sale, or cancel the lease sale by the 3rd of October of this year.

So in order to do that, we are going to incorporate these comments. We must have the final SEIS out there to the public filed with the Environmental Protection Agency in early September. So there is a 30-day waiting period before the Secretary of the Interior can make the decision. Once he makes that decision, this document, the final EIS, and his decision will be filed with the District Court, and there will be further briefings with the District Court, and then the judge will decide whether or not the agency has met its obligation under the National Environmental Policy Act.

And what we are going to do is, these posters after we are finished, we are going to hang them along the back wall so that when we have the break -- which there will be probably a break, as time goes on, and Jim will explain that -- he will give you an opportunity to go...
al long the back wall.

There is also some maps on the back wall that we put up. One in particular is the sale 193 map that you can see what was the sale 193 area that was offered, what's the alternative. There is still alternatives that are being looked at in the supplemental, so -- and then also what was leased. The leased areas are both the gray blocks and there are some red blocks because some of the leases are within one of the alternatives that the Secretary can decide to choose on this. So this whole sale is back to the Secretary to decide what he wants to do with the sale.

DR. JIM KENDALL: Thank you very much. I noticed when they were up there, they were pointing to me and saying Jim. I probably forgot to tell you who I was. Yes, I'm Jim Kendall. My name is Jim Kendall. I am the new Regional Director for the Alaska Regional Office of the Bureau of Ocean Energy Management, Regulation and Enforcement. I came up here on a detail from Washington, D.C. in January. It was supposed to be a two- to three-month detail. After six months I have fallen in love with Alaska. I think I have some Alaska colleagues that might like me, so I am moving to Alaska to join the community of this wonderful state.

Also, I would like to point out we have some

and that will be entered into the record, as well. So Scott, will you bring over the bowl.

Now, we have never done it before this way, but we are hoping that it makes it more fair and everybody feels they have had an equal chance to do it. Murray Richmond representing Senator Thomas. Thank you. Thank you, Murray.

Our first selectee is Debbie Miller. Debbie Miller. Come right up to the podium. The floor is yours.

MS. DEBBIE MILLER: I'm the lucky one. Gee whiz. I'm Debbie Miller. I have lived in Alaska for 35 years. I have spent much of the last 35 years exploring the Arctic, mostly during the summer months, extensively in the Arctic National Wildlife Refuge, Natural Petroleum Reserve, and I write books for children and adults about the natural world.

I have not been to the Chukchi Sea. I have traveled out on the sea ice north of Barrow when I worked on a book about polar bears back in the mid 1990s. And it was there that I learned about the culture of the Inupiat people and how they are the bravest people and the hardest people to go out into those sea ice, you know, areas where the ice is moving, where bears are, you know, struggling, swimming right now because we have such a situation with the loss of ice. We are reading all about

members in our audience who are representing our leaders. We have got the Representative Steve Thompson in the audience. Thank you for coming tonight. Rhonda Bayles representing Congressman Young. Thank you. And we've got Tom Mayer representing Senator Begich. Would any of you like to make a few opening comments?

UNIDENTIFIED SPEAKER: No.

DR. JIM KENDALL: All right. That's fine.

Now, with that, we are going to start the process where we get input from you all. Now, this is real important because we are preparing a document that goes to the decisionmaker. It's also very much a public transparent process. So we want input from folks. We want you to read the document. Tell us what you thought. Tell us what we are missing so when we give that document and all the material that goes with it to the Secretary, he can sit down with his staff and these materials and make the best possible decision.

So you are part of the process. This is really, really important. So once we start the comment period, please state your name. Let's try to keep it to three to five minutes so everybody has a chance and we are not here till 3:00 in the morning. But if we have to, we will stay till 3:00 in the morning. And if you have written comments, please bring it up here. I'll give it to Mary

that.

But this is an incredibly harsh environment, always changing, a dynamic landscape. It would be the last place I would ever consider a good place to have oil and gas drilling. Exploration and development. By -- just by the nature of the weather, the wind, the storms, the sea ice moving, the pressure ridges that I saw, the sound of the ice sheets grinding against one another. So just the nature of this place says to me aren't there other places that are less sensitive that would be a lower risk area to explore and develop oil and gas. The species, the polar bears, are endangered or threatened.

I noticed in the report -- I just have now seen this for the first time, and I turned to the polar bear page on page 100, and it mentioned that, as a conclusion, that the impacts appear to be minimal on polar bears with oil and gas development.

And I would, I guess, question that in that if you read a Canadian study that was done back in the 1970s when I was doing my research, there was a gruesome study that was conducted where the Canadian scientists purposely oiled the fur of six polar bears to see what would happen, and immediately those polar bears groomed themselves, ingested the oil, went into convulsions, and they all died. So we have had some studies that have looked at
what happens when a polar bear has its fur covered in oil. So these are serious impacts if we have an oil spill.

The second biggest concern I have with is there 4 is no proven technology to clean up an oil spill in Arctic waters, and that's also pointed out in your report on page 135. I was looking at the effect of ice on response actions. It's very clear that you are going to be hampered if you are out there in those kinds of conditions as far as getting that ice, building the boom protecting the area. Removing the oil with those ice conditions makes it almost impossible in a lot of cases. So again, the question would be why would we choose this area, a high risk area, on the heels of the Gulf spill, the Gulf of Mexico on the heels of Exxon Valdez oil spill. Why would we go to such a high risk area when we have other places to explore and develop and we have other choices for our energy supply, namely renewable energy, solar, wind, geothermal and all the other -- tidal. Wouldn't this be a safer bet?

Thank you so much for your time and for coming to Fairbanks and teaching us about all the work that you put into this. This looks like a very interesting document. I'll submit written comments at a later date.

Thank you.

DR. JIM KENDALL: Thank you very much. I
Steve Kelly, followed by Brent Helms. Steve, the floor is yours.

MR. BRENT HELMS: My name is Brent Helms. I'm a lifelong Alaskan and have worked in construction in the state throughout my career, many of those years in the oil and gas industry. Since the development of Alaska's oil and gas there have been thousands of workers trained for building and maintaining the oil and gas infrastructure. The jobs associated with this industry has allowed me to remain in Alaska to raise my family, along with many other Alaskans over the years. I'm concerned this may change in the future if oil and gas production continues to decline with the associated jobs.

The oil and gas industry demands a skilled workforce to construct and maintain its pipelines and facilities. These are trained Alaskans from across the state, a skilled workforce ready to work on projects that Alaska's OCS development would provide. Previous studies estimate that opening the OCS for development will provide tens of thousands of employment opportunities. These are good jobs, jobs that allow young men and women to raise families, support their communities, and remain in Alaska.

The oil and gas reserves of Alaska are crucial to the nation and its dependence on foreign oil. Further delays in permitting are costly and will deprive the nation of both jobs and future domestic oil supply. Developing the OCS is vital for Alaska's economic future.
I urge you to support permitting lease sale 193 for responsible development.

DR. JIM KENDALL: Richard Fineberg, followed by Buzz Otis.

MR. RICHARD FINEBERG: Richard Fineberg, 3920 Old Wood Road, Ester, 99725. I have observed oil operations for the better part of four decades as a newspaper reporter, as a state bureaucrat, and as an environmental advocate and as a consultant, I will go back to --- and my comments are informed by, I think, all of that work, primarily onshore, but some offshore. I was with the governor's office in the Exxon Valdez spill and observed it very closely throughout the summer of the first year, and have just been down in the Gulf on my own extensively, the Gulf of Mexico, which is not directly relevant here, but I simply want to suggest I do have some background to make a couple of general challenging statements.

Number one, my first dealing with offshore spill response was 1983 when I became the budget analyst for the State's Department of Environmental Conservation in the governor's office, and I had to move paper as a naive bureaucrat who had no knowledge of how to do it, but the first paper I had to move was to move the paperwork to get funding for a stalled response project on oil spill.

Response to a very large oil spill section.

The conclusion two pages later -- and I'll have to paraphrase this. As a stutterer, that's the least I can do for you. While intervention and response could mitigate the volume and certain effects, the significant and perhaps irrevocable adverse impacts associated with a very large oil spill highlight the need for effective spill response.

I spent that time stumbling over my biography because I'm going to suggest a venture that I'm not clear on, which is the precautionary principle. I believe these two statements stand in almost flagrant violation of the precautionary principle. Although my language is strong there, I don't know that that's legally relevant, but common sense wise it is a point I wanted to make. And I am sorry that I do not have the legal background to know if I'm on point for you on that.

So I thank you very much for your time.

DR. JIM KENDALL: Thank you very much, Richard. Next is Buzz Otis and followed by Charles Paskvan.

MR. BUZZ OTIS: Good evening. Good evening. Thank you for being here. My name is Buzz Otis. My mailing address is P.O. Box 59068, North Pole, Alaska 99705. And I welcome you to Fairbanks tonight. And I know we got precluded from the opportunity to testify early on, so I appreciate you amending your schedule and including us.

I represent North Pole Economic Development Corporation. I'm their executive director as well as a private businessman in this community since 1976. Lease Sale 193 should be affirmed as held in 2008. I believe the EIS provides sufficient information and analysis to support an informed decision affirming sale 193.

Rescinding leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment without a corresponding benefit to the environment.

Alaska's economy is at a crossroads, as I see the United States. We need to get a handle on this energy issue. We are paying close to $4 a gallon in this town for heating oil. We heat our homes some people somewhere eight, nine months of the year, but certainly six or seven. We have snow on the ground from the first of October, usually, until the first of May. And the people on fixed incomes are leaving this town, retirees, people -- it's difficult. You can sense it in the streets. You don't see the activity in the construction industry, at the restaurants. And it's a concern of mine.

I've decided to make Alaska my home, and I'd...
right now why the oil gets to Valdez is because it's heated -- taken out of the pipe, a lot of it is heated up, some of what they don't use gets put back in the pipe and raises the ambient temperature of the oil in the pipe.

We are down from two million barrels a day to 600,000, and we need to get that oil back up to the levels where it doesn't become ChapStick. We had an incident last January when the line was shut down for seven whole days because of a situation up at Pump 1, and it was difficult getting it started.

So I see these type of developments being beneficial, not only to Alaska, but the Trans-Alaska Pipeline, our economy, the people of this state, both Natives and those of us that weren't blessed enough to have been born here, as well as the United States.

And so I urge you to move this thing forward, the restrictions on development, the hurdles we have to jump is -- is very, very difficult for industry to stomach. Challenges putting a bridge across the river, the Colville River, here on the Tanana. It just goes on and on and on. And we are taking America down in the process. There has got to be a balance between what's good for the country and just saying no to -- to further -- I'm not sure quite what the agenda is, but it's time to change.

Thank you very much for your time.

DR. JIM KENDALL: Thank you, Buzz. Next,

MR. CHARLES PASKVAJ: I've worked construction since 1975 on the oil pipeline. And I've watched a lot of development go through that. I just have a couple notes here I'd like to go over there. I'm releasing -- or releasing 30,000,000 barrels from our strategic national reserve an energy policy? No. Alaska has for over 30 years and over 15,000,000,000 barrels of oil, that is an energy policy.

In a new offshore oil field, the Oogarook, the oil pipeline is inside of another pipeline. And what you have there is the ability to have sensors. There is also another couple of pipelines inside of that. So you have the oil, gas, water, power inside of a half-inch pipeline that protects the oil and gas and all of that inside of that.

So after what he was talking about having the island built out there for this development, and then you have a buried pipeline that has sensors that would prevent any release, you have zero possibility of an actual spill from a pipeline with the new technology that they have been using up there on this field now. So this company is doing everything that they would need to to protect and ensure any potential, and there would be zero potential of a spill with this new technology.

What we are doing today is really amazing. And we all know that with the knowledge we are doing it we can do it right and do it safe in America for national security, for Alaska's jobs, for us to build it.

The other problem here is overregulation of the entire industry, the entire country. We are being regulated to death. I mean, we are doing it right, the technology is there, and we just need to go out and do our job.

Thank you.

DR. JIM KENDALL: Thank you very much.

Next is Merrick Peirce, followed by Jeanne Creamer-Dalton.

MR. MERRICK PEIRCE: Good evening. Thank you very much for coming up to Fairbanks for this hearing.

My name is Merrick Peirce, P.O. Box 10045, Fairbanks, Alaska 99701. I'm in the oil and gas business, and I do support responsible oil and gas development. And I think before I begin my testimony, I'd like a little audience participation by a simple show of hands. How many of you have been up to the Arctic coast ever in your life, just a quick show of hands. So most of the people. And how many of you have been up in the Arctic ice in the wintertime? Let the record reflect about half the room...
a large group of Alaskans have actually been to the Arctic in the wintertime. One of the concerns that I have is that there are many decisionmakers, both within industry and within government who have never set foot on the Arctic sea ice in the wintertime, so they don’t fully appreciate just how tough these Arctic conditions are, how cold it is up there, how windy it is up there, and yet these are the folks that are making decisions about what happens in Alaska’s Arctic.

This is an environment that’s vastly different than the Gulf of Mexico. According to a recent AP investigation, there are 27,000 abandoned oil and gas wells, and no one in industry or in government really fully comprehends just what’s happening with all the oil and gas wells, particularly wells that have been abandoned, thousands of them. And it begs the question of why we are moving in the Arctic with all of the issues that remain to be resolved in the Gulf of Mexico.

I think with the Gulf of Mexico it’s helpful to illustrate what’s happening in the Gulf of Mexico to what’s happening in the Arctic. In the Gulf you have thousands of miles of roads in the Gulf, and you have airports, you have ports, you have a basic infrastructure in place, but you access to the oil beaches if there is a release of crude oil. And of course, you have got year-round warm weather. You don’t have the ice and the wind like you have in the Arctic.

That’s not the case in the Arctic. There are no roads to the major communities in the Arctic. You can’t drive to Barrow. You can’t drive to Kotzebue. You can’t drive to Kaktovik. What I’m asking you to fully appreciate is that you can’t even drive from Kaktovik to Kotzebue. The road infrastructure just isn’t in place. And the nearest ice-free port is at Dutch Harbor. That’s roughly a thousand miles away from where this proposed development will occur.

There is a real concern about the behavior of the oil industry in Alaska over the last 20 years. So if we can start with the corruption that we saw within MMS to where officials abrogated their fiduciary obligation to taxpayers where they were taking bribes, where they were taking prostitutes, there were drugs, promises of jobs, and they walked away from their fiduciary obligation to the taxpayers.

In Alaska we saw what happened with Exxon in Prince William Sound where they released between 11- and 20,000,000 barrels of crude oil into Prince William Sound. Oil that’s spilled there, today, you can simply kick over the rocks on some of the beaches there. We saw that BP ran their pipelines to failure in Prudhoe Bay. We had Doyon Drilling with a convicted felon.

And what we have is a situation where we had ADEC regulators who were told not to do the jobs that they were responsible to do. And they were fired when they did. And we have even had scores of representatives, both representatives and senators who were taking bribes from the oil industry. Huge concern.

And so the question that we have to ask with all of this felonious conduct, this blatant corruption, how can we have the slightest degree of assurance that history will not repeat itself with oil exploration and development in the Arctic Ocean? That’s an unanswered question.

But we can look at past behaviors to get some indication of what future conduct is like. And the possibility of cleaning up a major oil spill with sea ice, darkness and storms is a fairy tale. As any Alaskan can tell you, particularly in the cold winters, Murphy’s law prevails. If something can go wrong, it will go wrong and it will go wrong at the worst possible time. So you’ll be looking for an oil spill, a major oil spill in the darkness of an Arctic winter where you have get sea ice, where you have gale force winds.

If you talk to the Eskimos up there, they’ll...
MR. KIRK JACKSON: Hello. My name is Kirk Jackson, followed by Rita McGrath.

I just wanted you to know that I'm one of the people that's adamantly opposed to the drilling as it stands now. I don't believe they have the technology needed to deal with any oil spills. And I think it would be devastating to the planet. So thank you.

DR. JIM KENDALL: Thank you very much.

Garry Hutchison followed by Kirk Jackson.

MR. GARRY HUTCHISON: My name is Garry Hutchison. I live at 140 Falcon Drive, Fairbanks 99712, and I'm here to voice support for development of oil in the offshore regions of the Chukchi Sea because of the need for our pipeline that goes through this community to provide a viable resource to the state and this community. Earlier we have heard about the decline and you are aware of that, the Prudhoe Bay decline that's increasing with each year. And there is a need to put new oil in it. And my understanding is that the potential exists for up to a million barrels a day to come from the offshore. And we need to do that.

I lived in Fairbanks before the pipeline, so I know what it was like, and I also understand the tremendous, tremendous benefit that the oil discovery and development and the pipeline has given to this community and our state. Without a doubt, it's the greatest thing that happened to the state since its inception.

And I think with that is an understanding of how devastating it would be to this community and the state if the pipeline no longer was able to function and we lost its usefulness in the community. It would hurt our tax base. It would hurt our public systems and our revenues and jobs, and would be just as devastating to this town and to this community as it was good 30 years ago. So this is something that we need.

You know, we all can fantasize about fears, but we can look back and see facts and reality. And the facts are that this oil and this development has been tremendous for this state, and we know that the country needs oil.

We know that we need to change the way that we develop our energies. We have the ability to do that through technologies. Alaskans will not tolerate pollution. We haven't, we won't. We love the land like no other people.

And so I very strongly hope that you support the development efforts and allow that to go forward and give the future to this state and this community. And I appreciate very much you coming to Fairbanks. Thank you.

DR. JIM KENDALL: Thank you, Garry. Next is Kirk Jackson, followed by Rita McGrath.

MR. KIRK JACKSON: Hello. My name is Kirk Jackson. I live at 579 Wilcox, Fairbanks. I was born here in Fairbanks, lived in Alaska my whole life. I want to thank you for giving us the opportunity to speak today.

Alaska has enormous untapped oil and gas potential, especially in its offshore areas. The Chukchi Sea offers more resources than any other undeveloped U.S. basin. Alaska's North Slope and its offshore areas are now perhaps the most-studied energy bases in the United States. Over 250 studies have been funded in the Arctic in the past decade with the majority focused on the Beaufort and Chukchi Seas. The demand for energy is continuing to rise, and reality will require continued development of oil and gas resources.

At its peak, the TAPS pipeline carried approximately 24 percent of domestic production. Due to declining rates of oil production in the onshore North Slope region, TAPS is down to a third of that production. Development of OCS would help fill the pipeline and keep TAPS flowing for generations to come.

So I urge you to move forward with the development of the Lease Sale 193 at a time when America needs jobs, economic growth, and a dependable supply for affordable energy. Thank you for your time.

DR. JIM KENDALL: Next is Rita McGrath, followed by Roger Burggraf. The floor is yours.

MS. RITA MCGRATH: My name is Rita McGrath. I live -- POB 7314, Fairbanks. I'm a rather...
newcomer. I've only lived here 33 years, as the old-timers love to hear me say. I'm not a public speaker, but I do want to give my opinion for the animals, for the ocean, and the land. And say that we do not need this. We do not need this to be open, sold, or however you want to say it. We have got to get creative. Oil is -- for the vehicles is something of yesterday. We are getting into a new century, so we have got new ideas. We have got to get creative. And the three things we as human beings fight is greed, pride and lust. And if we didn't have these resources, we would have to get creative and think of other things to do. And there are scientists out there doing that, and just people. Look at the kids at UAF that are adventurers and winning awards for the things that they are coming with for electric cars and other vehicles. So we can do that as far as the pipeline selection -- the gentleman here said about the corruption that's going on. I was bedridden this summer, so being bored I watched Gavel to Gavel. And I was so appalled at our government sitting there and wanting to give these oil people tax breaks. Come on. If you guys pick up the paper and look at the -- I don't play it, so I don't know -- sorry. My nervousness is getting the best of me. The market on the economy, look at the money.

MR. ROGER BURGGRAF: My name is Roger. Followed by Greg Burggraf. I reside at 830 Sheep Creek Road, Fairbanks, Alaska. And I would like to speak in support of the OCS field proposal.

I -- for a little background information, I have lived and worked in Alaska since 1963. I have worked in the resource industries. I've worked for the U.S. Fish & Wildlife Service in the early '50s. I also worked as an advisor to the National Park Service. I have a very strong feeling towards our environment and trying to ensure that it is protected. However, I am a realist. And I realize that if this state is going to grow and people are going to have jobs, we have to develop our resources in an environmentally sound manner.

And I support, you know, the testimony that Buzz Otis gave previously and Garry Hutchison. We are at a crossroads. I've also worked in the -- been in the Arctic.
25   people who can wire them. They need people who can do the
24   transmission lines. Solar panels need racking. They need
23   pipeline -- wind turbines need towers. Power systems need
22   going to help your business. Now, people who work on a
21   on iron, I can work with steel, I can do things that are
20   future. Okay.
19   something that's going to ensure that I'm going to have a
18   can, like, maybe get with the program and try to do
17   you bozos come in my shop and buy more horseshoes, or I
16   thinking? Okay. You are thinking, well, I can stand in
15   century -- and you see the first car go by; what are you
14   things. We have got to have jobs. But you know, if
13   understand that they are important. Our families are important. Our families want things. We all
12   beneficial to all. And this area has been researched so
11   is not done right. And so I heartily request that we
10   consider this. I know there is a lot of emotion about
9   what's being proposed, but I have confidence in U.S.
8   technology to do things right.
7   And with Shell Oil, you know, I am appalled at
6   the fact that they have -- they spent 2.5 billion dollars
5   for the leases and they have been held off, and they now
4   have, I think, about 4.5 billion dollars invested in
3   trying to be able to drill. And there have been a lot of
2   other companies that have drilled offshore in Alaska, and
1   we have not had problems there.

Dr. Jim Kendall: Thank you, Roger. The last speaker before the break is Greg Egan. And after the ten-minute break it's going to be Pam Miller and Tim Sharp. So we are going to start promptly after the ten minutes.

Mr. Greg Egan: Hi. My name is Greg Egan. I live at 981 Gold Mine Trail here in Fairbanks. My main point is that -- okay. I get nervous up here, so bear

With me. There are safer places to drill for oil. Okay. If you are going to do something, you -- you know, if I had the caribou in my bedroom, I'd do it, okay. But it's not the cleanest, neatest place to do it. It's probably going to come back to haunt you if you do something stupid like -- you know, you just don't want to -- you know, why make work for yourself? You know there is going to be problems in the future. Why not just be smart and try to -- you know, we need this oil development, fine, but let's do it the smartest way we can. We know that we are human. We know that things happen, and we know that, you know, sometimes we have to go back.

We -- the best of intentions, the smartest engineers built the -- the walls that were to keep the tsunami waves out of Japan, and they built them higher than they thought the waters were ever going to go. Well, the ground dropped 20 feet underneath their walls. Nobody knew that was going to happen. And the rest of it is history, right?

So my point is, there are just safer places to do it. If you do it on land, if you have to have the oil, great, just do it the safest way possible. You don't want to do it someplace where if you have a spill, you're not going to be able to clean it up, you're going to cause all kinds of wreckage and devestation in the area. It just

Dirt work to, you know -- for a solar farm or dirt work for roads to join, you know, the pads for wind turbines. We have a lot of resources. Oil isn't our only resource. And don't kid yourself; even if you have been welding pipe for 30 years, don't kid yourself that you can't do something else as good or better as the next guy. I mean, you know, I've got -- I know people, especially Alaskan workers, are very resourceful and they can learn just as good or better as anybody out there.

And so I think we just need to, you know -- some of us may need to change our jobs, you know, just in the future. And I think that that's important to just understand that and keep your eyes wide open. And if there is an opportunity you need to jump on or there's something else you need to learn, you know, you don't want to be the last guy working at a place before they turn the lights off.

So that's all I've got to say. Thank you very much for listening. Thank you for your time. And I wish you all the best. I'm glad to see people come out. Whatever their opinion, I'm glad to hear it. Thank you.

Dr. Jim Kendall: Thank you, Greg. Okay. We are going to take a ten-minute break. Right after the break, we're going to start with Pam Miller and Tim Sharp.
So I'm kind of the school mom here, so in ten minutes I'm starting. See you back.

(A break was taken.)

DR. JIM KENDALL: If you want to take your seat, we are going to get started in about ten seconds. I want everybody to have a chance to speak, but I also know a lot of you don't want to spend all night here. So next in line is Pam Miller, followed by Tim Sharp. Pam.

MS. PAM MILLER: Thank you for this opportunity. My name is Pam Miller. My address is P.O. Box 82803, Fairbanks 99708. Welcome, Dr. Kendall and the rest of you, to Fairbanks. We appreciate this chance to speak about this important issue, the future of the Arctic Ocean and its living ecosystem.

Here in Fairbanks our community does have a stake in this issue, and our community is tied to the oceans by the Pacific salmon that run up the Yukon River to the Tanana where people have fished for at least 11,500 years. Resilient Alaskans have made a living on this land for a phenomenal length of time. We're connected by migratory birds that fly across Creamer's Field that end up nesting in the Arctic and then feed and molt and do other things on the shoreline of the coastal -- of the Chukchi Sea, as well as elsewhere in the Arctic.

Like many Americans, we care about these

of lessons to learn, both how to deal with cleaning up oil, as well as having adequate knowledge about the ecosystem that is at stake. That's why we are here today, because of failures of the federal government, not just once, but three times, to provide adequate environmental analysis, good science about the impacts of offshore development based on baseline information that's adequate to actually make those assessments.

There is also a failure of common sense to apply the risks of major spills to the decision at hand. Even though this time in the document there has been an acknowledgment that significant impacts would occur from a blowout, a very large oil spill, but the decisions have not changed.

This lack of an adequate scientific underpinning of the decision to lease the Chukchi Sea and, in fact, common sense about the daunting risks of an oil spill, my organization, who I'm representing here today, the Northern Alaska Environmental Center, made the tough decision to join with the Native Village of Point Hope and other Alaska Native communities and conservation groups to challenge the adequacy of the original document and other risky Arctic Ocean drilling. This is not a decision we take lightly.

This process is a hard-won step in light of the poor and rushed process that went forward in the Bush Administration that was found to be legally deficient.

The stakes are high with the chances of a major spill from 25 to 54 percent from the drill platforms or pipelines as a result of the Chukchi Sea Lease Sale 193. That was in the original document. But in the first document the impacts of blowout spills were not analyzed. The original EIS said "we consider blowouts to be unlikely events," and the government felt they did not need to analyze those impacts. The second draft, which took place after the Gulf of Mexico spill, also decided that they did not need to analyze the impacts of a very large oil spill.

So finally we have a document that does say, yes, there is a very large -- there is a chance that we will have a very large oil spill and that we will have significant impacts to bowhead whales, to migratory birds, to polar bears, to the subsistence of communities who live along the coast.

There is still not proven technology to clean up oil spills. And I was lucky enough to be invited to participate in one of the spill drills in 1999 and 2000 that Alaska Department of Environmental Conservation required when the very first truly offshore field was developed at Northstar.

And we are -- we have a lot of potential here to figure out how we are going to have a sustainable future with energy.

The University of Alaska Fairbanks has also made major scientific contributions to the knowledge about the marine ecosystem and also that the Arctic serves as the air conditioner to the world, that it's affecting -- the Arctic is affecting the climate -- that global warming is affecting the climate and the oceans on a global scale, and that the melting sea ice is occurring from the most rapid warming in the world. This has produced great uncertainty and complication to the factor of doing the environmental impacts in this document.

During this process, it's important to remember and not have national or even local amnesia that a major disaster happened in the Gulf of Mexico and we have a lot...
And it was sobering to be out on the ship and to go through the various procedures for the equipment that the plan had, whether it's booming, sending out a barge that's going to collect the oil in October. It couldn't get out of the dock. With very small percentages of ice in the water, the boom broke, popcorn went out, the kind of skimmer they were going to use to clean it up, it got more kernels. That was just a simulated spill. There's been no real testing, field testing in the Chukchi Sea and no field tests of the kinds of equipment that are proposed for using today in the proposed drilling.

Furthermore, this process, which seems long, is actually short because I didn't bring my copy of the document up here, but 98 pages of this new, thick environmental impact statement is justification why none of the data gaps that were identified in earlier rounds of the process where there was inadequate baseline science -- none of them have been addressed, short of the worst-case spill scenario and the impacts to fish from that kind of spill.

So there has been a statement that these are the data gaps. We don't have adequate baseline information. If there was a spill tomorrow, we couldn't say what was harmed in any level of detail. We know that great resources are at stake. We do know that the Arctic Ocean is an integral part of life in Arctic coastal communities, that it supports wildlife species, that it helps regulate the planet, and it's changing rapidly. However, there is very little information about how the Arctic Ocean functions today or the ways in which this fragile Arctic ecosystem might respond to industrial activities.

Our university was very involved 30 years ago in a very good program with the OCSEP program, which was an environmental studies program. It was oceans wide on the Beaufort and Chukchi. It looked at everything from ice algae, plankton, birds, looked at how the relationships were within the ecosystem. So much has changed. And nothing like that is in place today.

Just today, the U.S. Geological Survey, an agency of the Interior Department, released a big study called an evaluation of the science needed to inform decisions on OCS energy development in the Chukchi and Beaufort Seas. There is no recognition that that study was under way. The Interior Department could have waited to put out this document and incorporate the findings from what the USGS said were necessary information upon which to make these recommendations for the future of the Arctic Ocean.

What I did notice in reading very briefly some conclusions of the report that came out today, it said the effects of climate change are anticipated to influence all components of the Arctic ecosystem, and Arctic OCS energy activities may exacerbate these changes unless careful analysis of risks and tradeoffs is conducted. That is the kind of decision that we are faced with today.

The USGS also noted that well, first off, mentioned -- people think when the Arctic Ocean was ice free that it's going to be like a bathtub, that it's going to be just calm water. Well, nothing could be farther from the truth. We have weird weather. We have unpredictable weather. And what the USGS said about this is that although portions of the Beaufort and Chukchi Seas are expected to be ice free for a greater period of time each year, the pack ice is predicted to be much more dynamic at certain times, increasing the risk of accidents and making oil spill response more difficult during these times.

I got an e-mail this morning from a friend in Barrow who knew I was coming to the hearing, and he said that the whole coastal zone is mixed out with ice. It had phenomenal currents and winds that have shoved this broken ice right up to shore. They can't get out into the ocean from Barrow. And it's a big factor. It's a big change. And so that nature of the ice is -- I'm humbled by what I've seen in the ice, what I've seen on the satellite images of looking at the Chukchi Sea. Every day those leads are changing. The ice is changing. And the risks and how that translates to how operations would take place have not been addressed in these documents.

So our community here in Fairbanks is also tied to the people not only in our area who depend upon the land, but people who live in the Arctic. We are economically connected to them. We are socially connected to them. And we offer great opportunities in both directions for living a wonderful life here in Alaska.

So in conclusion, before the Interior Department considers any drilling in the Arctic Ocean, including Shell's proposal to drill ten wells in the next two years in the Beaufort and Chukchi Sea, the impacts from a blowout spill must be analyzed. That worst-case spill scenario needs to be addressed, and until the issues, such as the lack of comprehensive science and the inability to clean up an oil spill in Arctic waters, are proven, the federal government cannot make informed decisions about leasing in this remarkable area of the Chukchi Sea.

Thank you very much.

DR. JIM KENDALL: Tim Sharp, you have the floor.

MR. TIM SHARP: Good evening. My name is Tim Sharp. I'm the business manager of the Alaska...
I'm not here to speak for the polar bears. I'll let the scientists do that. I will not speak for the Inupiat people or Nucht because they have traditional IRA councils that will do that for them and do it very well.

I did talk to one of the groups tonight. He gave me a sticker about protect the Arctic Ocean. We, as a district council, are fully in agreement. We want to protect the ocean. We just don't want to shut down the ocean.

For us and the people that I represent, actually workers and I represent workers -- we are looking for jobs, good-paying jobs to support our families, that deliver benefits on top of those so we can retire with dignity; medical benefits so we can take our families to the doctor and realistic medical care. At the end of the day, that's really what it's all about for us.

At the same time, in being what some would buttonhole us as pro development, we support the development as sustainable development with the strongest environmental engineering possible that's on the market today. So I think we are -- we are having a foot in both camps.

We understand the environmental concerns, but we live in today's world. And in today's world, people are moving out of Fairbanks, Alaska because of the cost of energy. That has to be addressed. And one way you address that is to open up, at least with strong...
natural gas. I've read the reasons that that issue is not
further analyzed, but I still think it's important to
consider the fact that increased production and increased
supply of oil and gas has some sort of connection with the
detrimental effects of greenhouse gas emissions. And I
don't think that you can see those as separate and
independent from one another.
So I would strongly urge the no-action
alternative two listed in the draft statement. And I
thank you for your time.

Lucas Francis, followed by Katherine Schake.

MR. LUCAS FRANCES: Thank you. My name is
Lucas Francis. I don't live here in Fairbanks. I live in
Anchorage. And I want you to thank you all for allowing me
the opportunity to speak tonight. Full disclosure, I do
work for Shell, and I'm coming out tonight really to give
my opinion because Shell is going to be submitting their
own written comments by the 12th.
And I wanted to come up here and thank everyone
for coming out. It's important to hear both sides of
this, and your opinions are well worth sharing the time on
the floor.
I want to just maybe throw out a couple points
from the perspective of where this very large oil spill
might relate to the conversations tonight. One of -- one
of the points I'd like to just relay is that this is a
hypothetical very large oil spill. In fact, the locations
that are laid out in this draft SEIS are actual locations
Shell is not drilling in 2012 or '13.
But beyond that, I think it's important to keep
in perspective the amount of time, the amount of input and
energy and thoughts that have come to get this program to
where it is today. And I want to thank all the input that
we have received from the community, from BOEMRE, also,
for these hearings.
Beyond that, maybe I can touch on some of the
jobs. And from that point of view, we have worked here
regionally. We have strived to attain that local content,
but the public support from the community can only come
from the impact that it can make to the community. But we
also reached out to the University of Alaska Anchorage and
asked for a study to look into the potential economic
impacts to the state of Alaska. And I think many have
seen that study that came out a couple years back.
And it talked about the 35,000 jobs that would
derive to the state of Alaska directly. And that seems
like a large number and it's a yearly average over a
50-year timeline. So to the comment that this would be a
flash in the pan, if you will, these are multigenerational
good the technology is, it still will fail at some point.
I work with the latest laser technology on a
daily basis, and it's amazing when it works well, and most
of the time it doesn't work well. And it just takes one
software glitch. It just takes one person not being
trained correctly. I mean, the point is, it's not 100
percent foolproof, so it's a matter of people losing jobs
immediately or the potential of people who live in the
north losing their food resources, losing their way of
life.
So I would encourage all of you, rather than
spending time trying to make a decision where somebody
loses out or has the potential of losing out, to find an
alternative solution. And I realize that's scary because
it involves job loss or temporary job loss, but we are
creative as people. And when we are forced to do things,
it's amazing what we can do. So it would be great if
neither group had to lose in this situation. That's all.

MR. RANDY GRIFFIN: My name is Randy
Griffin. Post Office Box 73653, Fairbanks, Alaska. I want
to thank the group here for doing their revised draft
supplemental environmental impact statement. It looks
job opportunities that would come from the potential
development of the OCS. And USGS has looked at those
numbers and they have, I think, a conservative number. At
least our internal auditors look at it, and they think
there is a lot of opportunity there. But tens of billions
of barrels.

But more than that, I think it's looking at the
broader context of how it relates to TAPS, how it related
to how our communities interact; really, the importance
that Alaska plays in its impact to the country at large.
And I'd like to see Alaska continue to play that role.
And I want to continue to live in Alaska because I love it
here.
So that's all I have to say. Thank you.

MR. RANDY GRIFFIN: My name is Randy
Griffin, followed by Jay
Quakenbush.

MR. RANDY GRIFFIN: Thank you, Katherine.
Next we have got Randy Griffin, followed by Jay
Quakenbush.

MS. KATHERINE SCHAKE: Hello. My name is
Katherine Schake, and I'm a seasonal worker up in Alaska,
and I have been working up here for six years. And I just
wanted to bring out the perspective that it seems like
both sides are speaking out of fear, and both sides have
legitimate fears. And I think about all of the energy and
the time and the effort that's been put into the sale, and
the lease sales and the research involved in trying to do
this in a safe way. And the fact is that no matter how
I'm in favor of drilling in the offshore continental shelf, OCS, mainly to keep the pipeline full, to keep our economy going, to keep the Permanent Fund and its concept alive since that's where all the money for the Permanent Fund came from is oil development.

I know an earlier speaker talked about why not drill in the safest place, and he gave a good example about cutting up caribou in your bedroom. Why do it there? There's still blood in the carpet and nasty smell. Why not do it in the garage. That's a good point. If you don't have a garage, why don't you do it outside. I suppose if you were stopped because you didn't have a garage and you tried to do it outside, but some environmental group said that you are wrecking their view shed by doing all that nasty chopping up, you might have to do it in your bedroom, better there than not having the food.

I suppose if we ask the left wing groups, would you allow us to do it onshore in ANWR, I'm sure they would give a hearty venting to that. No deal, I'm sure they would say. So the prospects are good on the -- in the OCS area and so that's an economic question. Let's see. The Gulf oil spill, that was a horrible thing, horrible to watch it on TV, go day after day, week after week, several months pouring into the Gulf. Of course, that was way down there, a mile plus or two miles, or whatever it was; way the heck down there.

This is -- the OCS is a very shallow area. And so -- but it -- every time we go through a disaster like that, I think in the North Sea in the North Atlantic they had a big oil spill, I think, some decades ago or a platform blew up or whatever. And people learned -- people learned -- we, civilization, learned from that, and that's what civilization is all about, trying and learning and proceeding and getting better and better. I think things just get safer and safer, as long as our endeavor is not absolutely catastrophic. I think there is no good reason not to venture forth while keeping safety at the highest level.

I once read a science fiction magazine where they colonized the moon, and some company developed a device that could capture a little bit of earth's atmosphere, changing it to radio waves, even to the moon to give them a little bit of atmosphere while just diminishing the earth's atmosphere a little bit.

Unfortunately, something went wrong where they had this machine way out in the wilderness, and the shutoff didn't go off, and it kept sucking away earth's atmosphere. And when they tried to send an airplane to shut the thing off, the atmosphere was so thin they couldn't fly and it eventually sucked the whole earth's atmosphere and destroyed it; but the moon was okay.

That's an example of a catastrophic thing that you don't want to go there now, but even in oil even in the Gulf of Alaska, as horrific as that was, I would not suggest that we shut down or not venture forth in the Gulf of Mexico [sic] because we will live and shrimp will come back and things will go on.

It would certainly be bad in the Arctic because of ice and the oil doesn't evaporate as well. So by all means, the people should figure out what would they do; where would they get their supplies? Do they need submarines to go under the ice to crimp off the well if the blowout preventer or whatever failed totally. I mean, it's one in a million, but things happen; Murphy's Law, I guess.

Anyway, I used to work up at ARCO up at Kuparuk for 11 years at ARCO as an oil field operator, and I am appreciative of all the effort they go to. Mistakes happen, but civilization must go on and our economy needs to not die. Thank you.

DR. JIM KENDALL: Thank you, Randy. Next, Jay Quakenbush, followed by John Platt.

MR. JAY QUAKENBUSH: Jay Quakenbush, 1593 Scenic Loop, Fairbanks. I'm a 53-year lifelong Alaskan, and I want to thank you for coming and listening to everyone's opinion. My opinion is I view the world -- even though I'm a hometown boy, I hope to always keep an open mind and to see our issues here in Alaska and how it affects our entire world because it gets smaller and smaller every day.

And as Mr. Burggraf mentioned, what I would like to see as far as the offshore development is controlled and regulated by the people of the United States of America versus the very few controls that I have read about and heard about from some of the other countries of the world that don't have an opportunity like this for Americans to come out and speak. They will be thrown in jail if they oppose development or if they suggest realistic environmental protection laws which we do here in Alaska.

I've worked on the North Slope a little bit. I currently represent about 5,000 electrical workers in the state of Alaska through the International Brotherhood of Electrical Workers.
We would love to build power lines all over Alaska. That's what part of our union membership does, but it doesn't do good to build a power line if you don't have people to use that power. And so we realize there is a need for other industries, not just the generation of electricity, but industries that will bring people and keep people in Alaska so some of our members can work and, as Tim said, provide good wages and benefits for their families and put food on their table.

So I urge the movement of this sale to go forward, but I also urge many of the environmental protection issues to be brought to light so our environment is protected. I've had the -- the great privilege to not only work on the North Slope and along some of the coast in the Chukchi Sea, but to hunt and fish up there, as well, and all over Alaska, and I hope to continue that.

I want to see our environment protected, but -- and I'd like to take my family with me. And as they have gotten a little bit older, they are searching for opportunities to make a living in this state and stay in this state. I've already seen my grandkids and daughter and husband move to Anchorage because it's a cheaper place to live as far as energy goes. It makes me pretty sad.

And I'm hoping things like the offshore drilling worked in the construction industry for about 30 years. And a lot of that work was -- many years were on the North Slope.

Lease Sale 193 is a very important component to help spur our economy and provide Alaskans with good-paying jobs. The ongoing delay in Alaska OCS development is a concern not only to me and Alaska, but also on the national level as well. Cost of living in Alaska is not going down, and I believe we must promote more oil and gas development in our state. Every year the EPA issues useable permits across the country, but when it comes to Alaska, the timeframe in which permits are issued are drastically increased. This is unacceptable and we need prompt action to help move Alaska forward.

OCS production will help bolster TAPS, which is now operating at about one-third capacity. Alaska needs to move forward at a faster pace and increase development of our oil and gas resources. This development will create good-paying jobs for Alaskans who live here and want to remain in Alaska.

Again, OCS is vital to economic prosperity, and I urge you to support permit lease 193 for responsible development. Thank you.

DR. JIM KENDALL: Thank you, John. Jessica, followed by Jim Laiti. The floor is yours.

opportunities will possibly not only bring my grandkids back, but keep other people's grandkids and family here in Fairbanks and see our economy grow soundly here in Fairbanks because it is getting harder and harder.

I've got a good job. My wife has a good job. But I see more and more people every day not have a good-paying job. Some of the jobs that are produced on the North Slope -- I might as well say it now. I hope when and if this sale goes through, that Shell and any other company that has an opportunity to drill up there looks at people in this room, talk to Tim Sharp or anybody down at the unemployment office, and hires Alaskans because we will help you protect our Arctic Ocean, our shoreline, and our fish and polar bears. People that don't have a stake in our land may not.

So I would urge you to put that in your study that Alaskans be hired during the drilling and the process of bringing that oil to shore or on tankers, or however that's proposed. It's Alaskans that are doing that work.

Thank you again for your time.

DR. JIM KENDALL: Thank you, Jay. Next is John Platt, followed by Jessica LeClair.

MR. JOHN PLUTT: Thank you for the opportunity to comment today. My name is John Platt, and I have lived in Fairbanks for almost 50 years. I have
The protection of the environment here is critical, you know, in my opinion, and I think everybody here in this room would not argue about that. We don’t want any oil spill to the ocean. What happened in the Gulf, I followed that very closely, and from my — what I saw, I mean it was clearly human failure, you know, from all that I read. Of course, the courts will finalize that at some point, but I think a very large oil spill, you know, that term that we have here, is important to prepare for something like that, but I think the real key is to prevent an oil spill from ever happening. From what we learned in the Gulf, we have got the capability to do that, and that’s what we need to work for.

Clearly, you know, we are very dependent on oil development, on the petrochemical industry. All of us in this room, look here, you know, the lights in the room, the fees in here running, those are provided mostly by coal. We can do better than that. The energy in the room here, if everybody put that energy into developing natural gas, that would be much better.

Renewable energy, certainly we have to go there and maximize that. I agree with that. But in the meantime, I’m supportive of the OCS development. We need to do it in the very best way that we can to ensure that there is not any damage to our environment here. And the jobs — I diverted from my prepared remarks, and those
environment for our children and future generations.
Please affirm the lease and allow drilling.
That's it for my comments. Thank you.

DR. JIM KENDALL: Thank you, Zebulon.
Sharon Alden followed by Paul Tengan. Sharon, the floor is yours.

MS. SHARON ALDEN: I'm Sharon Alden, 159 Nevin Road, Fairbanks, Alaska 99712. And I'd like to first say thank you for the opportunity to speak.
We've talked a lot about costs and economics and jobs. What I want to say is that cleanups are costly.
The cost to the environment in the case of a disaster or a very large oil spill are incalculable. We cannot fathom what the real costs are to the environment, to the animals, to the -- to the systems, to the people who are relying on the environment for their subsistence. But the costs of the cleanup of a spill are a little bit less incalculable. We can calculate those, and those are huge, what it would cost to our economy, to our -- to clean up a very large oil spill in the Arctic.
We have seen that even without big headline-worthy disasters, there have been many small spills up on the Slope, small, medium, and large. And these -- these have been caused by accidents and negligence, deferred maintenance, letting things go. And

And that concludes my comments. Thank you guys for coming here to Fairbanks. I appreciate that.

DR. JIM KENDALL: Thank you, John.
Zebulon Woodman. I hope I'm pronouncing that correctly.
And following -- the next will be Sharon Alden.

MR. ZEBULON WOODMAN: Hi. My name is Zebulon Woodman. I've lived in Alaska all my life. I'm a third generation union laborer, third generation working in the oil field in Prudhoe Bay. I believe we should drill in the OCS and the Chukchi Sea. With the economic crisis in our nation, we have a responsibility to develop domestic fields and try to free ourselves from the grip of foreign oil. In Alaska we need to create jobs. We need to refill the Trans-Alaska Pipeline, which many people have stated is running at one-third of capacity. We have a chance to safely drill in the OCS while protecting our environment.

My family and my children here, we eat fish. We fish in Chitina. We fish in all the rivers up here. We eat moose, shrimp, halibut. We want to protect the environment. I want my children to grow up hunting and fishing up here, eating off the land. And so even though we have a chance to drill, we can do it in a safe manner.
We need -- Alaska needs a sustainable supply of oil, natural gas, and jobs. We can drill, protect the

we still don't know how to clean up oil in the icy waters, and especially in the type of weather that occurs in that part of the Arctic Ocean. And I do believe that we have a lot of know-how to do things right, to do things environmentally safely. But having it and doing it are different things, we have seen.

I'm going to make sure that I comment on deferred maintenance. Things that are supposed to be done end up not getting done and then, yes, there are always the human errors. And it would be nice to have the boom, but if you want a boom, we will get a mini boom if we have a spill in the Arctic Ocean. We will have an economic boom for the support of those operations, supporting the workers to go and clean, transportation, food, lodging. That will probably be mainly out of Anchorage, though, and not Fairbanks.

That was -- that was really what I want to say, that the costs in the event of a spill will be greater than we can imagine and environmentally incalculable. And financially it will be calculable, but it will also be huge. Thank you.

DR. JIM KENDALL: Thank you, Sharon. Next is Paul Tengan, followed by Paloma Garcia. Paul? Okay. I'm going to put the card back here in case he just stepped out for a minute. Paloma Garcia. Did I pronounce
Why do you think my people are so united against fantasizing about fear. These people talking zero percent potential of oil spill, time. You cannot set an oil boom in the ice floe. I hear set an oil boom in the ice floe. I’ll repeat it one more boom in the ice floe. You can’t. Bottom line, you can’t.

I should be talking to you guys. Never mind cost?

mean, I understand jobs. People need jobs. But at what things that are developing, and I hear both sides. I was reading a paper this week and seeing all these compelled to get up in front of politics like this before. I was reading a paper this week and seeing all these things that are developing, and I hear both sides. I mean, I understand jobs. People need jobs. But at what cost?

I should be talking to you guys. Never mind these guys.

You can’t set an oil boom. You can’t set an oil boom in the ice flow. You can’t. Bottom line, you can’t set an oil boom in the ice flow. I’ll repeat it one more time. You cannot set an oil boom in the ice flow. I hear these people talking zero percent potential of oil spill, fantasizing about fear.

Why do you think my people are so united against

MR. DANIEL LUM: (Inupiaq.) I’ve not been Garcia. And tonight we have heard a lot of mention about the oil spill in the Gulf of Mexico. So I want to revisit what happened last year while we speak about drilling in the Arctic Ocean. On April 20, 2010, BP’s Deepwater Horizon well exploded in the Gulf of Mexico and caused the largest accidental marine oil spill in the history of the petroleum industry. The oil spill flowed for three months, and it caused damages to the environment that will take decades or even centuries to repair.

During the three months, 205.8 million gallons of crude oil leaked from the Deepwater Horizon well. And according to a NOAA report, about half or more of the oil leaked into the Gulf remains on or below the Gulf’s surface in a dissolved or dispersed form. 665 miles of coastline along Louisiana, Mississippi, Alabama, Florida, and Texas got contaminated by oil. The people living in the coasts were exposed to chemical poisoning that affected their health. And according to the Fish & Wildlife Service, Deepwater Horizon Oil Spill Response Report released in April 2011, 8,233 birds, 1,150 sea turtles and 170 mammals have been affected or killed by the oil spill. And these numbers are just of the carcasses that are found. So in real life there are way more.

So now imagine if an oil spill happens in the Chukchi Sea. And according to the EIS, there is a 27 to 34 percent chance of a large spill from the drill platform at the Chukchi Sea that it can happen. The cold temperatures, the low visibility, the extended periods of darkness, the broken sea ice and the high winds that are as strong as hurricanes will make any oil spill much harder to control, and therefore it will affect the environment in a much more devastating way.

Shell Oil claims to have more rigorous response plans, but they are not field tested. There should not be oil drilling in the Chukchi Sea or anywhere else until there is proven technology capable of cleaning up a spill effectively.

The Chukchi Sea of the Arctic Ocean is one of the wildest and most biologically diverse seas left in the world. If an oil spill was to happen there, it would affect the health and life of the Inupiat community that lives on the coast, and it would cause irreversible damages to polar bears, endanger bowhead and beluga whales, gray and finback whales, Pacific walrus, and any migratory birds.

What we decide to do now will affect the Arctic Ocean forever. And just as Jessica and Sam and Joseph ask you to think about their future, I’m 22 years old, and I’m asking you to think about my future, as well, and to keep the Chukchi Sea as wild and biodiverse as it is now.

Thank you very much.

DR. JIM KENDALL: Thank you. Next is Daniel Lum, followed by Carolyn Kremer. Daniel, the floor is yours.

MR. DANIEL LUM: (Inupiaq.) I’ve not been compelled to get up in front of politics like this before. I was reading a paper this week and seeing all these things that are developing, and I hear both sides. I mean, I understand jobs. People need jobs. But at what cost?

I should be talking to you guys. Never mind these guys.

You can’t set an oil boom. You can’t set an oil boom in the ice flow. You can’t. Bottom line, you can’t set an oil boom in the ice flow. I’ll repeat it one more time. You cannot set an oil boom in the ice flow. I hear these people talking zero percent potential of oil spill, fantasizing about fear.

Why do you think my people are so united against this development? Because for thousands of years we have existed on this ice. For thousands of years we understand these ice floes. We understand the power behind it. We have a phenomenon known as evu where certain ocean currents and wind currents, a big plate of ice push a second plate onto shore and wipe it clean, clean, killing everybody.

And in the turn of the century, a man came to Barrow named Charles Brower, wrote a book called 50 Years Below Zero. He described this event. He was inland hunting geese or something, and he heard this thunder, this deep thunder. And the ice came up onshore and wiped out and killed a dozen people. And it happened instantaneously. Granted, that doesn’t happen very often, but it happens. It happens.

I heard the guy from Shell come up here and talk about, you know, technology and safety, all that. We have the CEO of all of Shell come to Barrow, come to our village. He came and seen the Chukchi Sea. He’s seen our culture, the way that we live. And I think it was November or December. I was reading in the paper. John someone -- I don’t know -- but he came on my tour. I got to spend about eight hours with him. He doesn’t support drilling anymore in the ocean. This is the head of -- he’s retired a couple years, but this is the head of
I am grateful for that stuff, but at what cost? I'm grateful for the stuff, but at what cost? The ice is unforgivable. It's unforgivable. It is unforgivable. It's unforgivable. It's and you want to gamble it away in treacherous sea ice conditions so that we can sustain an economy, enrich oil companies. I challenge you guys to enforce and challenge the oil companies to practice inside a boom in flowing ice. You need two Russian icebreakers and a million pounds of titanium boom to even come close to that. It's impossible. You cannot set a boom in flowing ice. You can't.

We cannot set an oil boom, by the way. They cannot set an oil boom, by the way. Sorry. I'm a realist. The ice is unforgivable. It's unforgivable. The power of the ice, I have been from Barrow to Point Hope, all in between there. Twice I've come close to losing my life with experienced people. The ice is unforgivable. It's treacherous.

They have this zero percent potential of oil spill, 60,000 jobs, we are all fantasizing about fear. My people know what's going to happen. We understand the ocean. This development is going to be a catastrophe. It's going to be -- you guys don't understand the power of the ice. You don't understand the power of the Arctic. I mean, it's -- it's lucky that these offshore islands so far have not created a catastrophe. I challenge the oil companies. I challenge you guys to enforce and challenge the oil companies to practice inside a boom in flowing ice. You need two Russian icebreakers and a million pounds of titanium boom to even come close to that. It's impossible. You cannot set a boom in flowing ice. You can't.

I heard one of these other guys talk, mistakes happen. Yeah, mistakes happen. Look who -- you guys are here, and everybody benefits here. But a mistake happens in our water, it's our whole way of life. Let's look at what happens on page 252, if you guys would open. You don't have to. Let me just read a few up here, what would happen. Very large oil spill, which is feasible with all these giant ice floes. Number one, displacement; number two, undesirability for use from contamination; perceived tainting; three, reduced numbers due to species deflection from oil; four, increased risk of costs -- increased risk or cost of the subsistence effort due to having to travel further.

A very large oil spill would affect polar bears hunting and sealing, bird hunting, sealing, whaling and the ocean netting of fish. This next page it says in here -- I want you guys to listen to this carefully because this is the most important thing I've read in this book. An oil spill affecting any part of the migration route of the bowhead whale could taint this resource that is culturally pivotal to the subsistence lifestyle. You have our entire way of life in your hands, and you want to gamble it away in treacherous sea ice conditions so that we can sustain an economy, enrich oil companies. I don't think the tradeoff is there: jobs, catastrophe. Jobs -- oh, technology, it's safe, it's all safe. That's what I hear, technology, technology, technology. Yeah, we see technology. Look at the Gulf of Mexico. Look at all these spills on the North Slope. I mean, we've got this degrading old pipeline system; you want to pump just millions more barrels through it out of this sensitive area, which is completely dangerous. It's ridiculous. This is -- this is a catastrophe waiting to happen.

If you guys allow this, your Administration allows this, you will live with the legacy of putting this whole way of life, this whole ecosystem at jeopardy. This is the biggest mistake in the world. This is a sensitive area. The power of the ice is unforgivable. I hate to see this happen.

I've never came up like this publicly. I feel moved to do this, compelled.
Daniel just made. And it happens that I might follow up on that.

First I want to tell you I'm a writer. I write poetry and literary nonfiction, and I teach at the University of Alaska Fairbanks. I have lived in Alaska 25 years this October. I came here originally to teach in a Yup'ik Eskimo village on the coast of the Bering Sea in a very remote, small village of 330 traditional Eskimos. They are not inuit like Daniel. They are the Yup'ik.

They were a little bit further south on the Bering Sea. But I have spent time very close to the Chukchi working at Port Clarence, which is on a little teeny little spit of land on your map just south of Wales, which is on the Chukchi. I wonder if you would be willing to turn to page B28 in the EIS report. And maybe you could look at the map and -- because I want to briefly talk about two things: The scale that we are talking about here in Alaska in the Chukchi Sea, and also my sense of maybe a lack of realism in the EIS statement as it's amended. And I'll bring this to a couple of pages in particular in a second.

So if you look at the map, it's a nice map. It shows the whole Chukchi Sea. It shows the coast of Alaska, the area for the lease sales, and Russia. If you look at the bottom left, you can see the Bering Strait.

Well, I kind of laughed. I didn't say anything, but I knew that he half believed that that could be done without consequence. Of course he wouldn't do it. He didn't have the power to do it. But my sense from living there was, yeah, that ice, it's amazing, it's powerful, and I lived there in the summer. But I also lived in that Yup'ik Eskimo village for two years year-round. And I saw what it's like in the winter, what those winds can be like, what that ice, how it moves in and out. One day you would have a clear day; the next day we get totally covered in ice, or maybe not even the next day; within a few hours. Huge winds which have been described earlier tonight.

The weather conditions are -- they are very humbling, as people have said. They are humbling. They are not predictable. And as Jessica pointed out earlier -- very eloquently, I thought. This is only going to become more -- we have climate change happening. These weather conditions are going to become bigger and more unpredictable. So we have a lot to think about here.

And I just want to say that I feel it's very important. If people are -- in Washington, D.C., are making decisions about the Arctic, which they have never lived in, never visited, and maybe even never seen even from an airplane, they need to be very respectful and very careful, and they need to pay attention to every bit of information they can get in order to make informed decisions.

Now, I understand the purpose tonight, from what you all said at the introduction, was that one thing you really want is for us to think about this EIS statement and see whether it seems adequate now that it has been revised or whether it still is not adequate. That seemed to be the main purpose of these hearings.

DR. JIM KENDALL: Correct.

MS. CAROLYN KREMERS: So I'm glad -- we can't ever really probably avoid hearing opinions about whether people support drilling and oil and gas development in the Arctic Ocean and Chukchi Sea or maybe the Beaufort Sea later, who knows. You know, there are people for, there are people against; but it seems to me that's a big issue. I mean, we are going to hear about that because these things are all interrelated. We can't think about an EIS statement without thinking about what it is for.

So I appreciate all the comments that we have made tonight and I hope they have been helpful to you. But as far as the EIS statement goes, I did want to point out that the maps do show, if you can hear from the people who live there, how very huge this area is. When we look
at how close Russia is, 30 miles away at the Bering Strait, and how far, how much huger that area is where the oil and -- where the lease sales are, then if we think about what it says in here about the part that you said needed to be added, one part, you said you got 150,000 public comments about, was the desire, the theme thing that you noticed was that people needed to look at what about a large oil spill, what might happen.

So I didn't have a lot of time tonight, but I looked at some of the pages. And just want to go -- especially, I think, following up on what Daniel just said to page 135 and 136. And just briefly look at those, if you can keep thinking about what it's really like out there.

So it says here -- this is from Chapter 4, environmental consequences and Section 46, effects of a very large oil spill, this is just a little section. It's less than a page -- or maybe it's a page, Levels of Recovery and Cleanup Activities. I just want to read a few of these sentences. And I think everyone in here who has been to the Arctic -- as you saw that's quite a few people -- can picture this. You could probably have another conversation going on in your head as you think about these sentences. And I'm just going to read a few and comment at the end about them, and then I'll be done.

assist spill response and cleanup efforts as the spill progresses. Weather permitting, roughly 300 to 400 skimming, booming and lightering vessels could be used in areas closer to shore. Did I mention 300 to 400 vessels closer to shore and thousands of people helping? But when you live here and you have lived in the Bush or in any of these remote areas, you just -- you have a sense of it's not that simple. I mean, you have to get those people there. You have got to get that equipment there. You have got to have food to feed them. It's really hard for us to describe this to people who have never been in the Bush in Alaska for you to even understand. As someone said, there are no roads. But not only that, there are no airstrips that can -- later it mentions airplanes and helicopters that could come.

That's over on page 136, the second to last bullet. Dozens of planes and helicopters. Dozens of planes and helicopters would fly over the spill area, including impacted coastal areas. Existing airport facilities along the Arctic coast would be used to support these aircraft. And it lists airports, again, that not only are far away, like Katzebue and Barrow, and then smaller ones that are not capable of having any large aircraft land there.

Many of these, the biggest thing that can land
perceived incorrectly the probability of having something
indicated that air traffic was still far safer than travel
-- even in light of the attacks of September 11th,
Now, all of the actuarial tables, even knowing
that -- even in light of the attacks of September 11th,
indicated that air traffic was still far safer than travel
by car, yet people chose to travel by car because they
perceived incorrectly the probability of having something
suffered a lot. Why? Because people who traveled
of note that in the wake of the attacks of September 11th,
Dan's testimony there. We are not talking about our left
arm, would you take the job? Well, that's where we get to
the lifetime of the job that you are going to lose your
left arm. Would you take that job? Is that an acceptable
bad happen.
So we are lousy at assessing probabilities, but
nevertheless, that's what we need to do is to be able to
come up with a reasonable way of estimating and
understanding the probability.
Well, the problem is that human beings are
really lousy at estimating probabilities, with all due
respect, because I know you have included estimates of
probabilities in your draft EIS, but we are pretty bad at
doing that. So what do we do?
Let me take a step back from that and just sort
of note that in the wake of the attacks of September 11th,
what happened to the airline industry? Well, it really
suffered a lot. Why? Because people who traveled
suddenly traveled by car because they perceived that as
safer.
Now, all of the actuarial tables, even knowing
that -- even in light of the attacks of September 11th,
David. We have got Jane Ransdell, followed by Paul Tengan, if he's back in the room. Jane, the floor is yours.

MS. JANE RANSDELL: My name is Jane Ransdell, and I live at 607 Bullion Drive in Fairbanks. I do not believe all companies can effectively clean up an oil spill in the broken ice in severe conditions of the Chukchi Sea. A spill would have a devastating effect on bird and fish and mammal life of this area. Some of these species are already showing clear signs of significant stress. The maintenance of the populations of these species in this area is essential to the subsistence lifestyle of the Inupiat people of the Chukchi. Allowing drilling in the Chukchi denies the right of the Inupiat to continue their traditional way of life because the eventual spill will severely degrade the habitat of their traditional natural food source long term.

Any significant spill in broken sea ice conditions would be a worst-case discharge, too difficult to clean up fast enough for survival of the wildlife in the area. Just too difficult to clean up. Then what? Apologies, regrets, blame shifting, compensations, chaos, buyouts, cop-outs. And what will that be worth? Will that make it right with the Inupiat people? Will that bring back the wildlife and reverse the damage?

Drilling in the Chukchi Sea is not worth the risk of ruining the rich habitat of this incredible area.

Thank you.

DR. JIM KENDALL: The last card I have is Paul. Paul Tengan come back in the room? Okay. Now, one thing I'm very adamant about is that everybody has a chance to express their thoughts, their opinion, their comments. We want to make this as transparent as possible, and I want to make sure no one leaves the room feeling they didn't have the chance to be heard. So is there anybody in the room that did not have a chance, did not put a card in there that now feels, well, maybe I do want to say something? We are not going anywhere until everybody here is satisfied they have had a good say. So please, if anybody would like to come up here, you are more than welcome to.

This is very important to us. We are not the decisionmaker. We want to make sure this is the best possible document. This is a revised draft. A lot of people are working on it. NOAA has worked on it with us, other federal agencies. And I want to be able to say when we go up to the Secretary --

Aha, now I'm a happy man. Your name, sir.

MR. TONY FERNANDEZ: Yes. I never talk on the mike. I get so nervous. I get nervous when I talk through mikes.

DR. JIM KENDALL: Your name, sir?

MR. TONY FERNANDEZ: Tony Fernandez. I live one block from here, 177 7th Avenue. I listen to everybody talking over here, but to me it's gone to the government. The federal government sold our leases in the ocean, not their lease. I worked on Pump 5 for 21 years, and I retired. Everybody talking about jobs around here. No, you don't need no jobs. He's talking about oil, crisis in oil. There is no crisis in oil.

It's 20 to 50 capping holes in Prudhoe Bay. Why you don't put that oil in the pipeline? When I get over there, we must push it in the pipeline 2,000,000 barrels a day. What is still there is 500- to 600,000 barrels. Why? Why the oil companies manipulate this well data? To keep the price high? It's no good. We pay the gallon of oil over here real cheap when we get it from Kenai way back before this pipeline pass by and we build the refinery.

Right now we pay 4.60 is why it's killing me to warm my house with this. You see what I mean? These guys need to push more oil and go over there and pump the lines to these guys; punching, I think there's probably about 20 or 50 holes already drilled in Prudhoe Bay.

Why you want to go in the water, you know, for a big, you know, mess? And like this guy was talking, you know [indiscernible], you see. He's talking about this and that. No, no, no, no, no, No. Let's go to the real thing. Go over there and drill in the ground, and you don't have no damage. That's the bottom line. Go over there to drill over there, that's dangerous.

And he's talking about oil spill containment. You can't contain oil. I practice all the time in the Yukon River, and if that line break right there and the oil coming down, you cannot stop the oil. The oil run all the way to the ocean because the water is so dangerous. You can't stop it over there. We tried a pig about this big with a boom, and he put that [indiscernible], you see. That's why, you know, that's so dangerous. That's why I hear everybody talk about jobs and this and that. No, no, no. You need to control this and drill in the ground.

There is plenty oil over there. Look at last winter and the winter before; they drilled two holes right there close to ANWR, went straight down and went horizontal to steal the oil from ANWR. Why he don't put this oil to the land right now? Why waiting? They're just keeping the prices way high to do all this drilling in the ocean.
Look at what happened in Louisiana. You kill all the fish, all the -- everything is down, and the fishermen is way down. You don’t see no money. Okay. Thank you. Thank you very much.

DR. JIM KENDALL: Thank you very much.

You used the microphone well. Okay. I don't want to be a nag. I'm sometimes accused of that. I want to make sure everybody has a chance before I close it out. Is there anybody else that would like to come up? Going once, going twice. Do I have to tell a joke before I get to three? Because I really -- this is important to us, and I want all the comments.

Well, with that, on behalf of the staff of BOEMRE, or BOEMRE [pronunciation], as someone said with a Cajun influence down in the Gulf, thank you very much for coming tonight. The document is on the Web. We have this. We passed some of the big documents out. Please go through it. If you fund things you think that needs to be dealt with, if there is mistakes, if there something we are missing, go to regs.gov. The address is back there on the chart. And get us those comments. This is a group effort. I want to be able to take the result and all the comments and take it and send it upstairs and say this is everything you need to consider before you make your decision. So with that,

REPORTER’S CERTIFICATE

I, MARY A. VAVRIK, RMR, Notary Public in and for the State of Alaska do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that the proceedings were reported stenographically by me and later transcribed under my direction by computer transcription; that the foregoing is a true record of the proceedings taken at that time; and that I am not a party to nor have I any interest in the outcome of the action herein contained.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my seal this ______ day of ______________ 2011.
Secretary of the Interior.

We pass it on to the decisionmaker, in this case the Continental Shelf. We pull the information together and manage the energy and mineral resources of the Outer are not a nongovernmental organization. Our job is to Department of Interior. We are not an oil company. We are a federal government agency. We're part of the are you, where are you from, just what are you. Well, we meetings is, as we got into the meeting, someone asked who go by BOEMRE.

I know that's a long line there, but we just Bureau of Ocean Energy Management, Regulation and Enforcement. Mike Routhier is the coordinator of the EIS. Next to her is Mike Blackburn. Sharon Warren is the project manager for the supplemental EIS. Next to her is Mike Routhier. Mike Routhier is the coordinator of the EIS. He takes all the parts and pieces and puts it together. Now, as it's being put together, we have got to make sure it flows and everybody understands it and all the definitions are there. That falls on the back of Scott Blackburn in the back there. Raise your hand, Scott. Scott is not only a technical expert in what we do; he is also a technical editor. So he tries to make the document written in a way that people can understand it.

We also have back there Michael Haller. Michael
23   The plaintiffs alleged that the EIS did not adequately
22   determine whether missing information identified by the
21   judge also said that the agency failed to
20   analyze the environmental impacts of
19   The judge also said that the agency failed to
18   determine whether missing information identified by the
17   And the judge said go back and analyze that because you offered
16   The judge also said that the agency failed to
15   The judge also said that the agency failed to
14   However, we didn’t analyze that in the environmental
13   In our notice of sale, we had a lease incentive
12   that if they purchased a lease for oil, then there was an
11   What was Lease Sale 193? Lease Sale 193, first
10   of all, we had done an environmental impact statement and
9   published it as final in 2007. In 2008 we had a lease
8   And at that lease sale, we had six companies bid
7   on -- to explore for oil and gas. We offered 29.3 million
6   acres, and there was 487 leases issued for about 2.8
5   million acres.
4   Over here on this map is the area of the sale.
3   And this was the sale area that was out here in red. This
2   is what we offered. There is some alternatives that
1   were -- there are some alternatives, and you will find

25   everybody feels they have had good input. If we leave
24   here tomorrow morning and someone didn’t speak their
23   piece, we failed. It’s very important that if you have
22   something to say, we hear it, whether it’s at the
21   beginning or at the end. It just has to be said. Okay?
20   With that, I’m going to give the microphone over
19   to Sharon. And Sharon, could you walk us through what we
18   all need to know before we start getting to work.
17   MS. SHARON WARREN: Thank you, and
16   welcome. Can you hear me? Here we are. Like Jim said,
15   we wanted to go through and let you know why we’re here.
14   And we have got some posters to explain why we’re here and
13   what we would like from all of you on this document.
12   Why we’re here today, we get -- we need your
11   comments on the Revised Draft Supplemental Environmental
10   Impact Statement for sale 193. The documents are back
9   there on the table. We have documents as well as we have
8   CDs of the documents. So if you haven’t received one and
7   you would like one, please take one this evening.
6   What was Lease Sale 193? Lease Sale 193, first
5   of all, we had done an environmental impact statement and
4   published it as final in 2007. In 2008 we had a lease
3   sale. And at that lease sale, we had six companies bid
2   on -- to explore for oil and gas. We offered 29.3 million
1   acres, and there was 487 leases issued for about 2.8

25   A in that litigation -- usually in litigation sometimes
24   assess the environmental impacts.
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4   assess the environmental impacts.
3   that litigation -- usually in litigation sometimes
2   assess the environmental impacts.
1   that litigation -- usually in litigation sometimes
exorbitant or means of doing so was unknown. The judge is saying that we didn’t follow the regulations that were there for us to follow. So he said go back and do it. So we went back and we followed the Court’s order. We drafted a supplemental environmental impact statement to address the three concerns. Many of you may have attended the public hearing we had in November here on that document. And so we were addressing the Court concerns with that document. And we got comments on the draft SEIS. The comment period included public hearings in Kotzebue, Point Hope, Point Lay, Wainwright, Barrow and Anchorage, as well as a series of government-to-government meetings at the affected communities.

MR. MICHAEL ROUTHIER: So the next question is, was the draft SEIS finalized after that. And the answer is actually no. In this situation, we put out the draft document. We held the public meetings like we are doing for this document tonight, and solicited public comments. We received over 150,000 public comments. Many of those requested that the agency consider the environmental impacts of a very large oil spill. This was occurring on the heels of the Deepwater Horizon event. A very large oil spill was on everyone’s mind, for obvious reasons. So we, as an agency, reviewed the comments and considered our options and decided that the best thing we could do is to analyze a very large oil spill scenario.

And so that we do it correctly, we decided to put it into an EIS form and add it to the draft SEIS, which we already had. So I mentioned a few times now a very large oil spill or VLOS or V-L-O-S. And that begs the question, what is it? Well, like it says up here, it’s a very large oil spill. And basically it’s a tool for us to analyze and understand all the potential environmental effects that could happen in the event that something goes incredibly wrong and there is catastrophic oil spill. It’s a scenario. It’s purely hypothetical. It’s an extreme case. Basically, in developing this scenario, our geologists who have the subject matter expertise in these issues, were instructed to basically consider or tell us what would be the largest possible flow rate from any reservoir known in the Chukchi Sea.

So they looked at basically any sort of variable that would go into determining how fast the oil will come out or how big would the oil spill be. They maximized all those variables, and we got a very large number. But that could be good because it helps us understand all the possible environmental effects, and it accomplishes the main goal here, and that is informing the decisionmaker.

It is important to understand that the very large oil spill is purely hypothetical, obviously. And it’s also different than another concept that you are likely to hear in the context of our agency’s work, that term being worst-case discharge. I’m not sure everyone here has ever heard that term. But that term comes from our regulations. It’s a term specifically within our regulations, and it’s a calculation that’s required whenever an oil company submits an expiration plan or proposes to actually drill a well.

Now, that’s not happening right now. Right now we are at the lease sale stage. If some or all of the lease sale is reaffirmed, then we could possibly go to the next phase which would be an exploration plan phase. We are not there yet. But if we get to that phase, within the exploration plan from the oil company they would do a worst-case discharge, which basically calculates how big an oil spill could be, but it also takes into account a lot of additional information that would be known at that time.

And by additional information, I’m talking about a specific location, specific type of well using specific technology, having specific responses that would be on hand. So it’s much more detailed calculation. And basically our agency would then review that calculation as well as the rest of the exploration plan that could potentially be submitted. We review that and make sure that it contains everything it needs to contain. It does the analysis properly. We do that review before deciding on whether to approve anything.

MS. SHARON WARREN: So again, what input does BOEMRE need? Again, this is in the lease sale stage. There are four stages in the OCS process. We have a five-year program. We have the lease sale stage. We have an exploration plan stage. And we have a development production stage. We are at the lease sale stage. So this is a decision the Secretary will make, whether or not to affirm the lease sale that has already happened in 2008 or make some other changes concerning that lease sale.

So we prepared the draft document, revised draft supplemental that addresses the issues raised by the Court and the analysis of the environmental impacts of a very large oil spill. When we were here in November, we had just a document that was attributable to where we were going to respond to the Court. This document has information in total from what we used to respond to the Court, as well as the very large oil spill.

So this document supplements -- it’s a draft supplement, and it’s supplementing the final EIS that was prepared in 2007. So in references to some of the --
the document you may see references to sections of the final EIS. That was because that was already released in 2007, and this is just supplementing the information that's in that document.

We are now seeking substantive comments on the draft document. So if you have information that -- and if you want an opportunity to provide that information, this is the time to do it. The public hearing and the public comment period -- we are going around the communities for the public hearing like we are doing today. The public comment period is open until July 11th. So we would ask you to get your comments to us by July 11th. There is a website to go to. We are using regulations.gov, but if you go to this website, it will take you directly to the regulations.gov where you can submit your comments, and we have instructions on the back table on how to submit comments using regulations.gov.

And if you have got any questions after you take a look at that, please talk to Scott Blackburn, and he can answer questions concerning how to submit comments through regulations.gov.

So what happens after these hearings? First we will consider the comments that we received through both of the public hearings, as well as through the regulations.gov comments. We will prepare a final supplementary EIS.

This is on a court schedule. We are in litigation with this document, and this litigation is before Judge Beistline with the U.S. District Court with the District of Alaska. He issued an order on May 19th saying, okay, you can do your very large oil spill analysis, but you need to have the Secretary to make the decision by October 3rd of 2011.

In order for us to do that, we need to have the final EIS out at least 30 days before the Secretary can make his decision. And again, this is a lease sale decision whether to affirm the lease sale or to modify and make changes to the lease sale; not to offer more land, but it will be within the confines of what was -- what was first offered.

Once the Secretary makes his decision, both that decision and the final SEIS will be filed with the District Court. There will be a briefing schedule established by the plaintiffs as well as the defendants, and it will go through the litigation process. The Court will then decide whether or not the agency has met its obligations under the National Environmental Policy Act and the federal laws that we have to follow.

Again, this is on the lease sale. This is not a drilling plan. We are not even to the stage of the exploration on there because before even any exploration can take effect in this area is, one, the Secretary has to determine one way or the other that there is going to remain leases out there; and also the District Court has to decide whether or not we fulfilled our obligations under NEPA. And then even that, the Court would have to allow exploration because right now the Court does not allow exploration or anything of activities like that on the lease.

And then there is further NEPA review. So even after we go through this and it just -- there is a lot of ifs. If this, if this, if this. And even with the exploration plan, there is additional NEPA review on it.

So it's another stage process.

And so that's what I wanted to say. Thank you.

DR. JIM KENDALL: Thank you very much.

Now the fun part starts. And since we have this many people in the audience -- we had about the same amount in Kotzebue. And we did something to try it and it worked roughly, really, really good. First everybody said, I don't think so, but we tried it, and by the end of the night everybody said, this is the way you have to do your meetings.

We took the chairs and we put them in a circle. Everybody sat in the circle and we passed the microphone around. And you could either pass, pass it to the next person, and that person could say something or pass. And we have kept going around till everybody agreed I've said all I needed to say and I'm just going to go on. And so I'd kind of like to try that here. Would anybody be really opposed if we just moved our chairs a little bit and we could see each other's faces while we talk? Thank you. I see George shaking his head yes. So let's make the circle up here so our court reporter can see our faces while we talk. Thank you. This will take about three minutes.

(Off the record.)

DR. JIM KENDALL: Okay, Friends. Let's take our seats. I know we have a nice meeting in the back. James, come on up. I think we may have to make our circle closer.

MR. GEORGE EDWARDSON: People will come in.

DR. JIM KENDALL: Okay. Good. Okay. We are going to start in 30 seconds. Now, usually the best way to start is to start with someone in authority. And so if it's all right, I'd like to go to a new friend of mine to see if she would like to start it off. And Doreen, you are free to pass and pass the microphone to your right or you can speak now or speak later. It's up to you. The mike is yours if you want it.
Ms. Doreen Lampe: My name is Doreen Lampe. I live in Barrow all my life. I am married. I have three kids and a couple of grandchildren. I'm concerned about this draft supplemental EIS because our tribal members in Point Hope had to go the length to sue the government to get their voices and their concerns heard. And we had a nice little briefing this afternoon with the ICAS board of directors from our villages, Nuiqsut, Point Lay, and Point Hope where it was called on such short notice.

But my main concern is the -- the reason we had to sue, and it seemed like the government has had a blind ear to our concerns. And even though it's not in our best interest to sue the federal government, we had to listen to our tribal members in Point Hope. And there was a bad year for them when they didn't catch any whales. And they were screaming and hollering that the seismic activity that was taking place in the Chukchi Sea was the main reason that they were not catching whales in Point Hope.

And we were not being acknowledged. We were not being addressed or respected. So we had to join our tribal sister government in Point Hope, one of our village tribal governments under ICAS. We had to join them in this lawsuit in Lease Sale 193. And from our discussions this afternoon, I'm not sure that this draft supplemental EIS will answer the concerns that -- that our primary community members of Point Hope, Native Village of Point Hope have sued for is because of the hardship of the access to their hunting and harvesting of our natural resources.

And in briefly just looking at the table of contents today, first time I seen this draft supplemental EIS today, of all the days when we are having a meeting tonight, and I'm asked to comment on it in this very short notice. And the biggest concern that I feel why we joined -- why ICAS joined the Native Village of Point Hope's lawsuit is because of the trouble, the trouble that hunters have in accessing subsistence resources and trying to get the attention of the government when big oil is right there blasting away seismic air guns and scaring all the game away for miles around when this is the only one chance to harvest those natural resources.

So I'm very skeptical about this draft EIS, supplemental EIS. I didn't see any real teeth in assuring hunters that they will mitigate the impacts from all four stages of your programs, or five stages now, including the five-year program.

So I'm very concerned about how difficult our future hunters are going to have so much red tape and so much traffic from oil industry, so much interference that our ice cellars might not get filled up. We might not have seal oil one year.

But I thank you for taking the opportunity to sit at our tables with us and discuss your draft supplemental EIS this afternoon. And I hope that we can work with you, that you can provide better access to our hunters, better mitigation efforts for the hardships that a hunter goes through when trying to provide food on the table. That's my biggest concern for this offshore exploration plan, the NEPA that we use to start out with.

In the input process for right now versus the exploration plan stage.

You mentioned that in your presentation, that you could follow up on that and lay out maybe the differences that BOEMRE sees in the input process for right now versus the exploration plan stage.

Next, Sir, you are welcome to pass over --

Ms. Sharon Warren: Okay. Is that fine? I'll take the time now. Yes. At the lease sale stage, we do an environmental impact statement. And the purpose of that environmental impact statement is that we do tier, as far as the National Environmental Policy Act says, that we can use that document in the later process.

So with an exploration plan, if we do get an exploration plan, the NEPA that we use to start out with to say thank you for bringing maps and some visuals to help communicate with people who are coming to learn about the work that you are doing.

And I also want -- was hoping that Sharon, you could clarify quickly, in your presentation you had said that there would be additional NEPA processes for the next stages of the Outer Continental Shelf Lands Act process, and you specifically referred to the exploration plan.

In the past, BOEMRE, MMS, the selected NEPA procedure was an environmental assessment followed by a finding of no significant impact. And also the public comment period is somewhat limited in part because of the 30-day time limit in OCSLA. So I was hoping, given that you mentioned that in your presentation, that you could follow up on that and lay out maybe the differences that BOEMRE sees in the input process for right now versus the exploration plan stage.

Ms. Sharon Warren: Okay. Is that fine? I'll take the time now. Yes. At the lease sale stage, we do an environmental impact statement. And the purpose of that environmental impact statement is that we do tier, as far as the National Environmental Policy Act says, that we can use that document in the later process.

So with an exploration plan, if we do get an exploration plan, the NEPA that we use to start out with...
is an environmental assessment. That's what we do first. And at that point in time we determine whether or not, in that NEPA review of the environmental assessment, is there any significant effects that we have not already addressed in the environmental impact statement.

If we have addressed them in the environmental impact statement, then what we do is what they call a finding of no new significant impacts because they have been addressed in the bigger environmental document. So if we had -- if we find that there are significant effects that we did not address, then what we would do is -- then we would go to an environmental impact statement on the exploration.

So it's a tiered process with NEPA because NEPA you do the lowest -- not the lowest, but you do an environmental assessment, and that assesses whether or not you had -- if there is a need to do an environmental impact statement. And like Emma said, when we deem an exploration plan submitted -- so a company submits their exploration plan. We look at it internally, make sure they have all the information that's required by the regulations, and then we deem it submitted.

Once that's deemed submitted, there is a very short public time frame that we send it out because the law requires us to either approve it or disapprove it.

We do put out a notice to prepare environmental assessment with the exploration plan because the exploration plan goes out to stakeholders to review. We do a notice of preparation of environmental assessment. That's the opportunity for others to come and provide comments to us. We do not have the environmental assessment out for public review. So the time for the public to get their concerns addressed is when we issue that notice of -- a notice to prepare an environmental assessment. That's the cue to provide us your concerns so that they can be considered when we do the environmental assessment. Does that answer that.

MS. EMMA POKON: So there is a possibility at the exploration plan stage that if the agency finds that there were potential impacts that weren't considered at the lease sale stage, that there would be a full EIS rather than just an EA. How would that work into the 30-day time limit?

MS. SHARON WARREN: Good question. We haven't -- I haven't been there where we had faced that where all the -- and it's just not impacts. It has to be specifically for the exploration plan. Because the lease sale EIS is very broad. It doesn't have specifics of where somebody is going to drill. So when we get an exploration plan, that's where we have specific -- where they are actually going to go out and drill, where the well is going to be. So there is additional information there for us to do our NEPA on it we don't have at the lease sale stage.

So it's taking -- it's going from a very large program, like from the five-year to the lease sale to the exploration plan. So you are getting finite down to where you are actually talking about.

DR. JIM KENDALL: Let's go back here.

MR. ELI NUQUIPIAGAK: Hello. I'm Eli. I'm a whaling captain from Nuiqsut. I just got through hosting a whaling feed for my people in the village of Nuiqsut. I'm on the other side in the Beaufort Sea from the Chukchi just around the corner from us. It's all the same Arctic Ocean to me. Whether it's the Beaufort or Chukchi, it's all Arctic Ocean to me.

That's the people of the whole North Slope's garden. That's where we hunt and gather food in a short period of time, especially in the summertime when migration of all different marine mammals that come to our area. Some might be lucky to get some, some won't because
the climate change is right now. They're talking about
climate change right now. It's already started. Our
river, Calville River, is now two weeks ahead of time.
That's how changing in our river now in Nuiqsut.

The first (Inupiaq) came around, start to come
at least one or two weeks earlier. That's the changing of
the migrations, the animals and the land and sea that we
depend on.

What kind of assurance are you giving me as a
subsistence hunter if that full-blown exploration and
full-blown barges that will come to our garden and to all
the marine mammals that we depend on from one coast all
the way up to Canadian border? What kind of federal
assurance are you going to give me if something of mass
destruction happens like just happened in Gulf of Mexico?
What kind of assurance are you going to give me if the
marine mammals or the food chain die-off happen? What
will happen that you --
The traditional knowledge of our Elders are
passing away real fast, and yet there is no -- the
scientific of the federal government and the Inupiat
scientists need to work together to address the need of
what -- most and do it right and compromise to help one
another so we will have our food on our table once we
start, because I have experience in the Beaufort Sea.

Before we do that, let's look at what happens to
oil when it hits the Arctic Ocean. We had a sample of
that in the mid 1940s when one of the Liberty ships
building the DEW lines ran aground and was about to be
destroyed by the waves and the only way they saved that
Liberty ship at Lonely was to off-load its fuel, its
bunker oil. And then it killed the whole Admiralty Bay,
the lagoons, you know, going to the west from Lonely. It
killed the whole ecosystem right there.

And then when the storm subsided, the oil that
was up in the high grounds, 50 years later a storm of the
same caliber hit again, and that bunker oil started
killing again. See, the problem with oil in the Arctic
Ocean is the Arctic Ocean is cold, very cold in
temperature. The light ends of the crude oil does not go
into vapor like it does in the Gulf of Mexico; the light
ends will, you know, disappear in the Arctic they don't.

And just to show you how effective that cold is,
cold weather is, driftwood that's been sitting on the
beaches for over 100 years, the outside might be rotting,
but when you cut the wood inside, oil -- the sap actually
starts to flow again. That's how well the cold preserves
oil, whether it be tree sap or crude oil. And that's, you
know, that kind of danger we have to watch.

And when you look at the Arctic Circle -- you

Native ice. We lost three boats, and I was one of the
boats that was lost because of boom project. Shell, they
do the same thing. Twenty years ago, it's the same thing.
Now he's back there doing it -- what will happen now?
What kind of assurance does Shell have for our people if
something like mass destruction happens.
Thank you.

DR. JIM KENDALL: Thank you.

MR. GEORGE EDWARDSON: My name is George
Edwardson, I'm one of the councilmen for Inupiat
Community of the Arctic Slope. And to continue where Eli
just left, when an animal, bearded seal, polar bear,
whale, beluga, when Point Hope misses it, then it
continues up to the east and Point Lay has a chance to go
after the same animals. And if they miss it, it continues
over. Wainwright then has a chance to attempt to catch
that -- harvest that for their family. And it continues
right on into Canada.

This is the migration routes of the seals we
depend on, walrus, the whales, polar bear. These are the
animals we depend on.

And when you look at the Chukchi, you have to
look at it from this perspective. You mentioned VLOS,
very large oil spill. Okay. Let's look at a very large
oil spill.
we will run into schools of salmon; sometimes salmon, sometimes other fish, more than one species of salmon in one big school. And I learned the dimensions from the -- from the Naval Arctic Research Laboratories' aerial photos of these schools of fish. There was one school of fish eight miles wide and 28 miles long, and these were all juvenile salmon.

Just to show you how thick that school is, one of my uncles once drove his boat into it and could only get about one-fourth of the way in, nine miles out straight out in the ocean in the middle of summer, he stepped out of his boat into the ocean, and he never went halfway up to his knees walking on top of a school of fish.

This is that fish that is in the Arctic that goes to the Arctic when the currents in the -- when the Bering Sea froze north in summer. This is the fingerlings that went there. And when they mature, they flow south, start to go back into their rivers where they originated from.

A few years back, the Yukon River did not get its fish. And that was the same summer, that same spring that the seismic was done in the Chukchi. And the salmon that was supposed to have been going to the rivers south of the Arctic Circle scattered all across the North Slope.

We are looking at the last third of the world's fish: North Sea, the Bering Sea, and the Pacific Rim. Two-thirds of them are damaged. One-third is dead. And in -- in the North Sea, the salmon is no longer harvestable because it's been overfished. But the bottom fish are being negotiated on by these two big major countries. Now, the last third of the world's fish is the salmon and its nursery is the Chukchi. Your responsibility is to make sure not just the lease sales, but what the ground -- what the ocean feeds people.

We are looking at the last third of the world's fish. Are you going to let it be destroyed so a couple of companies can profit? I mean, this is something you have to seriously look at when you look at the Arctic Ocean. I could talk all night, but I'll give somebody a chance to say something. And everything I gave you has come in -- I've learned from the United States through the Naval Arctic Research Studies or international organizations, you know, conferences conducted.
numbers I'm talking about are the United States' and other major nations' numbers. And all I'm doing is reminding you of them.

And my problem is I've lived here, and the ocean, the animals in the ocean, and my relatives that live up here, we have a very serious problem, and we -- that is, we cannot live up here without the food from our ocean. We are stuck with that food. You can't bring me beef and then make me live here and be healthy. I can't.

It will not happen. I need that fat from that animal that lives in the ocean. So this --

I need your help. We all need your help. So together we can protect the last third of the world's fish. And it's not all that's going to feed us. It might make us travel faster or a little bit longer, but it's not going to keep us alive. And when you are looking at the last third of the world's fish, which also feeds, you know, the seals I eat, the belugas, the bears, the animals I named, that's what I need. I need their fat. And they get their fat from the salmon fingerlings.

And two years ago, NOAA had done some studies on the coast, and they found our coast filled with salmon fingerlings, the fish I was saying that migrated north following the currents. I mean, you are looking at this information. It's not something new. It's something we all have all been watching throughout our whole history as a people.

There is very few of us up here that live up here that depend on this up here. We want to stay longer. We need our kids to live here after us. They have to be here. And the only way they can do it is to make you, the government, understand. We know legally you can't go selling something that don't belong to you.

At the UN, we have also come to understand when the United States says they are going to do something in the Arctic, they always remind the world we are under their custodial care. You are taking care of us, therefore, you can talk about the ocean. The United States has not signed the law of the high seas. Technically speaking, the Arctic Ocean is not yours, it's mine, the people that live here. And I am not ready to have my home destroyed.

DR. JIM KENDALL: Thank you, George.

MR. JAMES PATKOTAK: Thank you. My name is James Patkotak. I grew up here in Barrow, Alaska. I learned how to hunt from the ocean. Like George said, that's our garden out there, and I learned at a very young age hunting oogruk, seal and the whale out there. Now, we can't eat all the fish. The White Man food don't fill me up as well as our Inupiat food does. So that's been my concern, and also it is a concern of many people on the Slope.

Now, will that -- is that -- the EIS -- the EIS, does that -- is it still in there, that concern that has been brought out a while back when this used to be MMS? I'm wondering about that. Look into that, and if you are going to do the supplemental EIS, check it out. Make sure it will still stand. That's all I have. Thank you.
still moving forward. There are a lot of people working on it every day to make sure it lives up to what is expected. You know, it's something we are taking very, very seriously. As I say, I haven't seen the latest report on it, internal report, that is; but I know people are working diligently to make it happen and to get it on the Web. Does anyone know anything? I'm sorry. We can always get back with you, but we didn't come prepared to answer that question, other than the fact that I have heard people talk about it and people were pushing on it as hard as they can.

MR. BEN GREENE: Okay. Good. Thank you very much. I appreciate the update.

MR. GEORGE EDWARDSON: Hi again. George Edwardson. What I didn't do is tell you about my education and where I have worked in the past. 1960 I captained the very first cleanup boat that ever came to the State of Alaska. I had to change the system so it would work to pick up the oil in the water. And it only picked up the heavy ends that floated to the top. The light ends, like the gasoline and the diesel and the crude oil and the natural gases from the cold weather, that don't go -- evaporate up in the air, that remained in solution, but the cleanup boat I had captained was for Pan American Petroleum in the Cook Inlet in 1968.

In my college education, I'm a geologist. I'm a mining and petroleum technician, and I'm also a certified gas field operator with over 17 years of running a gas field and having worked at Prudhoe Bay from the beginning during the exploration. So I do know the industry and what it does and how it operates.

And when you look at my education, it's more than most in the oil industry. I took that education to find a way to try to find a way to protect my home. And I had worked for the -- our corporation, made an engineering firm for them, and was in the process of going after the offshore development. Then I asked the board, if it's not safe, what do I do? They told me, if it's not safe, find a way to stop it and we will be right behind you. And this is 1977.

And now we are in 2011, and the knowledge the industry has and the direction they are going has not changed one bit.

They claim they study, but where is it? We don't see it. I haven't seen it. Like I said, I have the degrees from the universities that says I'm an oil man. And when you look at VOL, very large oil spill, we all have a slight understanding of the Arctic gyro, how the Arctic Ocean goes around in a circle.

One year I came up on one of the barrier
islands, and there was a couple of people studying the
birds that were living on the island in summertime. They
had a drift card, and it was from a university in the
northeastern end of Australia. He showed me the drift
card he picked up from the barrier islands. That's less
than 30 miles to the east of Barrow. And then he asked me
how did this get there. I just happened to have a copy of
National Geographic on the ocean's currents, and I showed
him how it traveled.

It was south of the south -- South America, went
on the west side of Africa, went north, west side of
Europe north, and then it got in the North Sea and then
made the trip all the way around until it got to the
barrier island where it landed. And that drift card had a
four-year date on it.

And the Gulf of Mexico, we all worry about that.
I'm expecting to see that oil to the east of Barrow in not
too far in the future. The way that drift card was
traveling tells me.

And like I said, our Arctic Ocean is cold, so
the diesel and the gasoline don't evaporate out of it. So
it comes back to me every ten years. And then there is
that big nursery between Siberia and Alaska. Every time
it comes around, it's going to hit that. And that's the
world's fisheries everybody better be worried about. My

Now the heat is hitting them, and on top of it
we have this seismic noise, we have this drilling noise.
Seismic that when they send off a seismic boom, the ships
are falling apart in between their seismic work. They are
rewelding the ships over and over.

And I'm listening to this from the people that
work on the ships. Our marine mammal observers come and
tell me when they get off from the boats that in between
the seismic works, the welders are busy keeping the ship
together.

Now, this is supposed to be a harmless boom.
And when steel can come apart from the seismic, there is
something drastic going on in there someone is not
bringing out. And the government is not willing to stick
its nose in there to see if it's really for real, even
though the other agencies bring out the point that when
the seismic boom is set off in the Chukchi, Banks Island
in Canada 400 miles to the east cannot do their seismic
work because of the background noise.

Now, what's happening to all the animals in
between? If I shoot a Steller's eider or one of those
endangered birds, I'd go to jail for ten years right now.
You will not hesitate to lock me up, the Feds won't. What
does the Feds going to do? Do you have a plan? Does the Feds have
a plan for that? I'm starting to wonder now.

Now, once the lease sales happen and the oil
industry goes and buy a spot where they are going to
drill, now, will the oil industry keep their word in
hiring locals to be out there drilling with them or are
they going to say the heck with them, the Natives, saying
we are going to drill. We don't care what they say. I
tell you, what that's the -- that's a question that often
people ask, you know. What's going to happen? You know,
that's a big question. Thank you.

MR. JAMES PATKOTAK: What's -- what's
the -- what are the Feds going to do once the oil come up
to -- come up to the Arctic that does spill down in the
Gulf of Mexico? Who is going to clean it up once it gets
up here? Once there is ice out on our ocean, what are the
Feds going to do? Do you have a plan? Does the Feds have
a plan for that? I'm starting to wonder now.

Now the ice is almost all gone and that
family -- that family, that ecosystem now is going through
cultural shock. I call it a cultural shock because the
ice is no longer there covering it. And they had -- the
microorganisms that live in the ocean have adapted to the
cold.

Now the heat is hitting them, and on top of it
we have this seismic noise, we have this drilling noise.
Seismic that when they send off a seismic boom, the ships
are falling apart in between their seismic work. They are
rewelding the ships over and over.

And I'm listening to this from the people that
work on the ships. Our marine mammal observers come and
tell me when they get off from the boats that in between
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Now, this is supposed to be a harmless boom.
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bringing out. And the government is not willing to stick
its nose in there to see if it's really for real, even
though the other agencies bring out the point that when
the seismic boom is set off in the Chukchi, Banks Island
in Canada 400 miles to the east cannot do their seismic
work because of the background noise.

Now, what's happening to all the animals in
between? If I shoot a Steller's eider or one of those
endangered birds, I'd go to jail for ten years right now.
You will not hesitate to lock me up, the Feds won't. What
happens to the industry when they destroy whole flocks of
them like that? I mean, there is some heavy-duty
and it came about 20 years after it had been flowing. And
that was the Exxon Valdez. Now, we were guaranteed that
spill when the pipeline was in the process of being built.
That was a guarantee given and, sure enough, the federal
government kept their promise. They had Exxon Valdez.
And then when they done -- in the '80s when they
first attempted to do their offshore drilling up here in
the Chukchi when the first EIS came, we were guaranteed
one and one-third major oil spill. Exxon Valdez said you
keep your word. Now you guarantee me a one-and-one-third
major spill. You have killed the ocean with a one-third
damage. Your whole major spill had guaranteed that it
can't stand back up again.
Now, this is what I'm looking at when I look at
the United States and its promises and its EIS. You give
us an EIS right here, which we saw for the first time
today, and we are supposed to be sitting here commenting
on that. And when you look at us throughout the whole
North Slope, I don't think there is even two handfuls of
people that can read those books and understand what it's
saying because we are a subsistence people.
What are we going to do? Do we have to secede
or what in order to stay alive? We are Americans, just
like you are. I have a right to live like the way I want
to live, and my parents, going on back, they tell us we
don't like to stay around people and noise.

DR. JIM KENDALL: Again, we are going to
continue to go around until somebody does not take the
microphone. Making sure everybody gets a fair shake.
James is not going to disappoint me.

MR. JAMES PATKOTAK: I feel this is a very
important gathering for our people. This is our lives
that the oil industry -- it's our livelihood. You know,
it's very important that we express our -- express our
feelings for our Inupiat people.

And I've heard so much negative stuff come out
of our local people here regarding the oil industry when
they are working out in Prudhoe Bay. When they are out in
the ocean, they get these negative reports back to us when
we gather in our own little circles now and then. People
talk about the oil industry, how the Inupiat are being
treated by the oil industry.

Now, hopefully, with the industry out in our
garden, hopefully our local people get trained to be
captains of these drilling ships to keep their ears and
eyes out for our local people. Be top dogs in our -- in
the oil industry -- one great day, huh? I hope our
Inupiat people get to that point and get even more
serious, more serious than we are now.

With that, I'm going to close. Thank you.

DR. JIM KENDALL: Thank you, James.
Anybody else wishes to speak?

MR. GEORGE EDWARDSON: Let's finish off.
Okay. Let me finish it off.

DR. JIM KENDALL: Okay. George.

MR. GEORGE EDWARDSON: When Trans-Alaska
Pipeline was in the process of being built and the EIS was
conducted and in that EIS the U.S. federal government
guaranteed one major spill in its transportation system,

have lived here on this piece of land -- this is the
seventh ice age we are coming out of, according to the old
stories we have. Is this going to be my last ice age?
What gives?

DR. JIM KENDALL: Thank you, George.

MR. JAMES PATKOTAK: More one thing. I
wonder if -- I wonder how the oil industry would think and
I wonder how the White Man would think if we decide to
give them an EIS. I mean, I'll give you an environmental
impact statement because you are coming up to our land
here. I'm -- we are going to require you to fill out an
EIS for us. I wonder how it would turn out. That's all.

DR. JIM KENDALL: Thank you, James.
Anyone else? I may have to close the meeting a tiny bit
early.

MR. GEORGE EDWARDSON: I think we got the
message through, didn't we?

DR. JIM KENDALL: George, I think you got
the message through. Thank you. If there are no -- any
other -- aha. We were going to close, but if we have
another person who would like to speak --

MR. GEORGE EDWARDSON: Yes, we would love
to speak.

MS. QAIYAAN OPIE: Sorry. I was going to
drop by and see if anybody was still here.
comfortable knowing that they are a part of the comments being made and knowing exactly what the presentation encompasses in that sense. So I really appreciate that. Thank you.

I also did want to comment that I know BOEMRE at this point is kind of going above and beyond what the judge mandates in this sense in going beyond to take the extra effort to come and have the community and our agencies involved. So thank you very much.

And we do have some comments, and this is on behalf of ICAS here. And I'll just kind of read verbatim here since I don't really have much to say personally at this moment. I didn't quite catch the full conversation here.

So first of all, we do thank you for updating the previous supplemental EIS from last fall. While the EIS is much improved, ICAS still does have many concerns about the analysis and whether the lease sale should move forward.

Our first point here is the baseline information and that ICAS, it's been pretty well known that we, as well as a lot of agencies, have long advocated that the government must have baseline information about the area of OCS before authorizing work there. The EIS and the recent USGS report both demonstrate that critical information is missing. And we ask that the government ensure it has more information about the Chukchi and the important natural resources before deciding where to sell offshore oil and gas leases in this area.

Number two regarding oil spill, we appreciate the updated information on a very large oil spill, VLOS -- adding to the list of acronyms that I'm becoming accustomed to -- that is included in the EIS. This analysis shows the very far reaching and devastating impact of a spill in the Chukchi, but does not answer our questions, which are: Are the oil and gas companies capable of cleaning up a spill in Arctic waters with ice, hurricane force winds, darkness, and other challenging conditions? Should they be allowed to explore if they have not shown that they are capable of a cleanup.

The next question: Will oil and gas companies have to be able to drill same season relief wells? Also, what will be the response time for such a spill with the nearest Coast Guard office over a thousand miles away? And will the Coast Guard have ice breakers and other vessels to be able to assist in cleaning up a spill? And what will the oil and gas companies and the government do if subsistence resources are not available for Chukchi villages who cannot afford to live off of store-bought foods.

Lastly, here is climate change. Comparing the impacts to our climate from the lease sale to a worldwide baseline is not appropriate when our communities are already being impacted by climate change. Our ice cells here are rapidly melting like they haven't before, and our sea ice is changing. I can very comfortably say dramatically because I recently just turned 30 and I myself consider that old, but to my community and my mentors it's fairly young. But I know that in my lifetime I have been able to see this happen before my eyes. So it is very real and very here and happening very rapidly.

Also we must change our subsistence activities to respond to this climate change and you must address the impacts of climate change here and not just compared to the rest of the world. And also cumulative impacts -- the analysis of cumulative impacts must be expanded. The definitions of past, present, and foreseeable impacts need to be expanded. The geographic range considered needs to be broader for migratory species like the bowhead whale.

Significant thresholds. How the environmental impact statement defines significant impacts to different resources is unlawful. You are requiring substantial violations of federal law before an impact is considered to be significant. These definitions need to be rewritten.
so that significant impacts are recognized before federal law is broken.

And more alternatives and a hard look at the impacts are required. We appreciate the inclusion of additional qualification in the EIS on bowhead whales, very large oil spills, and natural gas development. This information has not changed the outcome. This information has not been used to develop a reasonable range of alternatives. This information has not been given a hard look in the analysis. And actual analysis of a reasonable range of alternatives and a hard look at the new information is necessary before leases are sold.

And these are some cumulative points that ICAS wanted to make. So I wanted to present that. And I'm sitting here wondering, oh, no, what if somebody was here and already did that. Have they?

MR. GEORGE EDWARDSON: You did good.

DR. JIM KENDALL: No, that's fine. Thank you.

MS. QAIYAAQ OPIE: Okay. Yeah, so thank you very much.

DR. JIM KENDALL: Thank you very much.

You were going to grab, say something. Anyone else would like to say --

MR. GEORGE EDWARDSON: One last time on

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MR. SCOTT BLACKBURN: I'm Scott Blackburn, and I'm with the Alaska Region of BOEMRE, as well. I'm a technical editor and writer.

MS. QAIYAAN OPIE: Qaiyaan Opie, ICAS, Inupiat Community of the Arctic Slope, National Resources Director.

MR. GEORGE EDWARDSON: Again, my name is George Edwardson. I'm one of the councilmen for Inupiat Community of the Arctic Slope.

MR. MIKE HALLER: I'm Michael Haller. I'm the community liaison for the Bureau of Ocean Energy Management, Regulation and Enforcement for the Alaska Region.

MR. JAMES PATKOTAK: I'm James Patkotak. I worked for ICAS as a natural resource director myself. Currently I am -- I work for KBRW radio station. I'm a DJ.

UNIDENTIFIED SPEAKER: I recognize your voice.

DR. JIM KENDALL: And with that, if there are no other comments, I would officially like to close this meeting on the public hearing for the revised supplemental EIS. I want to thank you all for coming out.

I know there is a whale celebration tomorrow. And I'm really pleased we had some folks here because I know it's a really important celebration tomorrow.

Thank you all for coming, and your input has been invaluable. And have a good evening.

(Proceedings adjourned at 8:50 p.m.)

REPORTER'S CERTIFICATE

I, MARY A. VAVRIK, RMR, Notary Public in and for the State of Alaska do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that the proceedings were reported stenographically by me and later transcribed under my direction by computer transcription; that the foregoing is a true record of the proceedings taken at that time; and that I am not a party to nor have any interest in the outcome of the action herein contained.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my seal this _____ day of ______________ 2011.

MARY A. VAVRIK,
Registered Merit Reporter
Notary Public for Alaska

My Commission Expires: November 5, 2012
BE IT KNOWN that the aforementioned proceedings were taken at the time and place duly noted on the title page, before Mary A. Vavrik, Registered Merit Reporter and Notary Public within and for the State of Alaska.

The whole point of this meeting is to get information from this community to help us make a certain document better because that document and the material that goes with it goes to the decisionmaker. The decisionmaker is the Secretary of the Interior. He will make the decision. We don't make the decision. We just package up the information that people have to give us.

Now, my name is Jim Kendall. I'm the regional director for the Alaska Region of BOEMRE. Carrying that chair over there is Mike Haller. Mike Haller is our community liaison. He helps us make contact with the communities to make sure your information gets into the system.

Sitting down there is Sharon Warren. Sharon is the project manager for this. She's the one that has to make sure everything works and comes together. Sitting next to her is Michael Routhier. Michael is the EIS coordinator. He takes all the pieces and puts it together from the scientists. And Scott Blackburn is over there. He was taking names. He is our technical expert and technical editor. His job is to make sure all the information we get from a lot of different people flows all right. Now, the other person we brought with us is extremely important. And that's Mary Vavrik.
MS. SHARON WARREN: Thank you, and thank you for allowing us to come into your community and provide this information to you and to get the comments from you because it’s very important.

Why are we here today? We’re here because we have a specific document that’s back on the table. It’s the Revised Draft Supplemental Environmental Impact Statement for the Chukchi Sea Sale 193. And when was the lease sale? The sale 193 was held in February of 2008.

We did an environmental impact statement in 2007 prior to conducting the sale. There was six companies that bid on the rights to explore tracts for the oil and gas. We offered 29.3 million acres, and 2.8 million acres was leased. And that was in 2008. And I know today is 2011.

So here is what happened. Days before the lease sale, plaintiffs sued to invalidate the lease sale. They alleged that the EIS -- they said that the EIS to the Court did not address the potential environmental impacts that was necessary for us to do under the National Environmental Policy Act.

So in July of 2010, the judge ruled that the EIS on most part was satisfactory, but he had three concerns, and he wanted those concerns addressed.

The three issues he wanted to address was, he said the agency failed to analyze the environmental impacts of natural gas development, even though there was industry interest in the natural gas and even though we received over 150,000 comments.

And I’ll turn the mike over to Mike so he can tell you what happened next on this.

MR. MICHAEL ROUTHIER: So as Sharon was saying, we received over 150,000 comments on the draft SEIS we prepared. And that’s in addition to all the public testimony we received going around to all the villages and then down in Anchorage. Many of the comments that we received asked the agency to analyze what would happen if something went horribly wrong and there was a very large oil spill in the Chukchi Sea.

As you all remember, this is coming on the heels of the Deepwater Horizon event. Everyone has seen those images on TV. It was and is of great concern to people. We, as an agency, in reviewing the comments, considered what can we do to address some of these concerns, and we decided that the best thing to do would be to prepare an analysis of the potential environmental effects of a very large oil spill in the Chukchi Sea.

Now, the term very large oil spill, what does that mean? Well, we have a great group of geologists in our office, and we went to them and asked the question, what is the highest possible flow of spilled oil that could possibly occur in the Chukchi Sea.

And so they studied some data, and they
basically provided us with a detailed scenario of what is
the worst thing that could happen out there theoretically.
We then provided that scenario to our scientists, our
wildlife biologists, our oceanographers, our air quality
experts. And they looked at the scenario and then wrote
analysis on what the potential environmental effects could
be from such an oil spill.

It is important to remember that VLOS is a
hypothetical event. It’s an extreme case. It’s an
extremely large spill. And it’s not -- it doesn’t
represent any actual well that a company is proposing to
drill. It’s just something we are using in our NEPA
analysis to inform the decisionmaker of the gravity of
these concerns.

A very large oil spill, as I just described, is
actually a bit different than another term that you might
hear associated with our agency or oil and gas activities
in general, that term being worst-case discharge. I bet
some of you have probably heard that term. Just as an
explanation, the term worst case discharge is a specific
term found in our regulations, and it’s a required part of
an exploration plan.

Right now we are at the lease sale stage. There
is a couple -- there is leases out there, and the
Secretary eventually has to decide whether he wants to
refirm those or cancel some or cancel all those leases.
We are at the lease sale stage. If some leases were to be
affirmed and if an oil company were to down the road
submit an exploration plan, then that exploration plan
would include a worst-case discharge.

The worst-case discharge calculation includes a
lot more information than the very large oil spill because
there is a specific company that wants to drill a specific
type of well in a specific location going out for a
specific type of oil. So a lot of the variables are
known. There is a lot more information known. So the
numbers might be a little different. This is just a
heads-up in case you see this other term come up. And
it’s the worst-case discharge that is used to inform the
oil spill response plan.

In other words, when the company prepares and
stations assets to respond to a potential oil spill, they
will use a worst-case discharge as the basis for that.

MS. SHARON WARREN: So what do we need
from you today? We need to have your comments on the
Draft Revised Draft Supplemental Environmental Impact
Statement. As I said, we were here in November. We took
your comments. And we now have another document for you
to review.

We are looking for your comments. We are using
regulations.gov, and the website is here. We also have
some handouts over there at the table on how you can
access regulations.gov. And then after the break -- yeah,
at the break that we will probably take, you can come up
and see the maps that we have up on the wall. It shows
what the -- what the area is that was the lease sale area.
It shows what the -- the alternatives, what was some of the
areas that was looked at prior to the decision being made
on this. So again, this -- this is a decision that the
Secretary will be making.

So after this public hearing, what happens next?
What happens is we will take your comments that you
provided us, and we really need them because we really
need to make sure that the document and the way we portray
subsistence, the patterns, the migratory patterns, is the
correct information that we have before us. And we will
take those comments that you provide to us. We will take
the public testimony, transcripts that we also have. We
will go through those to take a look at it to see where we
will make changes in the document. And so that what we
will have is a final supplemental environmental impact
statement that will include the transcripts, will include
our response to comments that people have provided us, and
also you will know where in the document that changes were
made and how your comments were incorporated in the
document.

Then what happens? We are under a court
deadline. We have litigation. Judge Beistline said,
fine, you can go out and do your very large oil spill. It
is beyond what he asked for in his three concerns, and he
said at the time that we really didn’t need to hold public
hearings, but the agency felt that it was necessary to
come out with this document again, back out to the
communities to ask them how did you -- do we have the
correct information in the document for the very large oil
spill. So the judge said, you know, you can go out and do
those things, but we want -- he wanted a Secretary
decision by October 3rd.

And so for us to have a decision so that the
Secretary can make the decision by October 3rd, we will
finalize the supplemental EIS, and it will be in final
form sometime in early September because it has to be out
there to the public for 30 days before the decision can be
made.

Again, this is the lease sale. Whether -- the
Secretary can either affirm the lease sale on how it was
conducted in 2008 and the leases that were issued; he can
modify it; he can cancel the leases. We can -- everything
is on the table with this decision.

And in the OCS Lands Act, it provides for four
MS. SOPHIE HENRY: I have a question. I get to say my piece. So a little respect for everybody. I just don't want to have a dialogue with a small group of people. So the answer to your question is halfway. We you can call us on the phone. You can send us other documents out to the communities so that the documents would be here when we also came here.

MS. SHARON WARREN: We brought this document out to the public -- notification was on the 21st of May. And we did -- around that time we sent it out to many of the stakeholders. The document was sent out. And then when we went out to the public hearings, several weeks prior to coming to the public hearings, we also sent documents out to the communities so that the documents would be here when we also came here.

MS. SHARON WARREN: Yes. The comment period is July 11th, and we are using regulations.gov. So please provide your comments by July 11th. If you have got any questions, like I said, there is a handout on how to do that. On the last page of the handout there is a telephone number to contact if you have any questions on the record. Is this the only -- I mean, you say a lot of different other villages. Is it just for the outlying coastal villages that you are getting testimony from, or is it the whole state of Alaska?

MR. WILLARD NEAKOK: Willard Neakok, for the record. Is this the only -- I mean, you say a lot of different other villages. Is it just for the outlying coastal villages that you are getting testimony from, or is it the whole state of Alaska?

DR. JIM KENDALL: Basically the whole state of Alaska and anybody else who wants to comment. So far now, we have gotten comments from Florida about this. So it's open to the entire country and anybody else. I think I got a few comments from Canada, but for actual
has a public hearing in Fairbanks and we have tomorrow night in Anchorage. We can’t visit every place, but we need to visit places like Point Lay.

MR. WILLARD NEAKOK: Thank you.

DR. JIM KENDALL: Again, before we open it up generally, are there any Elders that would like to speak first? This is really important. And the reason why I like to push that is that I’m a big believer in traditional knowledge or traditional science, if you want to call it that. And my staff and I are working as hard as we can to make sure that we get the traditional aspects of nature and observation and science in the document, as well. So are there any Elders that would like to speak before we start? Any elected officials, like maybe the mayor? Okay.

And that case, then, let’s start the process. And it gets kind of fun. What side should I start on, or should I start in the middle? I’m going to start with you, Earl, and if you could pick which side to go to.

MR. EARL KINGIK: (Inupiaq.) My name is Earl Kingik. I come from Point Hope. I’m a whaler. I belong to a clan called Qagmagtuq. I work for an organization called Alaska Wilderness League. We have

ocean due to the fast movement of the Bush era. The Bush era gave us a big headache. Now we are going to have to kind of slow them down, and time-out is called upon them. So this is your chance to open your heart to the garden you love the most, the garden that provides unity, the garden that provides cultural activities throughout the whole community because we are part of the ecosystem here. The ecosystem shouldn’t be messed around with.

Thank you.

DR. JIM KENDALL: Sir, you have the floor.

MR. JULIUS REXFORD, SR.: My name is Julius Rexford, Senior. I’m a whaling captain for the Village of Point Lay. I also sit on AEWC as a commissioner, and I sit on -- I sat on the North Slope Borough Wildlife Committee for about five or six years.

And we got to look at it like -- we can’t look at it like it’s not going to happen, the opening of our Outer Continental Shelf for drilling, but we need to talk about stipulations that need to be brought out to the floor and to the BOEMRE staff and personnel.

That 60-mile buffer zone is something that needs to be there. I know that these ships will be using low -- the lowest grade fuel to get out there and run their operations. We need to put in stipulations on having them use ultra low sulfur fuels to burn in their ships and

been doing this for a long time. Native Village of Point Hope took the government, took our own government to court, and you see what we come up with. This is what we want to hear.

I am here to listen to you guys. I’m not here to make comments, but to listen to you guys and what you guys are saying. And that way, whenever I go to different villages, we will do it better. And hopefully we will have Dr. Kendall give all the comments to everybody.

We had over 60 people in Point Hope. To my feeling, 100 percent was against offshore activity due to oil spill and other issues that’s in front of them. Our people even decided to go to the coastal plains of ANWR so they would stay away from our ocean we love the most, the garden that provides unity, cultural activity, and everything that’s been going on for thousands of years.

It is good that Dr. Kendall wanted to listen to you guys. This is your chance, and we want to hear and I want to hear from you guys, too. That will make my work a little easier. Like somebody said, who all is going to be giving comments.

I went to Alaska Intertribal Council, 209 tribal organizations. They passed a resolution opposing offshore activities. I went to National Council of American Indians. I asked for their assistance in protecting our
you know, trying to find, you know, fossil fuels to keep
our homes going, cars and everything. I never even
mentioned about that. I know we need the fuel. I know we
need the fossil fuel to keep our businesses going, our
lives.

And, you know, what can we do on land first
before we go out to the ocean because we have ocean
currents that go all the way down to Bering Sea. And it's
going to affect any kind of marine life that is in there
if we have a very large oil spill.

You know, Prince William Sound is still trying
to recuperate. But if you dig down a foot deep in certain
areas, you will still find oil. And what happened in Gulf
of Mexico, how many millions of gallons was, you know,
pouring out into the ocean? Took them four months to
finally cap that thing off, or close to four months. You
know, if we have it here, we lose our wildlife, our
culture of hunting, whaling, fishing. We lose everything.

That's scary.

I want my kids, my grandkids -- like I stated,
you know, in the Anchorage Daily News, I want them to
enjoy what I have enjoyed while living here in Alaska in
Point Lay. I want them to taste the food that I have
tasted, I have hunted, I have given out, I have shared. I
want my grandkids and possibly my great-grandkids, too, to
enjoy the things that I have enjoyed because if we have a
very large oil spill, you know, we lose everything.

The whales live off the krill. And those are
little, tiny creatures. If we lose those, we lose the
whale. We have beluga. We have fish. The belugas eat
the fish. The fish eat smaller fish, and so on and so
forth all the way down to the planktons, micro-organisms.

We have wildlife. We have seabirds come from as far as
Argentina, South Pole coming up this way to migrate to
be -- you know, repopulate. And we lose those, too. But
mainly, you know, from the ocean. If we have a large oil
spill, we lose everything, our way of life.

And if we do that, then, you know, we have to go
to our local store to try and substitute the food that we
have hunted for generations, from generation to generation
that was passed down by word of mouth. No documented
things like that on the board on how we do things.

Our Elders taught us how to hunt, how to take
care of the ocean, how to take care of the animals on the
land. We have a wonderful state. We have a wonderful
village. We have a wonderful way of life.

If we lose our ocean, you know -- I don't know
how many times I might have to say this -- but we lose
everything. And if we start -- you know, the way that
global warming is going, pretty soon we are going to have

I better pass the microphone on. I get carried

ground. And that's a scary thing to think about. But the
most scariest part is we lose everything.

I love the way I have lived before, hunting,
fishing, subsisting off the ocean, that the ocean has
provided for us Inupiat. We are all up and down the
Alaska coastline. I'm grateful that hopefully, you know,
our Secretary of Interior will listen, understand what I
want to see in the future: Clean ocean, our wildlife
still out there.

I know that global warming is making our ice
thinner and thinner, thinner every year. Pretty soon we
might not even have a North Pole. All it will be is just
magnetic north, no ice.

A lot of things are happening globally, and we
see it up here first. We see things that are going on at
Prudhoe Bay, all over the world, oil spills, oil spills,
devastation of animals. Might bounce back another 50 or
60 years, but that's like 50 years of just going to the
store, go buy pizza or chicken or whatever, not the food
that we have enjoyed for thousands of years living off the
ocean, our garden. It's scary, real scary. I want my
grandkids to, you know, enjoy the foods that I have
enjoyed, enjoy the way of living, hunting, fishing,
subsisting the way I have enjoyed it.

I better pass the microphone on. I get carried

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away because I don't want to see offshore drilling. We see oil companies say zero discharge, zero discharge. Looks good on paper. Looks good when they talk to us but, you know, we still have oil spills by pollution or human error. And that's their way of saying zero discharge, still having oil spill.

I'm grateful that, you know, hopefully our voice will be heard. Hopefully that, you know, Secretary of Interior will think about the statements that are going on right now, testimonies throughout Alaska or throughout the world regarding the Outer Continental Shelf plans to drill in the Chukchi Sea, in the Arctic Ocean.

So I'm glad that you folks are here. And I'll pass it on. Thank you.

MR. WILLARD L. NEAKOK: How do I follow that? I'm in the same position as my dad. First of all, my name is Willard Neakok, and I have no see -- no representative. I represent nobody. I just wanted to represent the Village of Point Lay. Our people are fighting people, and we have had to fight for our land.

We have had to fight for our animals, and now we are fighting for our ocean. So why stop now?

I mean, the reason why we go hunting is, like my dad said, we love the food. We love doing all that. And I may -- I'm one of the leaders -- drum leaders for our community, and I love it. I love it with a passion. And you know, that's one of the ways that we celebrate for successful hunting and celebrate life. And so I am in no position supporting offshore drilling.

MS. MARIE TRACEY: I'm Marie Tracey from the Native Village of Point Lay. I work for our mayor's office as a communications liaison for the Native Village of Point Lay, and I'm a volunteer fire fighter and a volunteer ambulance crew member, and I'm a coordinator for the volunteer search and rescue group, and I'm the ASTAC director. I'm a mother. I'm a grandmother. I'm not supportive of the drilling offshore, and I wish that they would try and drill onshore before they try to drill offshore.

And with that global warming that we have been witnessing, last fall we had thousands and thousands of walruses off our beach. I was born in the old site on the sand spit across there. And about one mile north of the village on the beach to our 11 miles, maybe at least ten miles up the beach was loaded with walruses. And then when you look out -- out to the ocean, there are thousands and thousands out there. And if you see our walrus picture, the walruses, when they come on land, they are right next to each other, real crowded and everything.

And that's how they were coming up on the beach.

And when they ran out of beach, the sandy beach, they were being pushed up on the land, you know, with more walruses coming up on the sandy beach, just really crowded. And you could hear them. And when you look out in the ocean, you know, the blue ocean, green ocean, you would see nothing but like brown spots, brown lines at the distance, there is so many walruses out there.

If there is a stampede, then you could hear their mourning, their loss of a loved one. It's really sad to hear. And but when they came in, they were so loud that the next morning I was talking with my cousin. She said, boy, I couldn't sleep last night. My neighbors just like they were quarreling all night. I couldn't sleep. I told her those were the walruses out there making noises.

She said, oh, my, I thought they were my neighbors.

Anyway, but -- and then we have our beluga harvest that we have that we depend very huge, hugely on.

We have our biologist, Robert Suydam here. He comes to tag our beluga, and then when he tags them, he set them free, and then they would monitor them because they would have satellite tags on them. And then when he gets information, he would give it to us, and we would see where the beluga go, you know, because they are tagged. And it's amazing to see where they go because we have never had this information before. And since Robert Suydam has been here, we have gotten a wealth of information about beluga. And they take samples.

And now we have a loon study going on. Daniel Rizzola from UAF Fairbanks has been coming here for three years to tag the loons, and he would also send us information. It's amazing where these birds and where these mammals go. And I would like to keep this going because we are getting a wealth of information from these people that come in to our village.

And Robert Suydam is getting old with us, too. And he's bringing his wife, here, too, which is great.

But I would -- I would discourage drilling in our ocean because we have hardly had any caribou around our village and that moves our meal from, like, caribou meat which I grew up with as a main course of our meals, like dinnertime and even lunch.

And especially, too, when our young ones go out hunting or else we have searches like during the winter, we would have some food for them, you know, like dried meat and oil and all kinds of food so they could have food out there when they go out. And sometimes we search for days, and it's miles and miles of travel looking for people and hoping to take them home alive. It's just so hard for us up here, but we love our food.

We would like to ask our Secretary of State...
Mr. Robert Suydam: Good evening. My name is Robert Suydam. I'm a wildlife biologist with the North Slope Borough Department of Wildlife Management. I've lived in Barrow for about 21 years now, although Point Lay is kind of my second home and the folks here are my second family, that we have been working together a long time to learn more about belugas.

And Marie, thank you for the nice things that you have said but, you know, much of the credit goes to the community and the hunters here for helping all of the scientists -- not just me, but the others here in the room and others not here -- for the successes.

I'd also like to say thanks to Jim and the rest of the BOEMRE crew, BUMMER [pronunciation] crew, whatever it is. Thanks for coming to Point Lay and thanks for coming to the other North Slope villages to ask the residents here about what their concerns are, about -- ask MR. ROBERT SUYDAM: Good evening. My name is Robert Suydam. I'm a wildlife biologist with the North Slope Borough Department of Wildlife Management. I've lived in Barrow for about 21 years now, although Point Lay is kind of my second home and the folks here are my second family, that we have been working together a long time to learn more about belugas.

And Marie, thank you for the nice things that you have said but, you know, much of the credit goes to the community and the hunters here for helping all of the scientists -- not just me, but the others here in the room and others not here -- for the successes.

I'd also like to say thanks to Jim and the rest of the BOEMRE crew, BUMMER [pronunciation] crew, whatever it is. Thanks for coming to Point Lay and thanks for coming to the other North Slope villages to ask the residents here about what their concerns are, about -- ask to highlight the need for information and using that information to make decisions that I have been surprised to learn the lack of information in the Gulf of Mexico and, with the Deepwater Horizon spill, the limited ability of agencies to understand potential impacts or assess impacts, especially to marine mammal populations.

There is so little information known about the population size or status or health of those marine mammals that being able to assess what the impacts were is very restricted, very limited. And so I think we are in a little bit better position up here that we know a lot about belugas, we know a lot about bowheads and walruses and other things, but there is still very limited information.

And so encouraging the agency not just to evaluate what information is missing, but also make -- continue to make efforts -- I know you have made great efforts here recently, and especially in the last five or ten years, to help fill some of the data gaps, but please keep doing that. Keep funding studies. Keep funding studies to document traditional knowledge. You know that many of the people in this room know more about the environment than any scientist or manager. So your identification of traditional knowledge as being key in making decisions I think is really valid. And I hope the agency is able to continue to do that.

As you evaluate comments on your EIS, please first take a look at the data gap analysis that USGS recently did. And I think that's a pretty extensive document, and it may be difficult and challenging for the agency to incorporate that in the EIS, but I think it's really important. It's available information about data gaps, and please use that to make your EIS here more complete.

So again, just emphasizing the need to use information to make decisions, I think that's really, really important. But I think there are some other things that are also important.

In the document you talk about thresholds and when a threshold is reached, that then the impact becomes significant. On page 75, I think it is here, of the document, you say that -- that 'a significant effect on subsistence harvest patterns occurs when one or more of subsistence resources become unavailable for a period of one to two years.'

So essentially the way I read that is that you are telling Point Lay and Wainwright and Barrow that if the actions that result from this EIS could make subsistence resources unavailable for a year or two, if it was less than that it wouldn't be significant, but if it's
I think that if the actions resulting from this EIS cause subsistence resources to be unavailable for two months or two weeks is significant and inappropriate. And so in this document, previous EISs and future EISs, I think you need to change the thresholds that you use for evaluating significant impacts, that the culture, the people that live in these communities rely on subsistence resources. The unique culture that is here is incredibly valuable, and saying that it won’t be a significant impact unless belugas or bowheads aren’t available for two years is just not right and something the agency should approach things differently than that and revise this EIS and make sure that future EISs are done differently.

I’ll pass the mike on for now.

DR. JIM KENDALL: Thank you, Robert. It’s great to be in Alaska. My wife is packing up the house in Virginia right now.

We are going to go around this way now and work our way back. Okay? I have a nice group of people here in a circle. Would anyone like to take the mike?

MR. DANNY PIKOK, JR.: Thank you. And thank you for coming to Point Lay and helping our way of life. And for the record, my name is Danny Pikok, junior.
And that's the culture that you are -- that you
I mean, it is -- every time I come down here for beluga
beluga -- to me it's the beluga whaling capital of Alaska.

And these things BOEMRE, I don't believe, have
considered at this stage because if you have, we would
like to see what you are offering to the community in case

of an oil spill.

But I'm speaking on behalf of Inupiat Community of the Arctic Slope. I serve on the tribal council. I've also served on the Arctic Energy -- Arctic Environmental Strategy Protection -- the strategy and the Arctic monitoring and assessment program within the confines of Inuit Circumpolar Conference as a delegate, as a delegate to the United States of America. And these issues that we are asking and concerned about tonight are the same issues that we address at the international forums, at the international regimes, that the Arctic nations, the eight country nations regulate within each respective state.

But I just want to emphasize that we do oppose offshore drilling. Inupiat Community of the Arctic Slope passed a resolution opposing it because of the unknowns of what would happen on our ocean if an oil spill like the VLOS that you have noted should happen because we have three currents.

Up in Barrow -- I can talk about Barrow. I'm not sure about right here. Up in Barrow we have three currents. They go north, they go south. And every species of wildlife would be affected by an oil spill if it should occur. How many gallons is 150,000 barrels? Can -- what's -- does anyone know?

DR. JIM KENDALL: It's about 40 gallons to a barrel.

MR. ROBERT SUYDAN: About four-and-a-half million.

MR. DELBERT REXFORD: Four-and-a-half million gallons? My lord. Do you have the technology to clean that up if it happens under your theory of a VLOS? I don't think you have a plan. You don't because, like I said, the industry tried their equipment to rescue the three gray whales, the stranded three gray whales, and all of their equipment failed. That's a living testament that the technology didn't work that they were proposing to take out to the sea.

Well, I've taken a lot of your time. I tell you what. You should spend time out in the ocean. Maybe you can appreciate it and love it just the way we do if you get a chance to get out there. There is no mosquitoes out there.

But thank you. I'm speaking on behalf of the Inupiat Community of the Arctic Slope, and I serve with Sophie on that tribal council. I've taken a lot of your time, but those are the concerns that we have. Thank you.

MR. LEO FERREIRA: Good evening, everybody. My name is Leo Ferreira, III, for the record. So we're here to discuss stipulations that need to be implemented into this BOEMRE. Point Lay would like to have a 60-mile buffer zone instead of -- I'm pretty sure it's standing at 15- or 13-mile buffer zone. We want to move that up to a 60-mile buffer zone, not just for Point Lay, but for the rest of the outlying villages in the Arctic Circle.

We also want another stipulation of one drill rig -- one oil ship, drill rig up here in the ocean, and also zero tolerance of cuttings and mud in the ocean, along with the oil, zero tolerance of oil discharge. These reasons are for the disturbance of our animals. We have -- right now Point Lay is dealing with disturbance of our tuta migration, our caribou migration route. We have we have had a coal mine going for a while, and all the helicopter use with coal mining has pushed away our migration route. We haven't seen our migration route come back close to the village at all in about five to seven years now.

And we just shut down the coal mine just not too long ago in our -- I think it was when President Obama went green finger on us. So we feel the impacts of disturbance.

And we also know that our animals in our ocean are very sensitive to noise. I could use walrus as an example because walrus are disturbed by even smelling cologne or smelling cigarettes in the air. If somebody is upwind and they smell their cologne, they are going to get disturbed. They also get disturbed by noise when you are -- when you are kind of close to them, you will disturb the walruses by noise, too, also, but mostly by smelling when they are out of the water.

We also have seen a few animals that we never seen before so much, like we seen a killer whale a couple years ago, and that was during when we had ship activity up here. So we see -- so we take that as a disturbance from all the ship activity that was happening in the Chukchi Sea and the Beaufort Sea over there further down south from us.

And all of us -- all of us people that live on the Slope, all of us Natives in Alaska been taught our way of life, so we have a lot of traditional knowledge to pass on to the government so they could help get a better understanding of how we want to live our life because we have to give up for oil drilling activities, so in return we want to protect our way of life. We want the federal government to start listening to what we have to say and start putting these things down as our stipulations to help protect our way of life, like the 60-mile buffer zone.

And maybe another one would be like when we go harvest our bowhead whale, we would like no ship activity.
during our harvests or no air activity along with our
beluga because our beluga is very sensitive to noise
activity in the ocean from the ships and from sonar
activity.
And that's a big concern is all the activity
that's going to happen. We are not just going to deal
with all ships. We are also going to deal with Coast
Guard ships. And they have helicopters, too.
And the other thing I heard is that if there is
going to be a port site, if and when this oil drill does
happen in the state of Alaska, I'm most definitely
positively saying that our way of life will definitely be
disturbed because we are going to disturb our migration
route for our whales, bowhead whales, beluga whales and
the walruses. The migration routes for these animals are
going to get pushed away from our mainland, and it's going
to be harder for us to catch our animals because we are
going to have to go further and farther offshore because of
too much ship activity out there on the ocean along
with --
Like I know like the oil spill, like Delbert was
saying, is we don't know how -- federal government
scientists already tell us there was no way of cleaning up
an oil spill in the icy conditions out here. I know of
three oil rigs that were toppled during Hurricane Katrina,
and the federal government or the oil companies can't even
fix those, can't even retrieve them, those little oil rigs
out there. And if we leave junk behind, we are going to
just pollute the ocean. If we have an oil spill, we're
 going to pollute our ocean. Once we pollute our ocean, we
are going to lose our way of life.
Point Lay is a traditional village. We live a
traditional life around here. There is not much jobs from
the government or from our North Slope Borough. Our
workforce around here is about 25 percent. Twenty-five
percent of this village works, and the rest of us are on
welfare. When we are on welfare, we live off the ocean
and off the land. All the animals, the caribou, the musk
ox, the whales, the walruses, the oogruks, the spotted
seals, so --
And I also know that because Point Lay and
Kivalina and Point Hope are not in the NPRA, if there is
an oil spill, these three villages will have no royalties
when there is an oil spill. I have been told we are going
to be the laborers. We are going to be the cleanup crew,
and they are just going to get us for the jobs. And here
we are going to lose out on it worse because we are not
even included in the NPRA. We are outside of the NPRA
boundaries.
And so myself and with others, I oppose offshore
drilling and I -- I wish the federal government would
listen to our stipulations and what we are trying to tell
them. And we would like to control -- have control of our
Inupiat way of life for our animals. We want to control
our own animals. We don't want the government telling
us our drill ship is going to be here and good luck on
hunting your animals.
We want to have stipulations saying during this
whale time period, during our bowhead whale time period
for that village, please stop your activity. You are on
our area and goes along down the coast, up and down the
coast and so forth, along with the belugas, along with --
we also -- because we know there is going to be
helicopters flying up and back workers and everything.
And helicopters is a big concern. It's a real noise
factor, and we feel it around here in Point Lay.
We are the -- we are the ambassadors of our land
up here. We want to keep on being the ambassadors of our
way of life. Thank you.
DR. JIM KENDALL: I want to make sure we
get this end of the room here, but Emma, do you want say
something?
MS. EMMA POKON: (Shakes head.)
MR. NATHAN HENRY: Good evening. Nathan
Henry, for the record. Let's see. If -- what was that
oil spill in Louisiana or somewhere like that? Deepwater
Horizon. I'm pretty sure if somebody had said something
like before you guys start that oil drill up here in the
depth ocean, if you guys ever do make an oil spill, will
you guys have homes prepared for those that want to leave
the area? And if you guys do have a drill out there, if
there is an oil spill, are you prepared to, like, move
some people if they want to move because, you know, like
it's being said our way of life is in the ocean and the
land. And are you prepared to -- not only for the oil
spill but, you know, some people might say, oh, man, I
don't know if I want to stay here. Are you guys going to
have homes ready, like Anchorage, inland somewhere?
Because I'm pretty sure that Exxon would have, like,
thousands of homes to get prepared for the oil spill if,
you know, somebody like me said something like, hey, you
got homes prepared for us if you do have an oil spill?
And does it matter what we say? Are you guys still going
to go out there and drill or what?
DR. JIM KENDALL: Those are good
questions.
MR. NATHAN HENRY: I mean, you hand me the
mike and I got something to say, too.
DR. JIM KENDALL: That's fine. If you've
got something to say, we want to hear it.
MR. NATHAN HENRY: I said it. Thank you.

MS. SOPHIE HENRY: Sophie Henry, for the record. I’m a member of the Native Village of Point Lay or the Inupiat Community of the Arctic Slope. And if all this offshore drilling, you know, they say that zero discharge and all that. Well, it’s like buying a new car. Everything you get is brand-new. It’s not going to leak, but over time it leaks, you see. And that’s just going to cause a problem and it’s just going to be a rolling effect of more problems, of course.

And also -- oh, both the -- you know, the Prince William Sound, you know, the Exxon/Mobil [sic], you know, that problem just -- it’s still a devastation in that area for them, and if -- you know, if they were to drill out here, do the people that want to drill out here, do they even know how thick the ice is, what’s underneath the ice, you know, what’s there, like year-round? You know all of that? You know all that? It’s good stuff.

Anyways, you know, like the famous question I have been seeing all over when they first started talking about it is how on earth do you clean up an oil spill in ice; under ice, in the ice. You know, how do you clean all that up? And if -- there is just -- it’s just irritating.

Anyways, also I wanted to know, like, you know, how do they keep pushing us, like, oh, it’s job opportunities, questions, like we are not going to change our minds. Why no, and they are still trying to come around and ask they all say no. We can shout as loud as we want, no, no, so what? You know, we can -- we -- so what?

MR. NATHAN HENRY: I said it. Thank you.

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You know, we would rather -- we would rather our

whales, we would rather everything else. They shouldn’t have the right to make the decision to take our lives, basically. They shouldn’t have the right to take away our mammals, our -- you know, it’s just our way of life. It’s our ancestors’ traditions. It’s everything. Just like we don’t get to say what they can live off of or we don’t -- we don’t get to take away what they love. They shouldn’t have the right to take ours is what I wanted to say.

Thank you.

DR. JIM KENDALL: Thank you. Okay. I’m going to get everybody. We are going to take a break, but we have to go around first. Two folks here. Okay. I want to go over here. Thank you.

MR. ROBERT LISBOURNE: Good evening. Robert Lisbourne, for the record. I am against offshore drilling, any kind, because the person who I am today is who I stand for. I am Inupiat. We are Inupiat. We -- we have been hunting. We have the traditions we had for thousands of years. We live off the land. We live off our food. It’s just a blessing to be Inupiat. And I’d just like to continue to -- our tradition and, you know, for it to go on for another hundred to thousand years. I would just hate to see my kids and my grandkids not able to be going out there because our ocean and our land is -- we live off the food, and it’s just --
As a child when my parents were out there hunting and use, you know, our land and our sea just like I did when I was a child when my parents were out there hunting and providing for us. I have been in this lifestyle all my life, and I don't think it will ever change. I want it not to change. Just like everybody else who talk on the mike tonight, I'm in full opposition of offshore oil, oil. So -- and I'd like to give thanks and welcome to our visitors here. They have a good voice. Their voice is heard. It gives us ideas, gives us information.

I do serve on the North Slope Borough Fish & Game Committee, volunteer at search and rescue. And with Point Lay being so close to this offshore drilling, I think we are the closest community, so we are in opposition. We are very worried about an oil spill. It is inevitable. I mean, it's going to happen, you know, here now or, you know, there later. I mean, it will happen.

I understand that they don't have the proper equipment to do an oil spill cleanup here in our ocean. I know just recently they had started their -- they had started these science projects out here in our ocean and in our land. I mean, that was just started recently. And it's good to hear that, you know, we have all these corporations going around trying to get information from the people who lived here for 1,000 years or more, more than that. And we have -- you know, we have all this information in our head. And I'm glad to see that there is people coming.

As I said, I'm in full opposition. I like -- I think everywhere you go they will have opposition for the offshore drilling. And I'd like to see more voices. I'd like to see more -- more people talking, more people telling us what they know and what some of us don't know. So the more information we are getting into the meetings, I think the better off, but in some ways I think that no matter how hard we try to stop these offshore developments, we are just not going to stop them.

We need to find -- I mean, they need to come up with some kind of oil spill response that will work, actually work to stop -- stop this oil if they do have a spill, stop it from coming ashore, try to contain it in the little area that's already affected. I think that's one of the biggest worries that I have is all spill containment and cleanup because it's inevitable. It will happen in small amounts or in large amounts. It doesn't matter.

I think everywhere you go they will have -- I might not -- I think everybody else who talk on the mike tonight. I'm in full opposition of offshore oil in there. It's like our garden. It's like you using pesticides in a greenhouse of, you know, stuff we are trying to eat. It's the same thing. It's killing off a lot of things.

But I am in full opposition of offshore drilling. I have been living off the land my whole life. I can't really think of anything else to say, but welcome. Thank you for coming, getting information, and I really hope -- I really hope it's heard. I hope ourvoice is heard, and not only heard but put into the thought and make them think about -- think about these things that they are trying to get information on, not just go back and just say, yeah, we did get information.

You know, we -- I'd like to see some like -- I'd like to have them notify us, you know, talk to us back, not just us talking to them and telling them, you know, what we think. I think they should -- I think they should -- I think we should hear their voice back after they get all this information. And after we give the information, I think we could get some information back on what is going to happen and what did happen to, you know, all this stuff that we talked about. That would be a lot -- that would be a real positive thing.

As I said, I'm in full opposition. I like -- I
I love my subsistence way of life. And it's never going to stop for me. I'm just hoping and I'm praying that it's not going to stop for our future generations that are going to come.

I know there has been a lot of fighting for the way of life that we live. You know, the oil drills up on the North Slope, they are -- you know, they try to take away our bowhead living. They are trying to -- they are trying to get counts or, you know, like populations of all of our animals, and they are trying to take actions before they -- before they come up with any kind of results. You know, it's nice for people to come up here and get the information from the people who actually live up here and see it every day of our lives. Even if it's the smallest animal that we see running across the road, that's part -- part of our life up here.

I can't put it any other way.

But I really do oppose offshore oil drilling. I'm in full opposition to that. And everybody who talked on the mike, they are in full opposition, but the way I see it, I think it's going to happen anyways. They are going to go out there and drill offshore. It's going to happen anyways, even without our opposition.

It will help a lot for each and every entity that comes up here we can give information to and try to get, you know, oil spill response teams in these communities that we live in. We reside here year-round, and we are not going to move. I think me and everybody else here would like to have some good part of our population trained or at least know how and know what to do in the event of an oil spill. I think we need -- we need these coastal communities to be trained and know what to do in case of an oil spill. I know there is -- there is corporations that give a limited amount of people, two or three or four people, who go down and they will leave town for training, this oil spill training and whatnot, but two or three people won't -- I mean, it will help, but it won't cut it.

We need a community to know what's going on with the oil spill and know what to do. I think it takes a whole community to understand that. And I'm sure everybody in this community, if they are trained and if they know how, they will give a hand. They will lend their hand out there to help clean up or try to contain, try to protect our way of life.

That's another big thing with all this oil development. I think every coastal community should have at least a crew of people who know how to operate machinery to contain and clean up an oil spill, not just -- if they do have an oil spill, they will say, yeah, well, we are going to have this contained and everything, but they are going to be providing -- they are going to say, yeah, we are bringing money up there. We are going to clean it up, giving you money, putting people to work, but that's the people that they already have trained to do that kind of job. And I think -- I think they should come to every community and at least train as many people as they could and get that thought in their mind so we know how to do it so we are able to do it.

I think that's another big thing on this offshore drilling. When an oil spill does happen, you know, I think every community should know what to do, not turning -- not turning to the phone and trying to call people and ask, okay, what do we do? We don't know -- that would be a worst-case scenario on a -- you know, in a community level to have nobody know what to do here. I think that should be another strong -- another real good idea.

I think I've said pretty much everything I could think of. I'm sure there is more but, you know, I'm -- I said -- I said I think -- I think I said what counts, so welcome and thank you. Thank you for your time. Thank you for letting us speak.

And you know, we are providing information. So I think -- I think it should be passed on, passed on to
(A break was taken.)

DR. JIM KENDALL: We notice it was pointed out by one of the community members that some people arrived after the initial presentation, and so just again so we are all on the same plate, I've asked Sharon to come up and very quickly rehash what she went through before so that everybody understands why we're here.

MS. SHARON WARREN: I was just going to, rather than go -- unless you all want me to go through the flip chart again, I can just kind of summarize what we talked about. So what's the preference?

MR. WILLARD NEAKOK: Summarize.

MS. SHARON WARREN: Okay. Why we are here today, we are here because our agency, the Bureau of Ocean Energy Management, Regulation and Enforcement, is seeking your comments on the Revised Draft Supplemental Environmental Impact Statement. Copies are on the table.

We are here because of a court litigation that was done back in 2008 prior to sale 193. And the Court told us to go back and to readdress the concerns.

So those are the three concerns we are addressing in that document is what the Court told us we had to do because our EIS was not adequate on natural gas development or on the missing information that we stated in the document. So we have to follow the regulations and go back and do it.

In addition, after we published the draft supplemental EIS, we came up here, got the community's comments, got public comments, over 150,000 comments.

We -- a lot of those, it was on the heels of the Deepwater Horizon event, and communities wanted us to say what would happen if there was a very large oil spill. So we went back and did an analysis on a very large oil spill. And so that is in the document. So not only do we have the information that we had in the last draft SEIS, we also had information on what it would be if a very large oil spill would happen.

We need your comments. We need your comments.

We need any traditional knowledge to take a look at our document. The due date for public comments and your comments are due July 11th. We are using regulations.gov.

There is information on the table on the website to how to submit your comments. If you have got any questions on how to submit those comments, we have a telephone number to our office in Anchorage. We are out of Anchorage, Alaska. We are all Alaskans up here. So you can call us and we can let you know.

Again, after we take your comments, we will prepare a final supplemental environmental impact statement. This supplements the environmental impact statement that was done in 2007. And it will go to the Secretary of the Interior who will make the decision whether to affirm the lease sale, the area that was offered for lease in 2008, or make some changes to it. We can affirm the lease sale, keep the leases, or he can cancel the leases. It's all on the table. So he needs to go back and make that decision.

Once he makes that decision, it will be filed with the Court. The Court has asked him to make that decision by the 3rd of October. He will make the decision. It will be filed with the Court, and the district judge in Alaska will decide whether or not our agency has complied with the federal laws of the National Environmental Policy Act and any other federal laws that were raised in the litigation to make sure the agency met its obligation in doing that.

So that's a quick oversight [sic] of it again.

DR. JIM KENDALL: Thank you, Sharon. One thing I want to add. And I heard this in this meeting and at our meeting government-to-government this afternoon and at another meeting. Some of the Elders have said you have been coming up here for 15, 20, 30 years. We tell you the same thing. Well, it's not that we are coming to bother you, thinking you might change your mind, but there is a law, the OCS Lands Act, that requires a five-year program...
MR. NATHAN HENRY: So just a scientific question. Is the global warming a natural cause or is the global warming caused of the oil being sucked out -- like opposite from insulation. You think that maybe that oil down there will keep it cool and it's just being sucked up and now it's just nothing to keep it cool, maybe, that might be cause of -- part of the cause of the global warming?

DR. JIM KENDALL: That's a good question, and we can talk about that all night. This is Jim Kendall speaking. Bottom line is, no matter what's causing global climate change, it's happening, and it's being felt first in the Arctic you are on the forefront of it, and we have to consider that in our analyses. But the jury is out on what's causing it and why it's happening, but it is happening.

You are -- right here in the Arctic it's starting first. And we have got to deal with it in our analysis, as well.

MR. NATHAN HENRY: There has been throughout the years and years there has been like billions of gallons of oil being sucked out of the ground, and it maybe the scientists go back to that same place like 30 years ago where they did look at it 30 years ago or 40 years ago and then look at it at the time the oil falls on the highway, it's going to stop us. It will stop us from going to the store. It will stop us from going to the store.

And on what Nate was saying, too, with the oil being sucked out of the ground and its relevance with our global heating, global warming, I mean, there is relevance that they are pulling the oil out of the ground and they are burning it. It makes carbon monoxide, carbon dioxide. So in a sense, Nate is -- part of his -- what he said, I mean, he's right.

But with our ocean and the drilling, I think -- I think most of their studies and I think most of their money that they are putting out for this energy, I think it should be going towards renewable energy like ocean currents. They produce energy. They have proven technology that we can get energy out of currents. We have technology that we can get energy out of the wind.

We have a whole bunch of technology that's proven to convert to -- converted to this renewable energy that we could use over and over, not like the oil and gas that we burn one time or -- you know, we could use the heat off of it after we run a piece of machinery. We could use the heat off of it. But it's not the same.

I think most of this money that they are pouring out into getting energy, I think most of it should be put to renewable energy. I think that's another big -- another big situation that you, know, they should think about and put to use, renewable energy. With that, we could have renewable -- we could have, like, wind turbines here to have energy whenever we have wind instead of using oil all the time to heat our homes.

And that's another part of the -- another part of the situation that I'm trying to understand and I'm trying -- I'm still trying to calculate it in my brain that -- all these negative effects that are going to happen to us. And once that happens, there is pretty much no way of getting it back. There is no way of making our life the same. It's going to be changed, you know, probably forever.

But I think a lot more money should be put into renewable energy instead of having all this wasted money of trying to get, you know, oil out of our ocean and -- because a lot of the money that they put in, it's -- it's almost like a waste to me. They put all this money in and then their plan doesn't go through as they are trying to plan. Somebody else stops and steps in and say, no, that was sucked out and then, you know, see if there was a big major difference or there are still grounds -- there are still, you know, the natural flowers that were supposed to go there or are there different flowers growing out or, you know -- I know that you can't stop the global warming, but you can stop the oil drilling possibly.

DR. JIM KENDALL: It's in the record. Thank you.

MR. NATHAN HENRY: Okay. Thank you. Good evening.

DR. JIM KENDALL: Thank you. It's Nathan, right? Thank you. Okay. Next?

MR. WARREN LAMPE, SR.: Hello. Warren Lampe, Senior, for the record again. There was a couple thoughts that did come to mind within the short time that I had the mike. This ocean and where they are drilling, where they propose to drill is right smack in the middle of our highway. It's like a highway, our food highway that our animal's have to migrate past us and get back. They get to their feeding grounds. They get to their grounds that they have babies. You know, they pass by us, and they have to pass by us to do it.

With the oil spill happening out there, it's going to halt the migration. It will reroute the migration. It's just like when we are traveling to the

store on the highway, a tree or something accidentally falls on the highway, it's going to stop us. It will stop us from going to the store. Same thing it will do to the animals with the oil spill. It will halt the migration, change the route. And it might take years. It might take 20, 50, 100 years for us to realize where this migration is going and, within that time, it will be too late.

And on what Nate was saying, too, with the oil being sucked out of the ground and its relevance with our global heating, global warming, I mean, there is relevance that they are pulling the oil out of the ground and they are burning it. It makes carbon monoxide, carbon dioxide. So in a sense, Nate is -- part of his -- what he said, I mean, he's right.

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I think they should have a round of informational meetings about renewable energy because I think that's some sort of something that would be all support instead of right now we are all in opposition of offshore oil drilling, and if you come up with renewable energy such as, you know, ocean current providing energy or the wind providing energy for us, that would be a whole change of story that would save our traditional cultural way of life. It would save a whole culture, a whole group of people who live up here off the land and off the sea.

I think most of us would -- we would be in support of renewable energy because we are all -- we are all opposed to offshore oil drilling and oil energy, even on our land where we are opposed to all energy, oil drilling so much, but it's more so far offshore. We don't want it to happen. I think they should put more -- more -- more of what they have, their funds, their thoughts, their energy, put more of it into renewable energy. I think that's -- that's a big thought.

I think more -- more thought, more energy, more, you know, information should be put towards renewable energy. That's something we would be in support of because everybody -- I'm -- I think everybody that you -- everywhere you go there is going to be opposition. There is going to be strong opposition for offshore oil drilling.

So if that could make it too, you know, the decision-makers up there to -- I think they should change direction and start -- start developing renewable energy. That's a big thing because I think a lot of us would be in support of that. So that's a thought I had in mind. So thank you very much.

MR. LEO FERREIRA, III: Good evening. Leo Ferreira, III, for the record. I just wanted to get out some stuff that I kind of left out. I can't remember everything, but I just wanted to touch a little bit on science and the studies that's been going on. I don't think the lease sale of 193 should not [sic] happen because there hasn't been a real good baseline study of energy. I think that's -- I think that would be a -- that would make a whole lot more of Alaska happy.

I think that's -- that's a -- that's a big thought, too. I think that's -- that's what should happen. That's what should be happening because oil is going to run out, you know, 20, 30 years from now just like our Prudhoe Bay is running out. We are going to run out of oil. We are going to run out of energy. Within that time we may have an oil spill. We may have contamination that's irreversible.

I mean, we go to renewable energy, we are -- we will be able to make use of it over and over again instead of this oil where we just use once and, you know, it burns off into our atmosphere. It causes a chain reaction of negative events.

And when I think in my mind, I think we could use this -- we could be going to renewable energy, and it's not going to be -- it's not going to be as polluting as burning oil and refining oil, all of this negative impacts of just getting this oil out of the ground and getting it ready for us to use and making it useful for us to burn safely.

I think -- I think they should turn their head the other way, turn it away from offshore oil drilling and put -- you know, face the renewable energy because the oil is going to run out. Our wind won't run out. Our water currents, they may change, but they are still going to be there, not like the oil. You know, it's going to disappear. It's going to be gone. So that's a big thought.

I think more -- more thought, more energy, more, you know, information should be put towards renewable energy. That's something we would be in support of because everybody -- I'm -- I think everybody that you -- everywhere you go there is going to be opposition. There is going to be strong opposition for offshore oil drilling.

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And another thing that the Coast Guard, the Coast Guard ships, I already know that when they go out here, they do a little drill hole just to go see how much oil is in there, that there will only be -- I understand there will only be one ship for containment of an oil spill in case.

And Warren has a point about an oil spill that the communities in the North Slope, the residents of the outlying villages, should all be trained for an oil spill so the outlying communities will be able to respond faster and will have more people available. And that's just another way of generating jobs up here on the North Slope is we all live off of the land and sea year-round, whether it be berries, tuta, caribou, musk ox, polar bears, brown bears, walrus, bowhead whales, beluga, all the sea animals and land animals. That would help protect our way of life. So if oil does get big, that we are ready for an oil spill, we would like to have training.
I happened, and I witnessed the government, the oil projects that are going on. I had a chance to go down to the Gulf when it happened, and I witnessed the government, the oil industry not doing anything to try to stop that spill at the Gulf. I seen some birds that I haven't seen in a long time, and I seen some birds I will never see again, like what has happened with the Exxon Valdez oil spill.

One good comment I heard tonight was Mr. Lampe. He wanted feedback. He wanted BOEMRE to come back and explain about the comments that Salazar will be looking at. So you see, Mr. Kendall, I think the Village of Point Lay would like you to come back and explain about your comment -- about their comments and how you are going to submit it to Salazar.

Before October's decision, I'd like to take all the tribal council members to Washington, D.C. when he's going to make his decision. And my goal is to pick up a resolution from all the tribal villages about opposition to offshore activity.

We all know in the past North Slope Borough has been doing a lot of research in which our communities have to have anything to say about. Even though we have got a North Slope Borough Wildlife Commission, our communities always ask for assistance and very little is sent forth. So we in the communities don't really trust the North Slope Borough or the State of Alaska. We trust ourselves because our traditional knowledge is very strong, and we need more time to be able to help and give feedback to the federal government.
For me it was scary to even ride out there on an 18-footer but, you know, when the waves are rolling or the -- you know, the waves are so rough, you know, I think about how mighty God is out there, controlling the waves. And you know, I say a prayer for anyone that goes out to hunt, that God will just bring them home safely. I'm sure everyone does that in the community, not only myself and Willard or, you know, other families.

And Marie mentioned that, you know, we worry about hunters out in the wintertime. We are having to go search distance, and it takes fuel to go out and look for the person. And that's, you know, gas, using gas. But I wanted to say that sharing our food from the ocean is always a blessing to bring people together, and that's a strong, you know -- I think it's strong enough to say that it pulls the families together. But I want to share from Genesis I, Verse 10. "And God called the dry and earth and the gathering together of the waters, all he sees, and God saw that it was good." And I -- I see it that way. You know, it's a blessing.

Thank you.

MR. WILLARD NEAKOK: My name is Willard Neakok, for the record. I have three more items that are related to offshore drilling which I'm in opposition. But first, you know, a few people would look out the window.
It's like Warren said, let's use that money to technology out there. Generators, run our snowmachines, run our boats? We have century. Why can't we produce something to -- that will renewable energy, you know. We are in the 21st century. Why can't we produce something to -- that will be renewable, something that we can use to run our generators, run our snowmachines, run our boats? We have technology out there. It's like Warren said, let's use that money to feed. Losing one thing just because we want to gain another, you know, gas, diesel, whatever, to, you know, have lights, have gas to run around by boat, snowmachine, aircraft, you know, that's, you know -- that's why we are in opposition. We are trying to balance everything. That's why, you know, we say what I've heard here tonight, you know. Let's deplete whatever is on land. There is ANWR. There is all different other places here in the -- or the Lower 48, I should say, that there might be potential for oil. Canada, even. We are so dependent on trying to provide our own United States to be dependent [sic] of, you know, producing our own oil, our own gas, yet, you know, we still order from, you know, other different countries. And now we have a small version of, you know, oil producing at Prudhoe Bay that only provides, probably, what, 15 percent of the United States consuming oil. That's another thing. I like the idea of, you know, renewable energy, you know. We are in the 21st century. Why can't we produce something to -- that will be renewable, something that we can use to run our exploratory drilling happens and we have the worst-case scenario of large oil spill. We don't have the capability of having staging areas for boom, for vessels. Closest one is, what, Kodiak, or Prudhoe Bay. They have a small
that has been passed on to us from generation to generation by word of mouth. If he hears that, I hope, you know, he does not make this a reality because we are the ones that are going to lose. We are the ones that are going to lose. We are going to lose our way of life. We need to take care of the ocean and the ocean takes care of us. We need to take care of the ocean. If we lose that, you know, we lose our identity. We lose our identity because we take care of the ocean and the ocean takes care of us. We need to take care of the ocean. If we lose the ocean, we lose everything.

And I hope that Mr. Salazar will hear our voice, understand what is going to happen if we have an oil spill. I hope he understands that traditional knowledge has been passed on to us from generation to generation. If we lose this knowledge, we lose the tradition, and we lose our identity. We lose our identity because we have lived off the ocean for thousands of years and we don't want to continue to live off the ocean.

Change of diet, change of food. Once in a while we eat store-bought food, yeah, but we live off the land and off the ocean, you know. That is what we use the most. There is natural resources, the natural foods, that has been provided by -- we don't over harvest. We don't waste anything.

So you know, I hope Mr. Salazar hears our testimonies, not only from this village, but any other villages that BOEMRE is close to and hear what we are talking about. I hope that Mr. Salazar makes the right decision. Thank you.

MS. SOPHIE HENRY: This is Sophie Henry again. Just to add on kind of what Willard was just saying, but from my experience -- I moved up here nine years ago. And nine years ago when I came up here, there was, you know hundreds and hundreds of caribou right here. We had to chase them off of the runway for the plane to land. I mean, it was overloaded with caribou.

And a few years ago, BHP started drilling a coal mine and they started having a helicopter, and traffic went back and forth. Well, that -- you know, that changed the migration of the caribou, so that pretty much robbed
know how it would look if you see some people dressed up in Tyvek suits trying to scrub off a polar bear or a walrus, even caribou.

If the lagoon got contaminated with oil, our whole entire Western Arctic herd uses our lagoon to get away from the heat and the mosquitoes. You will see the entire herd sitting in the lagoon. They will cross the lagoon and walk on the spit where there is less mosquitoes and more wind. They will cross the inlets in whole herds. And I couldn't even imagine losing that whole herd of caribou, a catastrophe like that would happen.

So thank you. Good evening.

MS. MARIE TRACEY: Hi. This is Marie Tracey again. Secretary of State [sic] Salazar, if you are listening -- and I'm sure you have listened to all of us, and we are very concerned about our ocean and how it may affect our life, our food chain. And I would like you to please be our hero. We will be waiting for your comment on what we have said from our little Native Village of Point Lay run by a tribal government. And I'm so happy to be talking to you. I sure wish you could talk back to me right now, but be our hero.

Thank you for listening to us and sending these people here to Point Lay. They are getting bit by mosquitoes, but I'm sure they don't mind. Good evening.

MR. ROBERT SYDAM: Robert Sydam. Folks
activities under the EIS.
Mitigation measures, there is a section in here
that's not very thorough, and it references back to the
original 193 EIS. And there are some things that have
been said today that I would like to reemphasize that the
agency needs to consider as mitigation measures.

Zero discharge is one of them. Shell has agreed
to zero discharge in the Beaufort Sea, but they haven't
agreed to zero discharge in the Chukchi Sea. And that
should be a standard mitigation for both areas. Certainly
some discharge occurs early on in the topple, but muds and
cuttings and industrial waste, household waste, those
types of things shouldn't be discharged into the ocean
because it's people's gardens or Sam's Clubs, or whatever
it might be. So zero discharge is a best available
technology that Norway implements and should be
implemented here, as well.

Many times beluga hunters here in Point Lay in
the past have told me they don't want any industrial
activity to occur in the Chukchi Sea until July 15th or
until the beluga hunt has occurred. So that should be a
standard mitigation to protect the beluga hunting here in
Point Lay and to protect the beluga hunting or the belugas
themselves.

No ships out there in the Chukchi Sea till after
July. Folks have talked about walruses and seals hauling
out on beaches up and down the Chukchi Sea coast.
Mitigation measures need to be in place to make sure that
those walruses aren't disturbed, that stampedes aren't
occurring because of helicopter traffic or airplane
traffic or ship traffic associated with oil and gas. Lots
of birds depend on the Chukchi Sea. They need to be
protected from oil spills especially, but also from
colliding with ships. So the appropriate lighting needs
to be a standard mitigation measure in the EIS.

In the fall time, Chukchi Sea villages are
starting to hunt bowhead whales. The ice in the
springtime isn't as good as it used to be. So it's harder
for communities to hunt bowheads in the spring. So
Wainwright is an example. They hunted a bowhead last fall
for the first time in a long, long, long time. Point Lay
has gone hunting in the fall time for bowheads, as well.
So there needs to be a closing date or a window
when there isn't industrial activity in the Chukchi Sea in
order to allow for bowheads to be available to the
communities here for hunting.

Many people have talked about oil spills, and I
don't need to go into that too much more, although I would
like to add one thing. The Deepwater Horizon incident
showed that oil companies aren't prepared to respond to a
large oil spill, even though they say they are. In
reality, things just don't work the way they would like
to.

I think the same is true here for the Arctic. I
think if oil companies are allowed to drill -- or before
they are allowed to drill, they should demonstrate their
ability to clean up oil that's spilled in open water
seasons and in broken ice seasons and in an ice covered
season. So more emphasis needs to be put on the ability
of companies to respond to an oil spill showing that they
can clean it up.

I'm pleased that BOEMRE decided to evaluate the
impacts of a large oil spill in the Chukchi Sea. And
there is a lot of information that's needed to be able to
respond to it, to be able to assess risks and be able to
respond to a big oil spill or a small oil spill, for that
matter. We don't know a lot about the surface -- water
circulation patterns, and if we don't know that, it's
really hard to estimate the trajectory of spilled oil or
the fate of spilled oil. What beaches might it end up on?
And that information will help for deploying oil spill
cleanup equipment before an accident happens.

I know that your agency, Jim, is trying to
gather some of that information, but a lot more is needed
before oil companies should be allowed to go out and work out there.

The issue of dispersants and how the dispersants themselves affect the animals, the plants and mammals in the ocean is needed. And are dispersants actually better than just letting the oil be out there by itself? These are really important questions that remain to be answered. And if people are going to dump dispersants on the oil but it actually makes the situation worse, that shouldn't be considered. So we need more information before we try to use things like dispersants.

And finally, I wanted to make a comment on cumulative impacts. The revised EIS has about 13 pages related to cumulative impacts. And unfortunately, that's not sufficient, and unfortunately the cumulative impact section doesn't even include evaluation of what a large oil spill might -- how that might contribute to cumulative impacts.

So even though the judge didn't tell you to evaluate a large oil spill, it should have been evaluated in the cumulative impact section, as well. And I think that should change between now and the final EIS.

That assessment, the cumulative impacts assessment section, is also not sufficient because it doesn't consider activities in Canada or Russia that are

that the oil companies collect on environmental issues, not from what's happening in the drilling or what's happening -- or the data they get back from the seismic exploration, but the environmental data needs to be publicly available. They are using a public resource, and all that information needs to be available for the public to evaluate, as well.

Thank you again for hanging in here late into the evening and for taking comments from me and other folks.

DR. JIM KENDALL: We are not done yet.

Don't go away. Back here. Anyone?

MR. NATHAN HENRY: Before I go, I have one more before I go. Nathan Henry, again, before I leave. Let's see. I think that oil spill was in Louisiana somewhere. I'm pretty sure if somebody knew that -- nobody knew that there was going to be an oil spill. Probably. I'm pretty sure if somebody knew that there was going to be an oil spill, I'm sure somebody would have gone out into the ocean and did a lot of -- I shouldn't say slaughtering because the oil already slaughtered them. I'm pretty sure that people would have gone to the ocean and got as much as sea life as they could possibly get and store it to the cellars or freezers or wherever.

And we don't know if there is going to be an oil spill out there or not. Should we go out there and slaughter the animals, the sea life before the oil does or -- we don't know.

DR. JIM KENDALL: Good comment. Thank you, Nathan.

MR. DANNY PIKOK, JR.: Danny Pikok, for the record. I heard a lot of good testimonies in just a short few hours. And I just want to let everybody know that I keep hearing we, we, we. And when I hear that word we, we are talking about everybody, not just the Arctic. We are talking about the United States, our nation. And just by watching science, biology, the ocean current up here, it goes around the globe. So if we have an oil spill up here, it's not only going to affect us. It's going to affect wherever that current is going.

And I believe that, you know, God helps those who help themselves. So help us help you. Let's work together. We are united -- what's that word united means? We are as one. So let us be a stepping stone. We are in control. This is our nation. We work together, and by saying no to offshore drilling, we are still -- we are in control.

Just like I mentioned earlier, let's keep drilling on land. Let's deplete the oil on land before we even consider drilling offshore. You know, just take the
I mean, take, for example, our Inupiat values: conserve, sharing, caring, you know, helping each other.

Just like one testimony, talk to farmers. Don't shut them down. By shutting them down, you are encouraging oil industries to drill where they want to drill. Who is in control, fossil fuel hunters or the farmers? We are all farmers here. Native peoples in the Arctic, we are farmers.

Just like one fellow mentioned, the ocean is our garden. You know, just look at it that way. So we have an oil spill, it's going to -- it's going to ruin our garden and it's going to ruin our nation. We are -- we the people, we are in control. Who is in control? We are, not the oil industry. So please do not drill offshore.

And I hate to admit I am a former oil company employee. And I have seen directional drilling. Take that into consideration. Keep the -- keep the rig on land and let them direct their drill to the oil, not -- not put ships in the water. Take that into consideration.

Thank you.

MR. DELBERT REXFORD: Delbert Rexford, for the record. I'd like to echo many of the concerns that have happened. I'd just like to add that when -- what's your name, sir?

currents are integrated, whether it's the Atlantic warm Gulf stream or the Pacific stream, or the Bering Sea, the Arctic Ocean.

Greenland is proposing to go offshore. The U.S. Coast Guard has already identified hundreds and thousands of vessels over the years that will go through the Northwest Passage and through the Chukchi Sea, the Bering Straits in the name of trade and cargo. Yet, Lease Sale 193 is right on the migration path of the bowhead whale.

I don't know if you receive any of John Citta's e-mails, but you should -- you should -- I think it's right smack in the middle of it. When we had our Barrow whaling captain's association meeting, right there. The Alaska Eskimo Whaling Commission opposed the offshore development of Lease Sale 193 because of that very concern; not only that, noise pollution.

University of Miami 20 years ago proved that a marine mammal can hear 100 miles away. And when -- when then ARCO put Cabot in into the Nelson Lagoon, we had to travel 80 miles to catch whales because of just the generator running. No exploration activity, no drilling.

Just the generator of the Cabot drill rig in Nelson Lagoon. Eighty miles away we catch our whales. And by the time we took the whales into Barrow, they were spoiled.

Dr. Jim Kendall: Jim Kendall.

Mr. Delbert Rexford: Jim, when you talk about 35 years of testimony, I had the privilege of being a translator for many of our Elders that have passed on over the years. And one particular Elder was so frustrated of attending meetings over and over again since the discovery of oil and gas in Prudhoe Bay. He said -- he told me to translate this. (Inupiaq.) It is time to kick those regulators and agency people in the butt. I couldn't find the heart to translate that. But he said translate it.

And this is the frustration of 35 years of repeating our testimony, of repeating our concerns, of repeating protecting our way of life. And when you talk about cumulative effects, you are not even considering the fact that the maritime Arctic is starting to begin.

Cruise ships coming through Barrow, through Davis Strait and the Northwest Passage, and then on the Chukchi side, estimating 18,000 marine vessels to go through the Russian side in the name of international trade and cargo delivery.

All these cumulative effects are not even included in the Chukchi Sea because of this proposed Lease Sale 193. And the amount of sewage or debris that may be disposed of into the sea. And as Danny stated, all these
Is this what we can look forward to in the future? Do we have to travel further to catch whales in the fall time and tow them in and the meat is no good by the time we get them to shore? That's not what we want. What we want is from our country, from our nation. From Secretary Salazar what we want is the assurance that our marine wildlife, the habitat, the ecosystem, the food chain will be all protected. Willard so eloquently spoke about the -- the clam beds and the mussel beds on the shoal. Critical habitat.

When then MMS decided to have the NPRA lease sale -- this is shocking. When they proposed to have the NPRA northwest lease, they said that the Kaseglik Lagoon from Wainwright all the way to Icy Cape was critical habitat. Oh, just a minute. It doesn't stop at Icy Cape. It goes all the way to Kutchiaq, 100 miles of it.

So how is BOEMRE going to evaluate 100 miles of lagoon that is considered critical habitat in their previous lease sales within NPRA? Are they going to determine the entire 100 miles of lagoon critical habitat? That needs to be considered seriously.

A lot of things have been said, but they have been said from the heart because of the concern for our garden, our air, land and sea. Unlike any other industrial nations, we have clean air to breathe today.

But you take a look at the cumulative effects in Niqgut, surrounded by oil and gas industry. The traditional land use areas haven't been impacted. How they go as far close to Point Hope to harvest wildlife that they were accustomed to harvesting within close proximity to Niqgut.

Is this what we can look forward to in the event that Lease Sale 193 does occur? Marine traffic increases, marine vessels increases, air traffic in the name of helicopter or other support, airborne traffic increases. BHP alone affected the caribou here in Point Lay when they did a short little study. That's common knowledge in the community. And these are concerns that we have, not only in this village; up in Barrow, in Wainwright, and elsewhere.

I do believe that as people, my fellow tribal members as a tribal council member with the Inupiat Community of the Arctic Slope, you know, we talk about airborne pollutants, things that are emitted into the air. And then when they get hot, they hit our Arctic area, it's cold and then they get into the water. So they become waterborne pollutants and then drop down to the bottom of the ocean. Is this something that our future generations will have to live with?

That needs to be considered seriously. Just like Barrow. I mean, Barrow is just right on -- right on the same route that this thing is going to hit. It's one current, three currents. Going north, going south, as Willard stated, currents underneath. Because what we do during the whaling season is that we drop a weight to assure our safety on the ice. We go 10, 20 fathoms to see which way the current is coming and going to protect ourselves from being taken out to sea.

It's not just the surface current that Robert alluded to earlier. It's also the current the undertow that is there. And if globs of oil go to that current, how does the industry propose to collect it and to clean it up? We don't -- we don't hear any answers from the industry.

But my late father worked hard to protect the bowhead whale and make sure that we continue to harvest the bowhead whale. And I think for those of us that are whalers, we continue to do so because it is our way of
life. It is our tradition, our cultural heritage. That is far richer than any cow or any chicken can be valued.

Yes, the farmers and the mass producers of those products reap the benefits, but it's not the same. There is no spirituality linked with it.

Like when we eat our oogruk or beluga or whale, when we harvest it, the gratification and the inner satisfaction that you feel whole as a person. It's not the same with hamburger. It's not the same with chicken.

But thank you for coming. I always feel at home in Point Lay, and this is the most beautiful season of the year. You are here when something very beautiful happens. And thank you for coming. I do hope Salazar listens, that it doesn't go in one ear and out the other ear in the interest of national security or national interest.

But we don't want to be another Amazon Indian tribe, overwritten, discarded and homeless. We don't want to be that because this is our home.

Thank you.

MS. MARJORIE PIKOK LONG: Hi. My name is Marjorie Pikok Long. I agree with Delbert. He said like 35 years ago his parents or the Elders were fighting for something. That was 35 years ago that this is still going on. I was seven years old. And now it's happening now.

I'm 42, and I have to speak for my kids because he's 19. He's wanting to get an idea of what whaling is about because it's being passed on not just from our village, but people from other villages that do whale, they come and help us to teach our kids and the villagers how to get a whale. And I hate to see that gone, too, because now we just finally get to eat whale and enjoy the food they provide us. They provided us with the food and everything, not just our Elders use it for medicine. Our

kids, they get sick, the medicine that we get from the clinic doesn't help.

The oils, sometimes the mothers rub it on their kids' chest for their cold, like you get thick gunk, nuvuk. I don't know how you -- but nuvuk is something that's, you know, something that's not good to have when you are sick. And the oil that's used to help loosen up the gunk and they use that to rub on their kids and they feed them a teaspoon full of that, too. And that helps those kids get better because the medicine doesn't work at the clinic. And if that's gone it's -- you know, it's hard to get medicine out here, too. It's hard to get anything out here to the Bush area.

It took two weeks just for a loaf of bread to finally come to Point Lay, and it takes three weeks sometimes just for hamburger meat to come to Point Lay. We can't afford a $320 trip from here to Barrow to go from here to Barrow to go get some groceries on our income alone. Sometimes our income alone doesn't make it through the whole two weeks to buy our groceries. We have to live off the food that we have.

So our kids are not just being raised by the weight of the -- how they are being raised right now with the White people's way of eating, you know, eating but they are also being taught with our culture. So we're

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So our kids are not just being raised by the weight of the -- how they are being raised right now with the White people's way of eating, you know, eating but they are also being taught with our culture. So we're
for the record. We say no to offshore drilling. We will continue to say no. So if the government goes out and does this drilling and happens to do a spill, that's stealing from us. What happens if I stole something from the government? I go to jail, right? We have no authority to do that to the government.

So this is very serious. It is our land. We will fight for it, and we have been living off it for thousands of years. So I'm just saying if they go out there and drill and they do happen to have an oil spill, there goes our food. That's our land. No more use for our land. It's stealing from us. So thank you.

DR. JIM KENDALL: Anybody back here? Is it time for a break, a ten-minute break? I see a couple heads shake. Why don't we take ten minutes, and if people want to continue to talk we are going to stay.

(A break was taken.)

DR. JIM KENDALL: Okay. I think everybody is in the room that's sitting down. And we have gone around the room twice, and we want to make sure no one leaves feeling that they didn't have their say. So instead of going around the room again, I'm just going to ask, who wants the microphone.

MR. WILLARD NEAKOK: Thank you, Willard Neakok, for the record. I'm not going to speak for the lease 193 at this time, but I'm going to speak for another village, which is the village of Nuiqsut. I know they are going to have exploratory drilling on the Arctic Ocean. And they are surrounded by oil companies on land. They have to go 30, 40, 50 miles just to go inland to go hunt caribou, ducks, geese, you know, sheep. And now they are going to drill on their ocean.

They are covered by three sides, east, west, and south. And now I feel sorry for Nuiqsut for oil companies closing their back door to their -- their ocean. And if that goes -- if that happens, you know, Nuiqsut is going to be surrounded completely. They have to go further out to go hunt bowhead, seals, you know, whatever else they might get.

We care for each and every one of our villages. When we hear somebody hurt, gets hurt in a different village, you know, we -- we have our sympathy towards them, their families, their friends. And now their whole village is going to be affected by closing their back door and start having an oil company out there drilling. And they are a lot -- you know, the lease sale that's happening over there is a lot closer than Lease Sale 193.

You might be able to see that oil rig, drill rig out there, that ship, you know. I just wanted to, you know, let Mr. Salazar know that, you know, if they let精神上, 心理上. 我希望它不发生于我们, you know. I would say that I'd hate to be those people going through tornadoes, floods, oil spill.

I hope there is a lot of compassion out there to say I hope that, you know, the lease sale doesn't go through and it's been approved for oil to be explored, drilling because, you know, like I said, we care for each other. We are supposed to care for each other. You know, we send money to different parts of the world, you know, in case a natural disaster happens or what like happened in the Gulf of Mexico or at Prince William Sound. We don't want it to happen to us.

And when I wrote my article for the newspaper, you know, I don't want to see what could happen to our animals, our way of living. I don't want to see what happened down there happen to us up here. You know, we have a lot of fisheries down there in Bering Sea. We have a lot of crabbing. We have, you know, walrus, marine mammals that are going to be affected, not only here on the North Slope, but we have currents that go to Russia, Greenland, Norway, currents that not only goes through the Bering Straits, but it's going to affect Russia, Chukotka, all different countries if an oil spill like what happened in the Gulf of Mexico.

But most of all, you know, if the other lease...
We will be asking ourselves why -- maybe Mr. Salazar might say, why did I do this, why did I say yes to exploratory drilling. Now look what happened. They have no animals. They can't hunt bowhead. They can't hunt the beluga. They can't harvest walrus, seals anymore because I said yes to exploratory drilling.

Mr. Salazar has a lot of weight on his shoulders and, I hope he doesn't make it a lot heavier by saying yes to exploratory drilling.

Thank you.

DR. JIM KENDALL: Thank you, Willard. Anybody else? I have an open mike. I'm not going to go around and bother everybody. Is that you, Nathan?

MR. NATHAN HENRY: Nathan Henry here again. Talking about the oil, maybe scientists should try and do a little experiment, like putting oil underground and oil -- putting the oil and see if -- like, freeze it and see how long will the oil -- see if the oil will keep it cold and see if, where there is no oil, you know, compare like -- because I think if you take a million gallons of oil underground out, it might warm up because maybe the oil might be keeping the ground cool.

And if you suck it out, maybe it will probably cause the ground to get warm, and there is a big gap -- I think I said that once time. There is a big gap when they sale in the Arctic Ocean happens, you know, the Village of Nuiqsut is going to be -- you know, you are just shutting a back door on them. I don't want to see that happen.

You know, I care for everybody here on this earth.

So I'm grateful that folks came here and get our testimonies. And hopefully Mr. Salazar, like I said, makes the right decision to where we can live our way of life, our cultural values, our heritage on what we do, what we hunt and share.

If you look at all these pictures here on the wall, you know, we have spirituality over here. We have togetherness on the other one. And all these pictures behind you, you can see the smiles on the children's faces. Over here, you know, we have old pictures, '50s, '40s, pictures of people that were before us that passed on their knowledge on how to take care of the ocean. We have a picture here of us whaling, not only us, but different other villages along the coast, all up and down the west coast of Alaska down to King Island.

You know, if we let the oil companies come and drill and we have an oil spill, it not only affects us, it affects those people down there, too. You can see the happiness in the kids. If we take that away, if we let somebody take that away, our heritage, our way of living, our animals, we won't see those smiles.

You want to drill in the ocean, in the Arctic Ocean for oil, and we have a big spill, it's going to cost so much just to clean up a fraction of that oil. So I hope Mr. Salazar takes that into consideration.

Just like Willard was saying he's got lots, lots on his shoulders. And if that sale passes, it's going to get worse. So I just hope and pray that he -- he makes the right decision. And again, I'd like to see the oil industry deplete the oil onshore before we even consider drilling offshore, especially in the Arctic. Thank you.

DR. JIM KENDALL: Thank you, sir. Anyone else? Going once. You found someone? Going once?

MR. DANNY PIKOK, JR.: Danny Pikok, for the record. Just to make one quick comment. I know oil means money, more funding, and that's great. Just drill -- drill in the right place, not in the ocean. No offshore, you know. More oil, more money. Let's -- less oil, more [indiscernible]. So we need to learn to go back to the old ways. And if we keep going in the direction we are now, we are going to lose our old ways, and we are just messing up our nation by relying on fossil fuels.

Let's go to natural energy.

Thank you.

DR. JIM KENDALL: Thank you. Okay.

Anyone else?
MR. LLOYD PIKOK: Good evening, Lloyd Pikok. And you know, there is -- everybody is relying on oil, you know, throughout the whole world, and there is a population bigger than Point Lay and there is a population bigger than the North Slope, and their demand for oil is bigger than us wanting to stop it. And I believe it’s not if; it’s going to be when they are going to start drilling.

And what do you guys have planned for our communities to benefit off of this? You know, if -- the way I feel it, you know, everybody has got so far to the point where we have to rely on oil unless we can find a renewable resource to live off of. And I feel like you know, you guys should have something in position for us, you know, like the students and the people that are learning here to give us something to learn so that we can do it, because we know the environment more than --

You know, everybody has lived off the environment for so long, and I feel that if you guys learn and teach the proper techniques and the proper -- give everybody the proper training, that might end in a safer, you know, conclusion than just coming into our backyard and start drilling. You guys should learn to train us and give us the opportunity to learn it than just say we are going to do it and send people from up there. And find a way for the community to benefit off of what you guys are going to do, even if it’s not going to; you know, just give them that proposal of, you know --

Because there are students and people around here that want to learn to help and keep it safe because they know the way their environment is and they know exactly how it works. And I just want to know how you guys are going to make the communities that you are going to start drilling in -- if or when, how you are going to make them benefit off of it, you know, because once this oil is gone and if we are going to deplete, we are just going to be here with, you know, nothing because you are going to take our land.

And the oil, if it were to come up and it were to mess up our environment, how are we going to be able to stop it? That’s all I got to say. Thanks.

DR. JIM KENDALL: And that’s why we keep going until everyone has a chance to speak. Well said. Thank you. Anyone else? Anyone wants to speak again?

MR. DANNY PIKOK, JR.: This just comes to my mind. I have been thinking about it for a while, you know. The more oil we have, the price of oil goes down. And the less oil we have, the price of oil will go up.

And that could help this nation to, you know, start conserving, conserve our oil, you know. I mean, if I’m going to buy a gallon of gas and it costs me $12, I’m going to be real careful how I use that gas.

Just take into consideration, Mr. Salazar. More oil, the price of oil goes down or stay the same. Less oil, price goes up. The more we conserve -- the more we help ourselves, the more we can help the planet.

Thank you.

DR. JIM KENDALL: Thank you. It’s Lloyd, right?

MR. LLOYD PIKOK: Lloyd Pikok again. And he’s talking about conserving our oil, and I think it would be better to make -- you know, invest in ways that can conserve our oil, you know, to make your dollar go a little bit further, you know. Kind of invest in ways that we use oil a whole lot less than when we did before for those Toyo stoves and anything.

You build a better environment for the oil to keep going and we will have more oil. We will have more sustainable oil because we know how to use it more efficiently. And I feel like if you guys are going to come in and drill, you might as well find a way to use this oil a whole lot more sustainable than just, you know, burning up half of what you are going to get because I know that when you burn one gallon of oil, you produce 34 pounds of carbon monoxide. And that’s -- you know, I was taught that in class, and it’s hard to forget.

And I mean, these houses run at like -- I don’t even know how much, but it burns so much oil and that’s what’s causing us to, you know, look for more is because we are burning more of it. What if we learn to conserve it in a way, you know, into our building, into our lifestyle and we learn to make it so that we run off of that extra dollar. You know, we run off that one gallon of oil and we make it last as long as five, ten gallons.

And it would be nice to see if you guys invested in that so that, you know, we can take the opportunity to think about, you know, letting this happen. And we would be -- we would feel more, you know, safe. That would cause the thought of drilling oil a whole lot more. We wouldn’t need to drill so much oil if we knew how to use it if we knew the efficiency of how to produce it and then how to use it because the way we are doing it, we are just burning it all up and we are not finding a way to confine it and conserve it.

And that’s all I had to say. Thanks.

DR. JIM KENDALL: Thank you, Lloyd. Well said. Anyone else?

MR. LEO FERREIRA, III: Leo Ferreira, III. For the record, I guess I have a small, little comment.
Just a crazy idea that I just thought of since I have been hearing lots of talk about our culture and our where we hunt at and what we hunt because I already know -- I already have a feeling that the federal government, they will take our comments and use it to make stipulations and regulations for the gas and oil industry.

And I just had a crazy idea that since they are going to go do it and go do exploration for oil, and if they do find oil -- and they probably might, but we don't know how much yet -- is that when they do get to that point to start processing and shipping our oil, that the federal government should take into consideration because every village is unique in their own way. Kotzebue depends on fish. It's their yearly supply for subsistence. Point Hope, theirs is bowhead whale. And Point Lay is unique to the beluga. And Wainwright could be bowhead and walrus and so forth. So every village lives a little bit different cultural lifestyle. But we all depend on the same animals.

So if we get to past the exploration and get to development, I think the federal government should let the outlying communities regulate and mandate their own wildlife in their areas with the stipulations that we are trying to set forth so that we can harvest our -- harvest our sea animals from the ocean and from the land, that these stipulations should be in place to help us protect our culture.

And I hope they -- it's a good idea, a very good idea, I think, that we should get to regulate our own seasonal hunting and stop being able to stop a ship so we can harvest our bowhead whales or stop the ships for a while so we can harvest our beluga. I think these other villages might want to do other things like they might want a time frame to stop the activity so they can harvest their whale when the whales are passing by on their migration route.

That was just an idea. Thank you.

DR. JIM KENDALL: Thank you, Leo. With those words, do we want to take a vote and have Leo's comment be the last comments? Going once. Going twice. You want to get the last comment?

Good night. Going three times. Thank you very, very much for hanging in there. We had a good meeting. Good comments. And we will be back to share. Thank you very, very much. Have a good night.

(Proceedings adjourned at 11:30 p.m.)
Anchorage
Pass that information up the chain. We collect information. We are not decisionmakers. The case is the Secretary of the Interior. So we are Feds. And as you are going to hear, the decisionmaker in this case is the Secretary of the Interior. So we are Feds. We collect information. We are not decisionmakers. We pass that information up the chain.

Reported by:
Mary A. Vavrik, RMR

Midnight Sun Court Reporters (907) 258-7100

Now, with me on the floor here is Jeffery Loman. Jeffery Loman is Deputy Regional Director for the Alaska OCS Region of BOEMRE. Up on the stage is Mike Routhier. Mike Routhier is an EIS coordinator for the document you are going to hear about. And then we have got Sharon Warren. Sharon Warren is the project manager. Her job is to make sure things happen on time. And with this document it’s real important that things stay on time, and she can tell you why.

Now, sitting right next to Sharon is Mary Vavrik. Mary Vavrik is our court reporter. Because we value everything that’s said here tonight, she is recording everything. And so we need to give her some help. Please state your name before you begin your comments. You don’t have to talk too fast because she’s an incredible typist. So slow down.

Also, to make sure everyone has a chance to speak, we are going to ask you to limit your comments to three to five minutes. If you have written testimony that’s longer, try to summarize it and provide that summary, as well as any other paperwork you have, any notes, to us and we will give it to Mary. That way we will make sure we have a complete record. All right?

Then after we go through this introduction of what this document is, we are going to go into the public hearings. That is a mouthful. You don’t have to remember that because after the brief introduction here, one of my colleagues is going to give you a briefing on exactly what this is so we all start from the same knowledge base. You know, there are a lot of misconceptions about what this is, so we’ll go through a series of flip charts so we know why we’re here today.

Dr. Jim Kendall: Good evening. Welcome to the Revised Draft Supplemental Environmental Impact Statement. That is a mouthful. You don’t have to remember that because after the brief introduction here, one of my colleagues is going to give you a briefing on exactly what this is so we all start from the same knowledge base.

You know, there are a lot of misconceptions about what this is, so we’ll go through a series of flip charts so we know why we’re here today.

Now, who am I? My name is Jim Kendall. I’m Regional Director of the Alaska OCS Region of a very long acronym: The Bureau of Ocean Energy Management, Regulation and Enforcement, or BOEMRE, for short.

Now, BOEMRE is not an oil company. We are not a nongovernmental organization. We are a federal agency or bureau within the Department of the Interior responsible for managing the energy and mineral resources on the Outer Continental Shelf. We are a regulator and a manager. We do our best to be unbiased, collecting information and pass that up to the chain of command to the decisionmaker. And as you are going to hear, the decisionmaker in this case is the Secretary of the Interior. So we are Feds.

We collect information. We are not decisionmakers. We pass that information up the chain.

Reported by:
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As we worked through the summer, we held public hearings in Anchorage. Many of you may have attended those public hearings in Anchorage. And we also had government-to-government meetings, as well. We received about 150,000 comments on that draft supplemental impact statement.

And I’m going to let Mike explain what happened next on this and where we are going today.

MR. MICHAEL ROUTHIER: Now, normally in the NEPA process, you recall with the draft EIS we had the comments and in a relatively short time afterwards, there was the final EIS. Here it was sort of a special case.

We received, as Sharon said, over 150,000 comments. Those are in addition to all the comments we received at the public hearings we held in the villages as well as Anchorage. And we noticed a recurring theme in many of the comments, and that was that we needed to look at the environmental impacts of a very large oil spill.

Now, this was occurring on the heels of the Deepwater Horizon event that was on everyone’s mind, and we as an agency sat down and considered those comments and made a decision that, yes, it would be appropriate to analyze the environmental effects of a very large oil spill.

So we spoke with our geologists. They provided the information in order to make an analysis.

Dr. Kendall said, we are going to go through a short presentation of why we are here. Why we’re here today is to get your comments on the Revised Draft Supplemental Environmental Impact Statement for the Chukchi Sea OCS Lease Sale 193.

Prior to the lease sale, we issued an environmental impact statement. We had the lease sale in February of 2008. There was 29.3 million acres offered. 2.8 million acres was leased. And 487 leases were issued.

There were six companies that received the rights to explore for oil and gas.

Then what happened? Again, the lease sale was in 2008. Days before the lease sale, the plaintiffs sued our agency because the EIS did not adequately, per the allegations, did not assess the potential environmental impacts.

In July of 2010, the U.S. District Court for the District of Alaska issued a remand order to our agency and said you need to go back and take a look at your environmental impact statement. The judge had three concerns concerning the environmental impact statement, and are following the National Environmental Policy Act.

The three issues the Court wanted us to address was the Court said that our EIS Failed to analyze each of what you’re supposed to follow when you state in there that you have missing information. There was an exhibit that was filled with the Court that pointed out all places in the environmental impact statement where we said we were uncertain, information was unknown, there was missing information in order to make an analysis.

So the judge said you need to go back and take a look and follow those regulations to assess that. And he also said that we failed to determine whether the cost of obtaining the information we said that we were missing was exorbitant and the means of doing so was unknown.

So what did we do as an agency as to respond to the court order? We drafted a supplemental environmental impact statement to address the Court’s remand. We released the draft supplemental environmental impact statement in October of 2010. We went out to the communities, had public hearings. We also had some public hearings in Anchorage. Many of you may have attended those public hearings in Anchorage. And we also had government-to-government meetings, as well. We received about 150,000 comments on that draft supplemental impact statement.

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Now, this was occurring on the heels of the Deepwater Horizon event that was on everyone’s mind, and we as an agency sat down and considered those comments and made a decision that, yes, it would be appropriate to analyze the environmental effects of a very large oil spill. And that is something that the decisionmaker should be cognizant of.

So we spoke with our geologists. They provided...
So I mentioned several times tonight the concept of a very large oil spill. What is that? Well, basically it's an analytical tool, something we use in our NEPA document to make a decision -- make the decisionmaker aware of potential impacts. It's hypothetical. It's an extreme case. It's not tied to a specific well, and it's not to be confused with another term you might hear in the context of oil and gas activities that's going to be a worst-case discharge.

Right now, we are at the lease sale stage. Before any exploration would occur in the OCS, several things need to occur. We need to finish this document; the Secretary will need to approve all the leases; the courts will sign off on it; companies need to submit exploration plans, and we need to review that and approve that.

So we are a long way off before any exploration plan is considered, but the worst-case discharge is specifically required by our regulations to be a part of it.

Your comments are due by July 11th, so that's the deadline for you to go to regulations.gov and submit your comments using regulations.gov. So if you haven't used regulations.gov, there is a guide out there that will walk you through on how to submit comments on that website.

Also, if you have any questions concerning -- after you're looking at that, you can call our office and somebody will help you walk through. So again, we want your comments.

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MS. SHARON WARREN: So what do we need from you today? We need your comments today. As I said, we're here because of the revised draft supplemental environmental impact statement. We have documents, hard copies, out there at the sign-in desk. If you have not received one, please take one. We have CDs available, as well. Please take one. We also have a guide to how to submit your comments using regulations.gov. So if you haven't used regulations.gov, there is a guide out there that will walk you through on how to submit comments on that website.

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MR. JEFFERY LOMAN: Senator Giessel, you have the floor.

MS. CATHY GIESSEL: Thank you, Mr. Loman.

For the record, my name is Cathy, with a C, Giessel, G-I-E-S-S-E-L. I'm a State senator representing District 4, where I represent South Anchorage. I'm also a State senator representing District 10, where I represent South Anchorage, and I also provide health care services in the coastal -- in coastal communities around Alaska, in rural Alaska. So I've seen the environment. I've worked in the environment where this kind of development will take place. And I'm speaking in favor of this as lease sale and of the expeditious development of these resources.

You know, the federal government is now releasing 30 million barrels from our strategic petroleum reserves when Alaska holds 40,000,000,000 barrels of potential petroleum that could be developed, meeting energy needs for our country. But it also meets energy needs for our people. Energy needs heat our homes, our businesses, et cetera, but also human energy in the form of jobs. Jobs that allow people to live independently and with the self-esteem of supporting themselves and still live in those communities where the families have lived for decades.

Multinational companies who are in a position to invest will do so outside of our country and therefore will funnel hundreds of millions, even billions of dollars, to outside economies that likely do not have the stringent regulatory framework to support America's interests.

Again, Mayor Sullivan opposes any further delay in development of Alaska's offshore oil and gas resources and urges allowing these leases to move forward.

Thank you for the opportunity.

MR. JEFFERY LOMAN: Thank you.

MS. JONNE SLEMONS: Good evening. For the record, my name is Jonne Slemons, J-O-N-N-E S-L-E-M-O-N-S. I'm here representing the Alaska Department of Natural Resources and the Division of Oil and Gas.

The State has reviewed the Revised Draft Supplemental Environmental Impact Statement for the Chukchi Sea planning area oil and gas Lease Sale 193. We compliment the Bureau of Ocean Energy Management, Regulation and Enforcement for the work put into this document. Alaska has a tremendous stake in the successful progress of leasing, exploration, and development of the Arctic OCS.

A study conducted by the University of Alaska Anchorage Institute of Social and Economic Research finds that the Alaska economy will be sustained by the addition of 30 million barrels of petroleum that could be developed, meeting energy needs for our country. But it also meets energy needs for our people. Energy needs heat our homes, our businesses, et cetera, but also human energy in the form of jobs. Jobs that allow people to live independently and with the self-esteem of supporting themselves and still live in those communities where the families have lived for decades.

Now, you are asking about environmental impact.

And you know those questions were asked when Prudhoe Bay was developed and when TAPS was built, the Trans-Alaska Pipeline. And we have shown in Alaska that petroleum development can exist with safe environmental standards.

We watched that Central caribou herd on the North Slope increase from 5,000 animals to now over 30,000 animals. It can be done, and I believe it can be done on the Outer Continental Shelf, as well.

Alaska, as a government, is working hard to ensure that all of those emergency response abilities are in place. So I'm speaking on behalf of this lease sale and I urge the expeditious permitting and development.

Thank you.


MR. LARRY BAKER: Good evening, and thank you for the allowing me to testify. For the record, my name is Larry Baker. I'm Chief of Staff for Anchorage Mayor Dan Sullivan. And he's asked me to make comments to you this evening. Mayor Sullivan's jurisdiction spans nearly 2,000 miles and almost 300,000 people. I'm
Development of the OCS would spin off approximately $8 billion in additional state and local revenues.

Further, OCS development is a prime source of the continued health and diversity of our onshore industry. Production from the OCS has several indirect effects, including lower pipeline tariffs and a longer life for the TAPS pipeline, a more robust and lower cost service industry, and longer-lived onshore facilities.

It is apparent from our review that you have addressed the Court's three concerns on the original document in a comprehensive manner.

In addition, the analysis of a very large oil spill in this revised draft is thorough, addressing the phases of a blowout event and analyzing the impacts that each phase would have on the various resources.

In summary, the State concludes that the revised draft supplemental EIS for Chukchi Lease Sale 193 provides more than sufficient support for the Secretary to affirm the February 6, 2008 Chukchi Lease Sale 193, and it is well past time for leaseholders to proceed to the next phase of exploration.

Thank you for the opportunity to provide our comments.
And the list of countries, the names of places that are around the world as a place people would want to invest. This shows where Alaska falls in regards to other jurisdictions, I was looking at a report earlier today that going to be good for our state. We are already falling as the lease just -- stuck on my words, but it's -- it's not this lease sale and hopefully the eventual development of into what was already a robust document. To further delay analysis in the EIS is a step further. It's a step above Seems like the incorporation of the worst-case supplemental EIS that's going forward.

The project Shell has in Alaska is defined by its remoteness. It was not a secret to Shell that the leases they were purchasing in Beaufort and Chukchi Seas were in harsh conditions and far away from infrastructure. So that's why Shell has invested everything to bring their equipment and the world's oil response capabilities to this scene. It's never been Shell's intention to, in a worst-case scenario, chase ribbons of oil with thousands of boats across the Arctic.

The other day I read a quote from another professional opposition group that said Shell doesn't have any ice class vessels that could work in the aircraft, which would be a tremendous surprise to the thousand men and women who are working right now in Louisiana 24 hours a day to build a second ice class (indiscernible) destined for Alaska.

And two weeks ago, finally somebody from one of these professional opposition groups showed his true colors. He was quoted as saying the Trans-Alaska Pipeline has passed its expiration date. So as a fourth-generation Alaskan, and I take from that that we should go back to something close to territorial status. I'm not willing to do that.

So I’m here to say, you know, on behalf of my family, certainly myself, I absolutely support responsible...
The lives and health of our men and women in the Armed Forces, I think, are the -- are equally, if not more, important than an oil spill that most likely won't happen.

So we also need the oil from the OCS Lease Sale 193 to keep Alyeska's pipeline safe and operable. Right now it's at a very low oil production rate. It needs to have more and more oil supplied to it so it can remain mechanically viable.

So thank you very much.

DR. JIM KENDALL: Next we have Renee, followed by Michael Jesperson. The floor is yours.

MS. RENEE LIMOGE: Good evening. For the record, my name is Renee Limoge. That's R-E-N-E-E L-I-M-O-G-E. And I'm here on behalf of the Alaska Support Industry Alliance. We are in favor of OCS development. Specifically, we are asking BOEMRE to reaffirm Lease Sale 193.

The Alliance represents over 400 member companies employing 35,000 Alaskans in the oil and gas and mining support industries. Continued exploration and development of Alaska OCS is vital to the economy of our state and our domestic energy supply. Americans across the nation are faced with high energy costs, and development of the OCS would help relieve some of those costs, while providing much needed jobs here in our state and throughout the country.

With the political climate around the globe, the United States should do everything it can to develop domestic energy resources, both on and off shore, rather than depend on foreign oil supplies. In doing so, not only can we employ Alaskans, but we will be assured that development takes place under the world's highest safety and environmental standards.

The Alliance and our member companies urge you to let the Chukchi Sea leases move forward and allow this abundant energy supply to be tapped.

Thank you.

DR. JIM KENDALL: Michael Jesperson.

MR. MICHAEL JESPERSON: My name is Michael Jesperson, J-E-S-P-E-R-S-O-N. I don't work for an oil company. I don't work for anybody that supports the oil company. I work in the tourist industry, and I still support development of the OCS. It's the only way we are going to keep the economy up here going. It will be done responsibly. It won't hurt tourism. Might well be safe.

But more importantly, the economy will improve and when my children, who are 15, 12 and 2, graduate from high school and college, they will be able to stay close to home and work if we get going now.

Don't delay. Let the leases go forward.

Expedites permitting and start drilling.

Thank you.

DR. JIM KENDALL: Okay. Next is Raychelle Daniel, Ayes Thompson and Russell Sell.

MS. RAYCHELLE DANIEL: Raychelle, R-A-Y-C-H-E-L-L-E, Daniel. And I'm with the Pew Environmental Group, and I'm here speaking on behalf of myself. I grew up in Western Alaska, and I also grew up living on a subsistence lifestyle. And a lot of the species that were important to us and traversed in the Chukchi 193 area. And so this is an important issue to me. As well as a background as a scientist, it's also an important issue.

We are -- we -- the revised SEIS -- the revised draft SEIS, we believe, does not remedy some of the significant flaws from the original EIS, and that's because it doesn't have the necessary data and new analysis of which to fully inform reconsideration of a leasing decision. So the lease stage is a time at which the agency decides whether to commit an area to oil and gas activity. So that's a really important time period. So it's essential that the agency have adequate information about resources and their impacts on those resources.

And one of the frustrations -- I talked with scientists about management and policy -- is that a lot of the science doesn't get incorporated. And while we recognize that there is a lot of science that's been conducted -- myself, I've contributed to some of those studies that occurred in the Arctic Ocean -- we would like to see that sound scientific information is applied to good decision making.

And so one positive step is the USGS report that was just released this past week. And the Secretary released the report entitled an evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas. And I believe this report is very relevant and highly applicable to decisions for Lease Sale 193.

And so with this new information available, BOEMRE should conduct careful evaluation of the USGS findings, the previous studies that have been conducted, such as the NRC cumulative impact study, and produce a clear, coherent strategy for gathering necessary information and conducting appropriate analysis to address key management decisions regarding activity in the U.S. Arctic OCS.

And so in conclusion, we think that the Secretary should suspend Lease Sale 193 until the agency...
And lastly, BOEMRE has the ability and the obligation to move the process forward, provide the oil that our industry, our state, and our nation so desperately needs.

For these and many other reasons, the Alaska Trucking Association urges the Bureau of Ocean Energy Management, Regulation and Enforcement to move forward as soon as possible in the approval process to allow for exploration and production activities to begin on Chukchi Lease Sale 193.

Thank you for your attention.

DR. JIM KENDALL: Russell Sell and followed by Mike --- or Mike Hank will be next.

MR. RUSSELL SELL: Thank you. For the record, my name is Russell Sell, S-E-L-L. And I am in the oil and gas business. I represent myself and my family at this event. And thank you, Madam Project Manager, for all your work and Mr. Secretary for allowing us to testify here tonight.

I would also like to reaffirm the lease sale going forward. And I’d like to say that I come from a certain level of expertise experience. Aside from all the onshore prospects that I’ve worked on in the Beaufort Sea and the North Slope, I have been physically present on offshore projects in the Lower Cook Inlet on some...
Mr. Secretary to look very seriously at this and allow us to do our job, bring jobs to Alaska, bring a piece of the American energy puzzle to fruition.

Thank you very much.

DR. JIM KENDALL: Forgive me if I'm saying the name wrong. Ma or Mae Hank. Mae, thank you. You are next, followed by Colleen McCarthy and then a Carl Portman. The floor is yours.

MS. MAE HANK: Good evening. My name is Mae Hank, M-A-E H-A-N-K. I'm originally from Point Hope.

I am a tribal member of the Native Village of Point Hope. And as the gentleman mentioned earlier, he's fourth generation of residing in Alaska. Me, myself, I am hundreds and hundreds of generations that have lived here in the beginning before anybody came.

My concern about Lease Sale 193 is that it is my family's hunting ground. It is my -- uncles, my aunts, my brothers, sisters, we all depend on our traditional food. And without it, if there is an event of an oil spill, that would be very devastating because that would eliminate our culture, our traditions, and our religious celebrations we do year-round.

I had a few issues about getting this into -- to get it opened again, that our traditional ecological knowledge that we have from centuries and centuries, our
exploration and development in the Chukchi Sea.

Thank you.

MR. CARL PORTMAN: Good evening. My name is Carl Portman, Deputy Director of the Resource Development Council. RDC urges the Bureau of Ocean Energy Management, Regulation and Enforcement Bureau to affirm Lease Sale 193 as held in 2008. The SEIS provides sufficient information and analysis to support a decision affirming the sale.

Oil and gas development is absolutely critical to Alaska's future economy. With the Trans-Alaska pipeline system now running at one-third capacity, exploration blocked in ANWR and nondevelopment activists working toward wilderness designations in the National Petroleum Reserve, nothing less than Alaska's future economy is at stake. The responsible development of potentially immense oil and gas deposits in the Chukchi Sea would significantly boost the economy and extend the life of the oil pipeline. Without new federal oil production, TAPS could be uneconomic to operate sometime in the next decade.

If there is no oil and gas development in ANWR and the OCS, and the best prospects in NPRA are taken off the table, the federal government must then accept the consequences, including heavy reliance on foreign oil. At the same time, we must ensure that our domestic energy base provides the nation with much needed domestic energy reserves.

I do see that the agency has provided a horizon spill to determine this analysis should be part of a supplemental EIS. You are aware the timelines to operate in the Chukchi and the Arctic are very short, and your late determination that a very large oil spill analysis should supplement your submission to the Court threatens yet another drilling season and the creation of Americans jobs.

While Shell acknowledges your attention to ensure proper analyses of impacts from a very large oil spill in the Chukchi, it is also important, as you explained before, that the public understands that the analysis presented in the revised draft supplemental EIS does not take into consideration an operator's ability to respond immediately to an emergency that results from a well controlled situation.

For example, Shell's exploration plans since 2009 have identified and provided specific information on all response vessels that would accompany a drilling operation in the Chukchi. So that continues to be misrepresented. So for the record, Shell Oil will bring with them oil spill response assets, as has been documented in public for the last six years. Our response to -- our response time to well control scenario is one hour.

I do see that the agency has provided a
description of our plans in the very large oil spill
analysis. But to avoid creating confusion, I appreciate
and I would encourage you to continue to use all
appropriate language to make clear the impacts analyzed in
that analysis which disregard any response efforts,
including Shell’s oil spill response plans.

So after having said that, Shell can and will
meet the challenges presented in our current exploration
plans because meeting challenges have always been a part
of our plan wherever we were in the world. So our project
in Alaska has always been defined by the region in which
we aspire to work. So it is remote. You are right. And
it’s harsh, and it is covered by a multiyear ice 65
percent of the year. So believe me, before we spent 2.1
billion dollars, we were very aware of the conditions in
the Chukchi.

We drilled four wells there. We drilled 12
wells in the Beaufort. So we know about the Arctic. And
we do recognize the traditional knowledge is absolutely
paramount to be able to continue to go forward.

Shell has already built a 300-foot ice-class oil
spill response vessel for the Alaska project, and we are
building an even larger anchor handler for use in our
Arctic operations. It’s being built as I testified before
you tonight.

These ice-class vessels are centerpieces to our
oil spill response fleets, and they cost well over
$100,000,000 each. That’s meaningful. That is meaningful
to spend over $100,000,000 each on vessels to make sure
that we are prepared. But that’s only one example of our
investment and dedication to keeping oil out of the water
in the Arctic.

So Shell has already committed to having in
place an Arctic capping system in the event we were to
have a spill and we were unable to shut in a well. I’d
like to remind you that the last time the world saw a
capping system like the one we are building for the Arctic
it was shutting in the most prolific deepwater well
blowout in the history of this nation. We have modified
that system and it will take place in Alaska before Shell
ever touches the sea floor.

That capping system, combined with our ability
to ignite and effectively burn oil slicks, is not
actually -- we are not actually given credit or credited
when our oil spill response capabilities are calculated or
permitted. Nor is our ability to use and deploy
dispersants, despite the fact that they have proven very
effective in the Arctic.

In the big picture, all of this doesn’t matter
because we are committed to having those tools and assets
public a great disservice.

Finally, I want to tell you that we will
continue to invest. Shell will continue to invest in the
Arctic and in oil spill response and recovery equipment
because if a worst-case discharge were to happen, it’s our
responsibility and ours alone to clean up. Not the state
of Texas, not the state of Alaska, not the Coast Guard,
but Shell.

So I find that very -- actually, I find that
very important and not comical at all. And I will tell
you that the best rate of return I can think of on that
multimillion dollar investment in oil spill response
equipment is to never have to use it in the first place.
That’s our intention. I urge you to expeditiously prepare
the final document and the Record of Decision so that
Shell can get on with responsibly exploring for new
domestic supplies of oil that will help fill the
Trans-Alaska Pipeline and create tens of thousands of new
jobs for America, which I assume that many could use.

Thank you very much.

MR. JOHN STURGEON: Good evening. My name
is John Sturgeon, spelled S-T-U-R-G-E-O-N. I’m a 41-year
resident of Alaska, and I work in the forest products
business. I support Outer Continental Shelf Lease Sale
193. I support it because I believe it can be done in an
1 my name is Ron McPheters, M-C-P-R-E-T-E-R-S. I’m nearly a
2 lifelong resident of Alaska, married, father of four. I’m
3 also President of the Laborers Local 341 in Anchorage.
4 I’m here to speak on the importance of oil and gas
5 exploration on the Outer Continental Shelf Lease Sale 193
6 should be affirmed as held in 2008. The SEIS provides
7 sufficient information and analysis to support an informed
8 decision affirming sale 193. Rescinding the leases and
9 allowing a de facto moratorium to continue will harm
10 Alaska’s economy and discourage future industry
11 investment.
12 Ladies and gentlemen, this is what scares me and
13 our 6,000 statewide members. We are so dependent on oil
14 and gas production we cannot afford any further decline in
15 TAPS throughput. The goal of Lease Sale 193 was to
16 produce oil and gas from the Alaska OCS and boost domestic
17 production from potential world-class energy deposits.
18 OCS production has the potential to refill TAPS, which is
19 now operating at one-third its peak flow.
20 An estimated annual 54,000 new jobs will be
21 created and sustained over 50 years by OCS-related
22 development in Alaska. An estimated $63,000,000,000 in
23 payroll will be paid to employees in Alaska as a result of
24 OCS development. Many of employees are in our union and
25 other unions.

P, as in petroleum. It was great to hear from my State
senator this evening. And it is wonderful to have the
opportunity one more time to testify in front of you here
tonight. And I must say it is much better to have a
little bit more room here compared to where we usually
are. So thank you for the continuous improvement.
I am 100 percent committed to leasing and
developing our resources. It is absolutely incredible
that in 1968 Prudhoe Bay was first discovered. In nine --
that was nine -- short years, the field was developed and
the Trans-Alaska Pipeline system was completed and oil
flowed. It was amazing what we used to do in Alaska and
in the United States.

Since 1977 TAPS has seen over 16,000,000,000
barrels of oil flow down that 800-mile beauty that some in
here helped build. It has transported North Slope crude
safely and reliably and has provided tremendous economic
benefits to the residents of Alaska and the United States.
In Alaska, we have a saying: No dough without oil flow.
It is now 2011 and we are faced with headlines
just today of “We cannot afford to let the pipeline die
from federal neglect.” Senator Lisa Murkowski.

Let’s quit talking about the same thing and get
Alaskans and Americans working again. We used to drill in
the Beaufort and Chukchi Sea back in the 1980s. Back then

To date 30 wells have been drilled in the
Beaufort and five in the Chukchi, all without incident.
These wells were drilled in the ’80s, utilizing older
technology compared to what exists today. Also, over 250
studies have been funded in the Arctic, with the majority
focused on Beaufort and Chukchi, making the area perhaps
the most studied in America. We should continue with
additional research, but at the same time move forward
with exploration.

Those who oppose exploration in the Arctic would
study the issue indefinitely and use any data gaps as an
excuse for inaction. There will always be data gaps and
unanswered questions, no matter where we explore and
develop, no matter where exploration and development
occurs.

Please let us drill for all our kids’ sake
because without this, we have nowhere else to go. Our
economy is one of the last strong ones in the nation.
Thank you for your time.

MR. TOM MALONEY: Good evening. For the
record, you have the toughest job here.

My name is Tom Maloney. That’s M-A-L-O-N-E-Y.
And I’m a long-term resident of South Anchorage District

environmentally sound manner, that it can be done with 100
percent certainty that’s not going to hurt the
environment. That’s not possible. Nothing in this world
is 100 percent concern, but I think there is enough
safeguards in place that it will reduce that risk
substantially.

I support Lease Sale 193 because it -- Alaska’s
economy is still based on oil and gas, and oil and gas
production drives our economy and is responsible for the
majority of our private sector jobs. It also pretty much
100 percent funds the State government. Without the oil
money, we wouldn’t have the government services that we
have today in Alaska and the many benefits we have.

I support oil and gas development in the outer
shelf because it provides quality of life that we all
enjoy here in Alaska. I urge you to move forward with
Lease Sale 193.

And in closing, I’d like to thank you for being
here tonight and giving us an opportunity to have our say.
Thank you.

DR. JIM KENDALL: Next we have Ron
McPheters followed by Tom Maloney, Jeff Jones, and Marilyn
Houser. So if you want to move up front, that would be
great.

MR. RON MCPHETERS: Ladies and gentlemen,
And then if Jennifer and Stacey want to move down, that would be great.

MR. PAUL KENDALL: For the record, my name is Paul D. Kendall and I'll -- I'm sorry, I heard something. My Tim is Paul D. Kendall. In all fairness, Mr. James Kendall, there is no relationship, so -- we just had met here a few moments ago.

Before we begin, I want to give for a matter of record two documents here. I want to give a letter where I am sending around to multiple institutions in Alaska asking how many barrels of oil Anchorage uses; how many barrels of oil Anchorage uses. You would be amazed what that discussion brought. For example, the mayor sent one of his people who e-mailed me, charged me $45 an hour to ask his people. Just staggering. It goes better than that.

I'm also going to offer the letter of understanding from the world's largest automobile manufacturers calling for hydrogen to be of sufficient density by 2015. Remember, ladies and gentlemen, the data transcends the individual. Don't ever forget that, if I might be so bold as to make that. So if I can put this in the record for historical purposes.

For the record, I rise here in opposition to any kind of development off the coast of Alaska until they can fill in the blanks. This is where I want to tell you why.

There are a multitude of things. For example, until you open your records, we cannot resolve anything until public information becomes public information. And ladies and gentlemen, again, I can't stress enough, the energy belongs to us. All of these companies are a conveyance of opportunity to serve us as a society. The other thing would be that I would not allow it until you give me a list of all of the things that are secret that are what they will nondisclosure, proprietary, which would be called a tricked-up term, a sling term, by the way.

Now having said that, I generally am here trying to explain to you as a messenger, I think in some way, to tell you you are much, much more important than you ever dreamed. If I were you, the OCS people, I would tell them, hell, no, you are not putting nothing in out there until we have a comprehensive energy plan in the City of Anchorage.

Now, keep in mind, the City of Anchorage is your hub. If you look at it like a wheel, it is from here which you can spawn in an accelerated mode. You can manifest things and create things. It is not in Juneau, it is not in Barrow, it's not in [indiscernible].
Now, keeping that in mind, I want to mention a couple other things to you. I didn’t -- I came here to hear Shell tonight. I thought they were going to give a major presentation.

But for the record, before I forget, the Volt is going to be on display at Alaska Sales and Service. [Indiscernible]. Late last year I drove an electric vehicle, drove 375 miles, average of 55 miles an hour, and it recharged in six and a half minutes. If you will look up Rossie-Cat, R-O-S-S-I-E-C-A-T, they are putting in 800 watts and they are giving out 10 kw of dry steam. In other words, they are taking 800 watts, or eight light bulbs, and they are getting 100 light bulbs on the other end, in simple terms.

But they are adding some hydrogen and some nickel, and the nickel [indiscernible]. They are going into production next year, over 50 scientists.

The reason that’s imperative for you to understand is because around you things are going very, very quickly. Some things do not make sense in the state of Alaska. If I were you, I would not only ask for the hub of Anchorage to have an energy plan; you should definitely as a family get something formulated, a 30-day plenary with respectful on-camera, sworn-in testimony.

What I’m trying to tell you is this: Last time I came to the plenary with respectful on-camera, sworn-in testimony.

Dr. Jim Kendall: Lois Epstein, Dave Cruz, (A break was taken.)

Thank you.

Ms. Jennifer Taylor: Jennifer Taylor and Stacey Dean. Jennifer, the floor is yours.

Ms. Jennifer Taylor: Thank you for the opportunity. My name is Jennifer Taylor, and I’m a born Alaskan. I work for Shell, but I’m here tonight representing my family, including my husband, my daughter, parents. They are all Alaskans.

I’m here tonight to voice support for responsible development of Alaska’s resources. I believe it’s vital to our state economy and future generations. I urge you to move forward allowing exploration on these leases.

Thank you.

Dr. Jim Kendall: Stacey, the floor is yours.

Ms. Stacey Dean: Thank you. My name is Stacey Dean, S-T-A-C-Y-D-E-A-N. I’m a resident of Anchorage. I’m not in the oil or gas or oil services business. I support Shell, and I’d like to see the lease sales continue.

Thank you.

Dr. Jim Kendall: Again, we are going to try something a little bit different. Instead of people coming in and out disrupting, we are going to take an official ten-minute break. I will warn you, in eight minutes I will be knocking on the microphone, as well as nine minutes, ten minutes starting now. Thank you.

(A break was taken.)

Dr. Jim Kendall: Lois Epstein, Dave Cruz,
Wayne Leighty, Leonard Horst, Mike Faust, Marilyn Heiman. So you may want to move up here. Mr. Loman, would you mind being the next master of ceremonies here? I’ve got all the ones labeled up through 40. Lois Epstein is first.

MS. LOIS EPSTEIN: Good evening, everybody. Thank you, Dr. Kendall and BOEMRE staff for this opportunity to testify.

My name is Lois Epstein, L-O-I-S E-P-S-T-E-I-N. And I’m a licensed engineer and the Arctic program director for The Wilderness Society, also known as TWS. We are a nonprofit public interest organization.

I’ve spent over 20 years working on oil and gas technical and policy issues as a consultant and as an employee of nonprofit organizations. I was a technical advisor on the Report to the President in May 2010, which contained recommendations on increasing offshore drilling safety, and I now serve on BOEMRE’s Ocean Energy Safety Advisory Committee. I’m not opposed to oil and gas production in Alaska. My role at TWS is to ensure that oil and gas drilling is done well and in appropriate locations.

For the record, and in response to other statements, TAPS is in no danger of shutting down, according to the industry data that was used in the recent court decision written by Judge Gleason and signed onto by the State.

According to that decision, TAPS will operate until 2047 at least, using current reserves. So that’s sort of a side show in terms of a discussion in this setting.

TWS’s position is that BOEMRE needs to take the time needed to make scientifically justified decisions before allowing drilling, including exploratory drilling in the Chukchi. This is true even though the previous Administration issued Chukchi leases, prematurely in our view.

As I stated at a similar hearing in Anchorage when the draft SEIS was issued, BOEMRE should reassess which scientific information in Appendix A of the SEIS is obtainable at a cost that is not exorbitant rather than BOEMRE dismissing the need to consider such information.

Without such reassessment, BOEMRE in effect is saying that it has decided to allow exploratory drilling regardless of the impacts. The public needs to know the impacts, however, in as specific detail as possible for rational decisionmaking.

Last week the U.S. Geological Survey issued its science gap and sufficiency report evaluating the science needed to inform Arctic Ocean drilling decisions. This

Intellectually sound report, which acknowledges that there are data gaps that ought to be addressed prior to decisionmaking, provides critical information that BOEMRE needs to utilize in SEIS development.

These gaps cover biological data, but also physical, oceanographic and meteorological data which are certainly relevant to BOEMRE’s very large oil spill trajectory modeling. If such data are not relevant or essential, and some of these data may be relatively low cost to obtain, is there any information that BOEMRE would consider essential when deciding whether to offer oil and gas leases in the Chukchi Sea?

More generally, BOEMRE should explain the factors or criteria it evaluated in deciding whether information was essential to its leasing decision.

Additionally, Secretary Salazar stated when the USGS report was released last week that, ‘This study is helpful in assessing what we know and will help inform determinations about what we need to know to develop our Arctic energy resources in the right places in the right way.’

Does it make sense for BOEMRE to ignore the Secretary? To carry out his direction now that the USGS report has been issued, BOEMRE could suspend operations on Lease Sale 193 leases pending further data collection upon which to base future decisions covering whether, where and how to permit implementation of the leases.

The Alaska Federal District Court’s recent decision which we heard about earlier that BOEMRE complete the remand process by October 3rd does not prevent the agency from changing its present and, we would consider, flawed course.

In Appendix D of the revised SEIS, BOEMRE provided background information on its estimate of a very large oil spill or VLOS. The VLOS analysis is valuable information for decisionmakers and the public, and we welcome seeing that in the revised SEIS. On the first page of the appendix, however, BOEMRE characterizes such a spill as a ‘low probability, high impacts’ event.

An academic colleague on the Ocean Energy Safety Advisory Committee forcefully argued in several conference calls that blowouts are not, in fact, low probability events, as there have been 79 reported losses of well control in the U.S. portion of the Gulf of Mexico from 1996 to 2009, according to the President’s Oil Spill Commission. This colleague, Dr. Leveson from MIT, believes such events should be characterized instead by BOEMRE as low frequency, high impact events rather than low probability, high impact events.

In conclusion, it is widely recognized that BOEMRE needs regulatory and other drilling oversight
MR. WAYNE LEIGHTY: Thank you. For the record, my name is Wayne Leighty. That's W-A-Y-E. L-E-I-G-H-T-Y. I work for Shell, but I'm here on behalf of myself speaking to tonight as an informed and interested lifelong Alaskan with degrees in environmental science, economics, transportation technology, resource economics, sustainable energy systems, and business administration.

Others have spoken already eloquently on the economic benefits of OCS development and oil spill prevention and response equipment and capabilities, so I'll use my time to focus on the stated mission of BOEMRE to manage mineral resources of the Outer Continental Shelf. Prompt finalization of Lease Sale 193 and permitting for exploration as wise resource management for at least four reasons.

First, OCS development will enhance existing onshore oil production in both value and volume. Volume will be enhanced by -- or value will be enhanced by reducing transportation costs per barrel with...
For all these reasons Lease Sale 193 was wise resource management. Failing to affirm the sale and proceed with permitting for exploration would be very poor resource management.

Thank you.

MR. JEFFERY LOMAN: Leonard Horst, followed by Mike Faust.

MR. LEONARD HORST: Thank you. For the record, my name is Leonard Horst, L-E-O-N-A-R-D; the last name is H-O-R-S-T.

Tonight I appreciate the opportunity to speak again, and thank you for that opportunity. I will speak from three different perspectives, if I can. One as an individual Alaskan; two, as a banker and an economist; and three, as a member of the Resource Development Council.

I am speaking in support of the affirmation of lease 193. I think it’s time we get going and get going quickly. As an individual with three grown children who have all left the state for opportunities that they didn’t feel they could gain here, I think the fact that we are talking in the neighborhood of 35,000 jobs on an annual basis is a critical factor. We do need to consider this.

You know what? I’d love to visit my grandson in South Anchorage, as opposed to Chicago. I’d love to visit my granddaughter in Eagle River, as opposed to Sydney, Australia. My kids have been very successful, but they didn’t see those opportunities here. I want to see that come back for their kids and generations beyond.

Secondly, as a banker I can tell you many of the comments that have been made -- I won’t go into all the facts and figures that I had originally planned, but I can assure you that this economy is in a serious condition right now. We need to address what is going on with TAPS now. Alaskans need to realize that the flow through that pipeline at this point is already at a critical stage.

Opening of OCS is important and it’s timely to do it now. What comes from OCS will refill TAPS, will put a ton of people back to work, and allow us to go forward with this economy for generations to come.

Finally, as a member of the executive committee of the Resource Development Council, we are a group of companies and individuals that represent all walks of life across the state of Alaska. We are committed to responsible development of Alaska’s natural resources. I believe that we have seen the oil companies, the mining companies, the fisheries, all come forward, the tourist groups; forestry spoke earlier this evening. We know how to develop resources in a responsible way in this state.

In conclusion, I do encourage you to move forward immediately to affirm the sale as proposed. Thank you.
TAPS, keeping this critical link for domestic supplies of oil in operation.

Working together, government and industry can develop a plan for careful exploration and production of oil and natural gas within the Arctic OCS waters. If exploration efforts are successful, new OCS resources would play a vital role in decreasing America's dependence on foreign oil, creating thousands of American jobs, and generating new sources of income for federal and state governments. At the same time, it will assure a steady supply of oil during the critical period while America balances fossil fuel energy use with other types of energy.

We are committed to explore the Chukchi Sea responsibly, with respect for the environment, and in a manner that would respect the subsistence way of life for the residents of Alaska's North Slope.

In closing, ConocoPhillips supports the supplemental EIS. We commend BOEMRE for a fine job on that, and believe it provides sufficient information and analysis for the Chukchi sea. We encourage BOEMRE to issue supplemental EIS affirming Lease Sale 193 and allowing those holding leases to proceed to explore them for Alaska's future economy and the nation's long-term energy security.
the highest standards for science, spill prevention, response and safety are conducted in the Arctic Ocean. And we want to -- we try to take a solutions oriented approach, and we don't blanketly oppose all drilling in the Arctic.

We are pleased with BOEMRE that they have included the analysis of very large oil spill in the EIS. We look forward to working with the department on more clearly defining what response capacity needs to be in place to respond to a very large oil spill, including assuring adequate shoreline protection and near shore protection.

We have been pleased to see the department has -- the Bureau has proposed new standards, strong standards for safety, but we haven't seen those level of standards for improvements in spill response. We have seen it for containment, but not spill response. And we know that the Bureau is working on that, but we would like to see that happen quickly because oil and gas is happening quickly in the Arctic Ocean.

As far as missing science, we were disappointed that the revised EIS didn't remedy the flaws in the agency's initial analysis and did not provide meaningful new analysis with which to reconsider the leasing decision. The recently released USGS report, which has been mentioned many times today, recognizes that there has been a significant amount of research done in the Arctic, much of it by the Bureau of Ocean Energy Management. But there's critical knowledge gaps that still remain. It also showed that the best -- that the information and data we do have is not synthesized in a way that it best informs decisions on potential oil and gas activities.

We encourage BOEMRE to incorporate the information in the USGS report in the supplemental EIS, specifically in filling needed information gaps, working with other agencies to come up with better ways to synthesize and coordinate data and recognizing the importance of traditional knowledge.

We clearly need to find better ways to coordinate and synthesize all the research and monitoring that is being done to guide the decisionmaking. And we urge BOEMRE to work with the USGS, NOAA and the Coast Guard, the university, the North Slope Bureau, industry, and all the entities who are working to produce this research to provide a coordinated research program with a one stop shop for the data. The data needs to be readily available for decisionmakers, for permits, but also for responding to oil spills. This data should also be available to the affected communities so they can take part in decisionmaking.

A comprehensive integrated research and monitoring program is essential to provide a framework for decisions on development activity in the Arctic and to help avoid adverse impacts on the environment and subsistence way of life. Some of the things that we said in the past are that, you know, we need to have better information on things, such as wind and currents, to determine where the spills will go and what the trajectory will be of those spills. More information on important ecological areas, sensitive areas, subsistence areas, just to name a few.

If the Secretary does affirm Lease Sale 193, we believe he should adopt a modified alternative that better protects important ecological and subsistence areas. We believe also that BOEMRE should place a suspension on Lease Sale 193 leases until a comprehensive integrated research and monitoring plan is in place to guide decisions, critical gaps identified by the USGS report are filled, and a plan is in place that protects important ecological and subsistence areas.

Thank you development.

MR. JEFFERY LOMAN: Thank you. Lucy Jean.

Kip Knudson.

MR. KIP KNUDSON: Good evening. My name is Kip Knudson, last name K-N-U-D-S-O-N. I am very fortunate to be employed by a small refining company called Tesoro. I say small because there is a single refinery just recently built in the country of India that refines double -- just a single plant -- refines double the amount of crude that my entire company does with seven refineries in the United States. We have lost other types of manufacturing in the United States, and perhaps refining is next based on that kind of model.

I'm also a volunteer with the Alaska State Chamber. I'm currently Chair of the Board and I would like to note that the 400 members of the State Chamber have repeatedly the last three years listed responsible OCS exploration and development as a priority for the business community in the state of Alaska. And my wife and I are raising a delightful, bright-eyed optimistic nine-year-old who we are telling on a daily basis that she can do just about anything she sets her mind to. And we are carefully protecting her from proceedings like this for fear she might become pessimistic.

You know, I said I work for Tesoro. We operate in one of the world's premier oil basins, and yet I'm going to tell you a shocking fact, and that is that Tesoro Alaska has to buy crude from foreign sources in order to manufacture transportation fuels for Alaskans. If you are not aware, the West Coast of the United States is
currently short of crude oil.

So the entire west coast from California north has to buy foreign crudes. Mr. Kendall referenced this issue, and he was incensed by it. I'm incensed by it, but there is not an option because there are no new sources of northern American crude coming on-line. And certainly none as prospective as the OCS in the Arctic.

It's going to be very important for Alaskans. It's going to be very important for Americans on the West Coast. And it's going to be very important for the entire world that we responsibly develop in the OCS. So if you drove to this hearing today, you likely burned gasoline manufactured with foreign crudes.

Now, I am sure -- I am 100 percent certain that not one of those crudes had to document even a tenth of that size produced prior to their development. If that doesn't concern you, fine. Keep buying the fuel and keep opposing OCS, and you will get your very large oil spill in some other environment.

So I'm telling the story there to highlight a red herring. I'm afraid to mention the word herring. I'm afraid to mention the word herring. I don't believe they live in the Arctic, and I would hate for there to be a supplemental environmental statement regarding the red herring. However, until that first young woman that testified and my daughter can invent or

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Mr. Rocky Dippel: My name is Rocky Dippel, and I'm a lifelong Alaskan resident. And I'm pretty sure that the Bureau has a copy of this, but I'm going to go ahead and submit it just in case they don't.

And I would like to say I fully support, along with our congressmen, our senators, politically opposite parties are in full agreement to move ahead. America is paying $4 a gallon for fuel. In the Bush they probably pay twice what we are paying. Can someone please explain

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To me what the holdup is?

Through my eyes, it takes on the appearance of an agenda-driven issue, more than once the effects of this study. Everybody keeps dredging up the Deepwater Horizon. The Deepwater Horizon happened in 5,000 feet of water. The water that we are talking about is less than 200 feet, on the average. Let’s keep comparing apples to apples, not apples to oranges.

Has anyone done a study of what would happen if we allow this Lease Sale 193 not to move forward? What would happen to the state of Alaska and all development to this point? What would be the unintended consequences? Financially the State will be bankrupt in a few short years because we don't have enough oil for the line. We need to ensure that we write a smart play of our time in history and that we [indiscernible].

I was here before the pipeline ever came here, and back then Anchorage was small, didn't take a whole lot to run it. Right now, the City of Anchorage has a pretty significant infrastructure. Without the pipeline, I seriously doubt that Anchorage, let alone the rest of the state, has the financial resources to operate their cities.

It will take years to implement what is on the drawing board, but we must give a green light on this

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Project and the sale and its downstream promises if we expect to move Alaska forward. I tend to disregard the nay-sayers when it comes to all the hype marketing. If you listen to them long enough, a butterfly flapping its wings in Africa causes a hurricane in Florida.

And if you think I'm making this up, I have seen TV ads with caribou walking around on the North Slope amongst the trees. And I have yet to see a tree on the North Slope, other than the two that BP has up there.

But I'm not against green. I helped put up the Kodiak wind towers, and they recovered 3,000,000. So it's not about taking a shot at the greenies. It's about using what we have, the resources.

When it comes to big green, I have to wonder what their agenda is and who finances what they are doing. What do they do to promote the well-being of others? I look at who pays my bills and then the vision gets pretty clear.

I've always been a clean camper, and I try use my natural resources wisely. My state is my agenda. Where would Anchorage, Fairbanks, Barrow, or the majority of Alaska be without Big Oil? This facility we are meeting here in is because of Big Oil. But at the same time, I don't want them to run roughshod over us. We need to be real. Trust, but verify.
and gas resources of the Chukchi Sea area. Sufficient
information is surely now available from this
environmental review to make an informed decision
affirming sale 193. With the potential available from
this area, it is incumbent to fully explore the energy
potential of this region by drilling and to move to
production from this reservoir of energy not obtainable by
other means.

The OCS is properly viewed as one of the most
petroleum rich offshore provinces in the country. As a
long-term Alaskan since 1959, I believe the potential can
be realized in an environmentally sound fashion, that
adequate protections to the environment are in place, that
the SEIS as drafted properly addresses the issues, and I
support the oil and gas exploration and development from
this Lease Sale 193. The sale should be affirmed
immediately with this information.

And I thank you for the opportunity to comment.

MR. JEFFERY LOMAN: Stan.

MR. STAN SENNER: Thank you. My name is
Stan Senner. That's spelled S-E-N-N-E-R. I'm the
director of conservation science for Ocean Conservancy.
We are a nonprofit organization dedicated to marine
conservation.

We believe that the Secretary should not


reaffirm Lease Sale 193. I'll confine my remarks to the
supplemental environmental impact statement. First of
all, we thank you for being responsive to some of the many
comments that were submitted on this document, and we
appreciate the inclusion of the very large oil spill
analysis.

Unfortunately, we do believe that the
analysis -- the overall analysis does not remedy the
deficiencies in the original document. The revised
environmental impact statement and its analysis of missing
information has not changed significantly from the
original draft.

As a graduate student in the 1970s at the
University of Alaska at Fairbanks, I was part of the Outer
Continental Shelf Environmental Assessment Program. I
gathered some of the data that led to the lease sale on
drilling in the 1980s. Unfortunately, there are some very
important parts of those studies that have not been
repeated, and now we are talking 30 years later.

There is missing information that are
fundamental to understanding this ecosystem and how it
would be affected by an oil spill, and we have missing
information such as fine scale data on currents and winds
that make it nearly impossible to project the trajectory
of spilled oil. I believe that those kinds of information
are essential to doing the job.

Out of a long list of missing information,
BOEMRE could not conclude -- did not find that even a
single piece of missing information was essential to a
decision. I do not find that credible coming from the
administration that is committed to science-based
decisionmaking. Indeed, by the methods that were used in
the analysis of missing information, there is no single
piece of information that is essential. And if you carry
that far enough, no information is essential to making a
decision, and I don't think that's what anyone intends.

So we believe the agency needs to go back to the
drawing board, take seriously the need to address --
identify and address missing information. The report
brings U.S. Geological Survey will assist in that process.

And I would simply conclude by saying that doing
it right and recouping the investment, the tremendous
investment that the oil industry has made in leases and
response and science and all of this, recouping that
investment means that we should start out by doing it
right, and that means a good base of scientific
information.

I mentioned I was a graduate student in the '70s
working in the environmental assessment program. I spent
seven years as a State of Alaska science coordinator
I think I understand something about the importance of good science to uphold our duty here, and we don't have that information yet.

So thank you very much.

MR. JEFFERY LOMAN: Thank you, Keith.

MR. KEITH SILVER: Good evening. My name is Keith Silver. K-E-I-T-H-S-E-L-V-E-R. I'm a former oil field worker. However, with the federal government's delay tactics, some caused by federally funded environmental groups, in addition to state taxes, my job and more than 10,000 others were eliminated.

I am here yet again for the fourth or fifth time to testify in favor of OCS development. I urge the Bureau of Ocean Energy Management, Regulation and Enforcement to affirm Lease Sale 193 in the Chukchi Sea. Sale 193 is critical to Alaska's future economy and the nation's long-term energy security. The Chukchi OCS has up to 29,000,000,000 barrels of oil and a possible 209,000,000,000,000 cubic feet of natural gas in place.

Besides the importance to Alaska's future and the nation's long-term energy security, there are many more reasons to affirm Lease Sale 193. The reasons are, but not limited to: Helping the nation to respond to the nation's long-term energy security, there are many more reasons to affirm Lease Sale 193. The reasons are, but not limited to: Helping the nation to respond to the reduction in TAPS. And it is going to continue.

So from workforce development activities, with that full investment, that would allow people within the state of Alaska and the federal government to be developed to the degree that they wish to be developed.

We have heard some of the statistics from ISER, the study. Alaska OCS, after a new analysis, will create almost 55,000 jobs per year, which is 145,000,000,000 in payroll. And then over the next 50 years, 200,000,000,000 in government revenue. And so with that type of impact from a workforce development standpoint, that will give tremendous opportunities to the people of the state of Alaska and the federal government.

Thank you.


Lynette, you're after Laurie.

MS. LAURIE BECWAR: Thank you. I appreciate the opportunity to speak. My name is Laurie Becwar, L-A-U-R-I-E B-E-C-W-A-R. And I'm a fourth-generation Alaskan. [Indiscernible] My kids are...
They don't care about anyone but themselves and want a kind of high-end living. That's what they want. Just to stay that way for them and their families and friends. They are greedy. It makes me sick.

Thank you for letting me testify.

MR. JEFFERY LOMAN: Thank you, Lynette.

And happy birthday, Betsy.

MS. BETSY LAWER: I'm Betsy Lawer.

B-E-T-S-Y L-A-W-E-R. I'm vice chair of the First National Bank Alaska, but I'm here to testify as a third generation Alaskan. My daughter and her 14 nieces and nephews are fourth-generation Alaskans.

I grew up in Alaska without oil, and I remember it well. We had a boom and bust economy. Living was hard, particularly rural Alaska. The discovery at Prudhoe Bay changed all that for Alaska. For the last 40 years, our economy has stabilized. We have had money in the pockets for Alaskans year-round. We haven't had seasonality of jobs that we had when I was growing up.

I'm not going to testify about the safety of drilling in the Chukchi because I think people have spoken about that very eloquently.

What I'd like to talk about is the economics of Alaska. Folks have spoken about the Trans-Alaska Pipeline, and it's a third full. It's also declining at a rate of six percent a year. Money from that Trans-Alaska Pipeline funds 85 percent of our state general fund. At the point at which that pipeline is closed down, I do not know what Alaska will be able to use to replace that 85 percent of those dollars. Those dollars fund education, they fund social services, they fund health care, they fund opportunities for rural Alaska.

The only opportunity I see to fund that pipeline is the opportunity to drill in the Chukchi and the Beaufort. There is not another Prudhoe Bay that's available to be discovered, based on information that I know, on the North Slope. So the Chukchi is our economic opportunity for Alaska.

Right now, with the Trans-Alaska Pipeline at one-third full, our economy is like a three-legged stool. One-third is funded by federal and state dollars, one-third is funded by the oil industry, and one-third is everything else.

If we lose that one-third of the oil industry because there really isn't very much drilling at all going on in the North Slope and there is only maintenance jobs available and those one-third of our jobs head south looking for something else, there is going to be a real estate crash because those people are going to be putting their homes on the market. And existing Alaskans, those people who have their homes on the market, will be losing all the equity that they have for college educations for their children, for their retirement, and so forth.

So I think it's very important that you consider the economy of Alaska in consideration and you permit drilling in the Chukchi Sea as soon as possible. Not only is it important for Alaska, it's also important for the country.

We still have not come out of the recovery that has lasted several years. One of those is the cost of oil. We need more supply of oil for supply and demand to drop the price down. And drilling in the Chukchi will not only provide jobs in Alaska; it will also provide jobs throughout the country. It will provide jobs as goods are shipped through the Port of Seattle. It will provide jobs as cars are produced in our car companies. It will provide jobs for manufacturing services throughout our country. And I believe it will give the shot in the arm that our country needs to help pull us out of the depression that we are in right now.

I thank you very much for the opportunity, and please approve drilling as soon as possible.

MR. JEFFERY LOMAN: Thank you, Betsy.

Ryan Schryver, followed by John Shively, followed by Kate Williams. Ryan? John? Mr. Shively, and then Kate
And one of the things that people need to understand about this, as others have said, this is not only about Alaska's economy. This is about the nation and our nation's oil supply. I would not, for instance, as others have done, put any credence in a court decision that says the pipeline is going to last another 47 years. It can last that long if there is more oil supply, but right now, over the last several years, as several have said, the decline has been six to seven percent a year. We are at 600,000 barrels a day or a little more. You can do the math, and it doesn't get you to 47 years.

So we need other supplies. Even if this lease sale is affirmed and the lessees are allowed to begin exploration next year, we are a decade or more off before any oil will get into the pipeline or supply America's energy needs that the country really, really has to have.

We right now are in a position where we are beholden to others, others in countries that don't share our values and don't share our interests. We need to develop the national energy supplies for that reason and because we need to improve the economy.

Thank you very much.

MR. JEFFERY LOMAN: Thank you.

MS. KATE WILLIAMS: My name is Kate Williams, and I'm the Regulatory Affairs Representative for the Alaska Oil and Gas Association. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining, and marketing activities in Alaska. We appreciate this opportunity to provide comments on the revised draft SEIS for Lease Sale 193.

AOGA urges BOEMRE to affirm Lease Sale 193. As directed by the U.S. District Court for Alaska, the SEIS fully addresses deficiencies in the original EIS related to natural gas development and missing information. The SEIS also analyzes the very large oil spill scenario, which is hypothetical, meaning it is not based on any actual exploration plan and does not include the beneficial impacts of cleanup, recovery, and intervention efforts. BOEMRE should make this point clear in the final SEIS.

In fact, the likelihood of a large-scale spill event occurring is extremely low. As BOEMRE acknowledges in the SEIS before the Deepwater Horizon incident, during the 38-year period 1971 to 2009, less than 2,000 barrels of oil in total were spilled as a result of well control incidents from OCS drilling operations. Important to remember is that this is a lease sale which authorizes lessees to engage only in ancillary activities that do not harm the environment. This is not an authorization to drill. Further environmental review, public process, and federal agency approvals are required prior to any exploration, development, or production activities.

Lease Sale 193 is one of the most successful oil and gas lease sales in U.S. history, generating 2.7 billion in revenues to the federal government for 487 leases. However, almost five years later, not a single exploratory well has been drilled and production activities are at least a decade away.

The importance of oil and gas development on Alaska's OCS cannot be overstated. This untapped area holds an estimated 27,000,000,000 barrels of oil and 132,000,000,000 cubic feet of natural gas. By comparison, total production from the North Slope is 16,000,000,000 barrels of oil.

Development of these resources is necessary for the continued operation of the trans-Alaska Pipeline system, which delivers 14 percent of domestic oil to refineries on the West Coast and has been identified as critical infrastructure for natural security. TAPS is currently operating at one-third of its capacity, or 640,000 barrels of oil per day, compared to 2,000,000,000 barrels a day in 1988, and could be uneconomic to operate...
as early as 2020 without additional supply.

An annual average of 54,000 new jobs in Alaska
and the rest of the U.S. would be created and sustained by
OCS-related development for 50 years. This translates
into $1,000,000,000 in payroll to employees in Alaska and
$2,000,000,000 to employees in the Lower 48. Federal,
state, and local governments would realize $93,000,000,000
in revenues.

Clearly, development of Alaska’s OCS resources
is vital to the nation’s energy security and would help
turn the tide against the economic recession we’re now
coming. Once again, AOGA urges BOEMRE to affirm Lease
Sale 193. Failure to do so would allow the moratorium on
exploration and development of Alaska’s OCS to continue,
harming the Alaskan U.S. economies and our energy security
without any corresponding benefit to the environment.

Thank you.

MR. JEFFERY LOMAN: Thank you, Dorothy

Lazar, Cody Lee, and Lindsey Hajduk. Dorothy, the floor
is yours.

MS. DOROTHY LAZAR: Yeah. I’m Dorothy
concern is that -- and I appreciate the opportunity to
speak as a citizen because I’ve lived in Anchorage since
1986, but I had the opportunity to live in Africa for a

So just to say what the bottom line would be for
me is it would be unconscionable to go forward at this
point until such a time that all this other information,
scientific and environmental, with data gaps, as one
mentioned, these mechanisms are in place and fully
functional. The oil will be there.

Thank you.

MR. JEFFERY LOMAN: Thank you, Dorothy.

Cody Lee.

MR. CODY LEE: Hi. My name is Cody Lee,
C-O-D-Y L-E-E. And I’ve lived in Anchorage since 1981. I
am not directly a part of the oil business. I am a small
business owner. I own a small residential remodeling
company. And I’ve benefited greatly from the economics of
the oil companies and the development of Alaska. But I
lived here in the mid ’80s when I have seen the lack of
development on the Slope and what it did to our economy
and the families in our communities and the people moving
out. It’s not a pretty sight.

We are a resource-based economy. And oil
companies have been developing oil safely in Alaska for
quite some time. It seems a lot of the lawsuits are filed
not in good faith, but just a way to do more studies, to
create jobs for a few scientists and environmentalists,
not to protect the environment. Alaskans need jobs. Our
In this revised draft SEIS, the Sierra Club once again feels two main issues are not addressed regarding missing data and unanswered questions about the Chukchi Sea, as well as the effects oil development will have on the ecosystem, including impacts from natural gas development. Site specific information regarding a very large oil spill must also be incorporated in the SEIS in order to move forward. Because these issues are not adequately addressed, the lease sale should not move forward.

This revised draft SEIS does nothing to remedy the flaws in the agency's initial analysis of missing information. The President's Commission on the Deepwater Horizon oil disaster seconds the call to fill these gaps and encourages BOEMRE to work with the U.S. Geological Survey and the National Marine Fisheries Service. The USGS recently published a report, and the information -- and the important missing information identified in this report must be incorporated into the SEIS before development decisions are made. This report makes it clear that drilling in the Arctic Outer Continental Shelf is risky, so we need to proceed without -- so if we proceed without taking the time to make thoughtful decisions, we risk another Deepwater Horizon disaster in the Arctic.

In addition, the National Marine Fisheries Service has told BOEMRE to obtain more information about the effects of oil and gas activities on fish before proceeding, and the same can be said about marine mammals. BOEMRE has acknowledged it does not know if seismic testing will affect fish at the population level because scientific information is inadequate. However, at the same time, it concludes that available information shows that there is no significant effects on fish. This type of double speak is not acceptable, particularly in the wake of the Deepwater Horizon disaster. BOEMRE owes it to the public to do better in this revised draft.

It is good that BOEMRE is looking at scenarios about a very large oil spill in the Arctic, which is something over 150,000 barrels of oil. But there is a chance, a 27 to 54 percent chance, of a big oil spill occurring. It's not a low probability. BOEMRE also acknowledges that this will have a catastrophic effect on the region's wildlife and, therefore, communities. This analysis actually finds that over 2,000,000 barrels of oil can spill in just 74 days in the Arctic.

It took almost five months to stop the Deepwater Horizon disaster from spewing oil, and that was in the Gulf of Mexico where weather is hardly an issue, thousands of people are there to help cleanup efforts. Those are luxuries we don't have in the Arctic. If you think the pipeline right now functioning at a level that is fine is really scary, we have to re-evaluate what we think is actually going to happen there.

That said, this analysis is an approach in assessing a spill in the Arctic in general, but there must also be a site specific environmental analysis for Shell's proposed drilling plans for 2012, including a potential blowout oil spill.

The Sierra Club will submit more complete comments, but this outlines the reasons why we think a decision should not move forward. Until, and if, this information can be adequately addressed, we cannot put the Arctic at risk from aggressive offshore drilling plans. We have a lot of people to stand behind this.

Thank you.

MR. JEFFERY LOMAN: Thank you, Lindsey. So everybody didn't agree with each other tonight, but I'd like everybody to stand and jointly agree with each other to welcome our guests from China in the back of the room. They came here tonight and spent the entire evening listening to us and watching our process here in America. Welcome to America. Welcome to Alaska. And thank you for coming to watch our process.

So we are going to take a break. And then -- we are going to take a ten-minute break and we are going to come back for anybody that has, as a result of the break or otherwise, something to say at the very bitter end.

(A break was taken.)

DR. JIM KENDALL: Okay. Ladies and gentlemen, we are going to wrap this up with anyone else that wants to provide some comments. Please, let's keep them three to five minutes if you choose to speak, and let's focus at the Lease Sale 193 revised draft EIS. We really need to kind of focus on that. And who would like to be next? We need your name and -- the floor is yours. Please state your name for the reporter.

MR. ERIK THEDE: Good evening. My name is Erik Thede, E-R-I-K T-H-E-D-E. I'm retired. I used to work for Unocal in Kenai at the fertilizer plant. I started up the one -- it was built in '76, '77, the one that's now being exported over to, I think, Nigeria. So we will be getting no fertilizer to grow our plants from food from Nigeria. The reason it's going there is because we have no more gas. We have no more feedstock here. The reason is because we have difficulty in drilling and getting permits and so on, so forth.

In 1976 when I was running one of the plans,
I strongly support the oil industry, not because they are perfect, but because they are our future.

Final comment -- final two comments. Russia owns the shoreline, about one-third of the -- one-half of the Arctic Ocean. They have stated -- and this was in National Geographic a few years ago. They have stated that a central part of their national oil energy policy is to develop the offshore oil, gas, in the Arctic Ocean.

If we don't and we don't have the technology and we don't have the experience, they are going to do it. And when they have an oil spill, they are going to say, oh, well. And we won't even be able to help them.

So I think that's another reason for pursuing this. We will get experience. We are well regulated. We are doing our best to make this a safe project.

Final comment. My wife is sitting in the audience. 1976, she and her family, in other words, her siblings, ten people made 200 Renminbi for the entire year. Two hundred, that's maybe $10 the entire year. They had a very small carbon footprint. They had water buffalo that plowed the field. She had a water buffalo she would hit to pump the water. They didn't have oil. They didn't have gas. That's how they lived. This year she is making maybe 100-200, $200,000 a year in real estate appreciation in China. They have gone from maybe her...
we have in our society. Not you. Don't take it personally.

We are facing complex problems that are interconnected. And that connection is becoming more complex to find resolution. And yet, many of our leaders have fallen back to old mindsets of control, control, control. This is the time when you have to open your people up and give them un hurried moments on camera, on recording, so that the greater body can see this. But when you gather them together and you try to herd them through comments of desperation or fear, which we call pounding the message, you end up with chaos, and it's just a matter of time before it blows back on you.

This lady here, the reason she can't hear me is because you don't have a camera running. You didn't prepare ahead to tell a radio station or a TV station which has a see right in the -- you could have gone to the entire state of Alaska right in here on this circuit board. But because our leaders seem to be divided between the Republicans and Conservatives and the liberals, it's just gone nasty, absolutely nasty. We are no longer able to have dialogue. We are no longer having unhurried dialogue where men can interrogate and probe the content and character of other men. And that's how you make a society work. And these are the most critical of times where we should be doing that.

Now, a couple other things I wanted to mention here. Thank you so much. I was going to ask for a round of questions for your public. You would have had a lot more people here, but what's happening is we are being so disconnected, so disconnected -- three minutes, you can't even -- you can't -- you can't build a reasonable platform in three minutes, let alone a complex platform. So what happens is the public is just breaking away because they cannot sustain the -- the loss of dignity and self-esteem in trying to communicate in those moments.

So when you set a round again, I thank you. It was a wonderful moment and I heard you propose it to Mr. Lohan. I saw him swing with it. So anyway, coming back here, for example, Mr. Knudson where I asked for the barrels of oil, the reason I did that is 50 of our cities are now preparing to do charging stations for electrical vehicles. Forty of the world's international cities are now preparing charging stations. China is spending $10,000,000 a month on beyond combustion energy. And in order for you to understand where your community has to go, you have to understand your foundational fuel feed stocks, which are oil. That oil is what we call a foundational feedstock. But when you try to find that out, they all tell you, oh, we can't tell you.

Mr. Knudson, bless his heart, he's a good man. He's a good man, and he called me right up and told me that he was bound by federal law that he couldn't give me the answers.

What the hell is that? And then he wouldn't e-mail me, so I have no record. But he was a good man, but we should have been able to query him because in order for us to understand where we have to go, we have to understand that by some formula that we can refer to outside of individuals with personal drives and conflicts of interest.

In closing, for example, there was another thing here, they keep talking about Shell Oil. Have you heard of the Rice Krispie Rocks up on the Slope? I call them Rice Krispies. The source rocks. Big bear, somebody, or Big Bird is claiming they can come in now and there is trillions of barrels of oil in what they call source rocks. I call them Rice Krispies. There are discussions going on in this state that do not make sense. They appear to have some insect colony hive like design where the chamber -- as long as the chamber can pound the message next to the general populace and drone them out, they move past any reasonable discussion. And a sign of that is terms like skinning the game, stakeholders, infrastructure.

When they say skinning the game to me, I tell them, you must be talking about circumcision, or a triple x-rated individual. Oh, no, Mr. Kendall, we are talking about investors. And I tell them, why don't you say investors? And here is why they don't. Mr. Kendall. The reason they don't is when you talk like that as a reasonable person, I can make inquiries, who are the investors, how much do they want to invest, what's their rate of return? What happens is you can begin to discover.

But those people who do not have the intellectual capacity or are corrupted in some way or not well intended, they use these sling terms so you can use of move past, like skinning the game, stakeholders, shareholders. Not shareholders, but things like that.

I'm very concerned I'm seeing that now develop across the board here.

In closing, Mr. Kendall, you are in a very, very special place. We have a chance, rather than having the G8 or the G20 tell us how they are going to reconstruct revenues -- we are in a precipice, a bore tide. If we don't figure this out, I think we are going to see chaos unlike we've seen before. Why would we let the G8 or the G20 redesign and reconstruct new revenues, when here in Alaska we could do that ourselves. And all we need is
people like yourselves and are the people who have
conveyed tremendous hope and faith and trust in which is
what you folks have earned. We now need you to be able to
put structures in place, like a 30-day plenary on camera
unhurried that so I can challenge these people and we can
challenge each other. And I hope that makes sense to you.
One more thing, if I might, like this said other
gentleman -- it's only you guys. Let me take you a little
place unusual. Our children are going to understand
energy like we have never understood it before. You do
not drink water. You drink hydrogen. The word water is a
tricked-up term.
It is an ancient, archaic, disconnecting term.
When you drink water, that's hydrogen. Your body makes
electricity, and that's where you get your synaptic
impulse. That synaptic impulse is your state of being.
You are a hydrogen fueled transportation system. Every
creature you can fathom in the universe, whether it's
microscope -- not the universe. That's a little bit of a
reach. Every creature that we are aware of, whether it's
microscopic or bacteria, is a transportation system, a
specialized design. All of those creatures are fueled by
living in harmony with the hydrogen, which allows them to
consume and make electricity, which allows them to fuel
their transportation system.

There is no such thing as gasoline. It is a
sling term. Gasoline is hydrogen popping carbon. You try
to pull a log out of a burnt fireplace that's black and
try to light that up, it's 5, 7,000 degrees. Carbon
doesn't do anything. Hydrogen is the work horse. The
ocean is a complex hydrogen compounded body, almost
another dimension. The known universe is 99.86 percent
hydrogen. The sun is 96 percent hydrogen. Diesel is
hydrogen with more carbon crammed into it. Natural gas.
These are tricked-up terms, sling terms. There is no such
ting as natural gas. When you make that connection, that
child is about to understand that he is related to
everything around him. Everything you see is a
manifestation of energy attempting to find a state of
construct or a state of being.
And so what I'm trying to show you is it is my
position -- I've looked at energy for many, many years and
I have been many places. It appears to me our children
are about to understand energy like we have never seen it
before. It is just staggering. And by the way, I don't
want to get too esoteric on you here, but I consider
hydrogen to be a female fuel because it not only breaches
life, it sustains life. And when you burn it, it's a full
circle.
It booms, and then it comes to be a consumable,

which we call, as an agent, people water. The male
energies appeared to be magnetic fields and frequencies,
which we call, as an agent, people water. The male
energies appear to be magnetic fields and frequencies, and
we are some serious players, but we are still a big
mystery. Nothing is held together without us without
proper magnetic fields and frequencies. We are some
serious players, but we are still a big mystery. Nothing
is held together without us without a proper magnetic
field or frequency.
Our children are about to understand that. And
in doing that, it appears to me -- and I have a site and I
have plenty of statements in writing; everybody knows
that. I'm now proposing that each of us should have an
annual allotment of clean electricity per person per
dwelling at no charge.
Now, energy is what we call a spherical subject.
It is thick. It is heavy. It is complex. And most
people can't handle that. But once you understand how
important energy is as a foundation to you and your
family, you will realize that all economies are
aftermarkets of the energy from that individual family.
All of these economies, all of these free enterprises are
conveyances of opportunity from us living in harmony.
Your top three priorities are your state of

being, which is maintained by hydrogen; your individual
free will; without that, you are a drone or a slave or a
subject. And the third is clean in harmony energy,
electricity for your property and dwelling, which belongs
to us in an allotment. And I have a form and a model for
that. And it appears to me after all these years it is
the only way for us to bring stability. And I do not see
how the rest of the world to watch people like yourselves
who are career people and I think well intended to see
them have foolish discussions about the stock market and
not talk about energy, we can no longer sustain using
energy as a means to be able to bring value to the dollar
it's all falling down.
The new economies are in replacing the carbon
and the new technologies. But in doing that, we are going
to have to look at energy, and Alaska, with your
residential sector here, the Cook Inlet, the Knik Arm, and
the oil companies and the Natives and the vast resources,
we have a chance -- the chance of a millennium to lead the
rest of the world, and for everybody to have everything.
And you have accommodated me. I've abused the
privilege you have extended to me. Mr. Lohan can make an
issue later, but Mr. Kendall, thank you so much.
DR. JIM KENDALL: You are welcome.
MR. PAUL KENDALL: I'm so excited with
this little moment, and there would be more people show up, but we go to a City Council meeting and it's three minutes. You just embarrassed yourself. And they turn your head to the crowd to the back so you all can't see your public. All your meetings should be to the left side so the public can see the faces of your -- it's very important that we gauge the content and the character of those people speaking. But when you disempower your people, you power them down, which is not uncommon in past histories. They no longer show up, and that is the beginning of the demise of your society.

And so I thank you for this moment here. For me it was a wonderful moment. Again, now I'm feeling guilty for talking so long. And Mr. Lohan, I still love you, for what it's worth. This is a tough guy.

MR. JEFFERY LOMAN: Have a good one.

Thank you very much.

(Proceedings adjourned at 10:22 p.m.)
PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT
CHUKCHI SEA
BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT
Wainwright, Alaska
Taken June 30, 2011
Comencing at 7:15 p.m.
Volume I - Pages 1 - 53, inclusive

Taken at
R. James Community Center
Wainwright, Alaska

Reported by:
Mary A. Vavrik, RMR

MIDNIGHT SUN COURT REPORTERS (907) 258-7100
bidding for leases out in the OCS, out in the ocean.

MR. LES SEGEVAN: Is that right in front here?

MR. MICHAEL ROUTHIER: It's a ways off.

There actually -- you can see on some of the maps in the back where the leases are.

MR. LES SEGEVAN: Those colored ones?

MR. MICHAEL ROUTHIER: Yes, yes. All three of those maps show the leases. All the leases in the Chukchi Sea were all from this lease sale right here that we're talking about.

MR. MARJORIE ANGASHUK: I was going to ask you, what is 193? What is 193?

MR. MICHAEL ROUTHIER: The question was, what was 193. And that was just the name of the lease sale. They called it Lease Sale 193, and that's how all this stuff happened, through that lease sale, the name of the sale.

A few days before the sale was held, a group of plaintiffs sued the bureau trying to invalidate the lease sale. They said that the environmental impact statement the agency prepared, they didn't adequately address the environmental impacts of what could happen if they were to offer the lease sale. It stayed in the courts for a little while.

Then last summer, July 2010, the Federal Court down in Anchorage ruled that while most of the EIS was satisfactory, there were three issues where the Court had concerns, and he reminded it back to the agency. He basically said you didn't do these three things well enough. You have got to do some more work.

The first of those three issues said that the agency didn't do a good enough job analyzing the potential effects if there were to be natural gas development in the Chukchi Sea. That Lease Sale 193 included certain incentives for companies who bought leases to develop natural gas, but the EIS that the agency did didn't really analyze well enough the potential consequences of what were to happen if these companies analyzed -- I'm sorry -- produced gas. So the judge said you have got to analyze natural gas production.

The second issue --

MR. LES SEGEVAN: That's only natural gas, not oil?

MR. MICHAEL ROUTHIER: Yeah, that's -- this is one of the issues that the judge said the agency didn't do a good enough job on. One of those issues was the analysis of natural gas development.

The two other issues are related. Basically, when a federal agency produces an EIS, there are certain procedures and protocols they are supposed to follow. One of those procedures is 40 CFR, Section 1502.22. And basically that section of the federal regulations tells the agencies what to do where there is data gaps or missing or incomplete information.

The judge agreed with the plaintiffs. He found that the agency didn't follow the procedures in the correct way. So the second and third issues is basically the judge telling the agency you need to go back and follow those procedures.

So what did BOEMRE, what did the agency do in response to the court order? The agency prepared more environmental analysis and then produced a supplemental environmental impact statement; in other words, another EIS to supplement the one that it did in 2007, with the thought that the two documents combined would fully address the issues. It was a draft. It was called a draft SEIS.

And part of publishing the draft EIS means that you have a comment period. So you put the document out for public comment. And we came out to the villages. We came to Kotzebue, Point Hope, Point Lay, here in Wainwright, Barrow, and then also in Anchorage, and we heard testimony. We got public comments, and we held a series of government-to-government meetings with the

Hope, Point Lay, Fairbanks, Anchorage, and now we are in -- and Barrow. We went to Barrow, and now we are in

Wainwright.

So anyway, so with that I'm going to turn the mike over to Mike, and he's going to go through the presentation that we have for you this evening.

MR. CHAEL ROUTHIER: Thanks, Sharon.

Okay. As Sharon explained, we're here to talk about a document that we brought here tonight. It's a Revised Draft Supplemental Environmental Impact Statement, or EIS, for Chukchi Sea OCS Lease Sale 193. And I'd just like to give you a little background information on that.

What was Lease Sale 193? Well, in 2007, BOEMRE, our agency, prepared an environmental impact statement, an EIS, on a proposed lease sale for submerged lands out in the OCS in the Chukchi Sea. And in 2008, the agency held a lease sale. Six companies bid on the rights to explore tracts of the OCS. We offered about 30,000,000 acres. A little under 3,000,000 acres were actually leased.

However, days before --

MR. LES SEGEVAN: I just heard you say 3,000,000 acres. What was that? I didn't get what you said about the 3,000,000 acres.

MR. CHAEL ROUTHIER: Okay. So in the lease sale that was held in 2008, a few companies were
tribal governments from each village. Again, that was in November of last year, so some of you might have -- I think were at that meeting.

Next question, was a draft SEIS finalized after that, and the answer is actually no. We received over 150,000 comments on that draft SEIS, which is a huge number. And many of those comments brought up a recurring theme, which was, in light of the Deepwater Horizon event that occurred down in the Gulf of Mexico, you as an agency need to analyze the environmental effects of a really large oil spill. In other words, what if something catastrophic were to occur in the Chukchi. You need to explain to the decisionmaker what could happen in that event.

So we as an agency considered those comments and we said, you know what? Yes, that's something the decisionmaker should know about, and we are going to do an analysis of a very large oil spill.

So we got a scenario from our geologists in Rance's department. We passed on that scenario to our wildlife biologists and our air quality experts and our oceanographers, all our scientists who know about the environmental effects, and we produced a very large oil spill analysis. Then we combined that with a draft EIS we had talked about in November, and we published it.

together, and that's what this document is. It's the same document we had in November, plus the very large oil spill analysis. Plus we made some other changes in response to comments that we heard in November.

UNIDENTIFIED SPEAKER: There are some people -- do you have -- in the case of a spill, do you have the equipment and all that to clean it up real fast, or is it going to be like the Gulf, you know, and slowly, methodically cleaning it up or something like that?

MR. MICHAEL ROUTHIER: The question was whether we would have sufficient equipment to clean up a large oil spill in the Chukchi Sea or whether it would be something akin to what happened in the Gulf. This analysis that we did, we talked about all the types of response techniques that are available. However, we don't have any specific exploration plans. There are no plans to drill out in the Chukchi right now, so that will be evaluated if and when we look at a specific plan. So the short answer, I guess, is, no, there is no specific plan, but that's because we are not formally considering any specific proposal to drill. We are still at the lease sale phase.

Only after getting through the lease sale phase, if the Secretary affirms some or all the leases, and if the Court agrees that we did a good job on the EIS, and then if the companies submit an exploration plan, then we as an agency would start looking to see whether their response was adequate, but we are a few steps away from that right now.

MR. LES SEGEVAN: Would you be prepared to clean up whatever goes down to the bottom of the ocean where the microorganisms are in case there was a spill? Like if there was ice on top of the water, would you be -- your company be prepared to go in there as fast as they can in cleaning up?

MR. MICHAEL ROUTHIER: Again, that's something we look at in this document. We look at the effects. We understand that some of the spilled oil would probably go down into the water column into the benthic areas, but again, we don't have a -- we are not evaluating any specific plans yet. So there are -- there is no plan to drill, so there is not any response plans either. But if we got to that stage, then, yes, the agency would look at whether what the oil company was proposing would be sufficient to do that.

MR. LES SEGEVAN: They will need to do that.

MR. MICHAEL ROUTHIER: Yeah, we agree that's something as an agency we would be looking at. As Sharon said, we are a regulatory agency. We are in charge of enforcing certain laws. One of the regulations that we enforce requires the oil companies to have an adequate plan to respond to an accident. So that's certainly something that we would be looking at if we receive an exploration plan.

MR. LES SEGEVAN: Like if there was -- we had an okay and you drill for gas, you would need to be prepared to get in there as fast as possible, you know, because we got them currents out there and it's moving all the time. Not --

MR. MICHAEL ROUTHIER: Yes. If there were any development, including gas development, there would need to be plans and resources to get out there quickly. We agree that's something the agency would make sure is within any specific plan that might come in down the road in a few years or whenever.

So we are here today to talk about --

MR. ENOCH OXTOOLLIK (Inupiaq): If you should find the recovery of oil and, you know, reading in magazines and whatnot, there are different weights of oil, right? There is real thick spot crude oil, and there might be light -- light crude oil. I don't know what kind of oil you are going to find out there. And if it's going to be recoverable, if it's heavy spot crude oil, what do you expect to find out there if you are going to go into
production? What are you looking at? What kind of oil are you looking at?

MR. MICHAEL ROUTHIER: Well, the scenario that we analyze, the very large oil spill scenario, analyzes a specific type of oil. It's a lightweight crude. That might differ in different areas of the lease sale area. There might be some heavier crudes in some areas, but again, we don't know exactly what the companies are even going to propose to do, you know, so we look at each specific plan. But we are not there yet. We are still at the lease sale stage.

And so we are not looking formally at any plans to actually drill anything right now. So we are not looking at any specific plans to drill right now. There is a few other things that would need to happen before we might get to that stage. So we are just here tonight to record the public comments that we get from you folks, and we are going to consider them when we prepare the final SEIS. In other words, we are going to take your comments and try to make our document better before we finalize it.

I mentioned a couple times the term very large oil spill, so I just want to provide a few more details on what we mean when we say very large oil spill or VLOS. Basically we analyze a hypothetical scenario. It's a very serious matter, so if we want to make sure that the worst-case discharge is -- that's almost about --

MR. MICHAEL ROUTHIER: Yeah, we agree. We have heard from a lot of the communities --

MR. LES SEGEVAN: Yeah, that's true. We have got a current, and the wind can change, and the ice can move around. It's a powerful environment out there.

MR. MICHAEL ROUTHIER: I believe -- correct me if I'm wrong, but I believe you are saying we have to be careful -- ready for a worst-case discharge. Given the extreme weather and all the conditions out there, things can get bad pretty quickly, so there would need to be something we would be ready for.

MR. LES SEGEVAN: Yeah, that's right. We have got a current, and the wind can change, and the ice can move around. It's a powerful environment out there.

MR. MICHAEL ROUTHIER: Yeah. We talk about those things in the VLOS scenario and analysis. So actually that would be a great thing to comment on. You know, we talk about some of the winds and the waves and the currents, so people with firsthand and traditional knowledge of these areas want to review what we have done in the document, tell us what we got right, tell us what we got wrong. That would be very helpful as we try to improve the document and go final with it.

MR. ENOCH OKTOLLIK: Enoch, for your record, I think you might -- if you go further out there into the -- how many miles is it out there where the popcarts are? That's almost about --

UNIDENTIFIED SPEAKER: About 140 miles.
MR. ENOCH OKTOLLIK: 140 miles out there you might see some whirl -- water whirls, whirls that might be happening in the areas out there. And I don’t know what they consist of. We don’t have the equipment, us, to try to get a second opinion from our own selves. We don’t have ships. I don’t know if anybody in our community go 140 miles out to observe how the ocean reacts out there. And if we had our own opinion out there, we would probably try to understand how our ocean act 140 miles offshore.

And boy, it’s just like you coming to me and trying to find answers. I can’t even give you answers for what you are trying to talk about. It’s very hard. We need to sit down all together and try to understand -- understand what you are doing out there in the ocean. I don’t know what I’m getting at, but I’m -- the depth of it and how the 140 miles offshore, how it reacts out there.

But I’ve heard it from Elders that we start seeing different kind of currents from shallow water area, there will be a different current and then further out a little ways there will be another current, and even further out, there will be different currents. And the way they -- the way they go in some currents sometimes, they will just probably come straight down like that and just go straight down into the ocean. But observing in

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MR. MICHAEL ROUTHIER: If we are doing our job correctly -- and I think we will -- we don’t need a lawyer to communicate. We can take what you say and we will put that in the document.

MR. EARL KINGI: Earl Kingi, for the record. We got a North Slope Borough attorney over there. You guys have any powers, Mayor Itta’s worker is over there. What’s your name?

MS. CHELSEA THIBEAULT: I’m listening. I’m not an attorney. I do work for the North Slope Borough.

MR. ENOCH OKTOLLIK: Nice to see them come around to go to the community to try to help us out. First time I ever see you. I’m the mayor of the community, and the first time I ever see you with -- with whatever is happening over here. And you are not even the borough is not even going to our community and helping us out and let us fill out what’s going on with this Lease Sale 193.

MS. CHELSEA THIBEAULT: I’m here to listen to what you all have to say to tell the Borough. Today I’m taking notes on everything that you say.

MR. ENOCH OKTOLLIK: Your mayor could work with you. You guys work close with the North Slope Borough mayor, and you are not working real close with us...
question. The State is right now trying to settle the
coastal management plan, and it's been wondering in my
head, you know, the North Slope Borough -- I know when
Adelaide (ph) went to Alaska Municipal League meeting and
brought the first time to get a coastal management plan,
what does it mean to us when -- when there is no coastal
management plan right now in the North Slope area with
this oil -- with what is happening with this environmental
impact statement?

MS. CHELSEA THIBEAULT: Can I talk to you
after they present, aside, and I can give you some contact
information of someone that could give you an answer on
your questions?

MR. ENOCH OKTOLIK: And it's relevant to
what you guys are -- what the federal is doing right now?

MR. MICHAEL ROUTHIER: I really shouldn't say. You know, I shouldn't get between talking to your
attorney, so maybe if she could just give you her
information, if you guys can talk about that on the side,
that would be fine. But I don't want to eavesdrop on any
attorney talk. So if we could just table that for now.

With that, I think that is some background
information on what we are here for. And again, I
apologize for coming at such a busy time for you folks
but, like we said, there is a court order that requires us
to continue to allow the leases out into the Chukchi Sea.

MR. MICHAEL ROUTHIER: That's the document to
explore about 140 miles out of Wainwright, right?

MR. MICHAEL ROUTHIER: To lease areas.

MR. LES SEGEVAN: To lease areas for gas
and oil exploration?

MR. MICHAEL ROUTHIER: Yes.

MR. LES SEGEVAN: Are you guys from
Washington, D.C.?

MR. MICHAEL ROUTHIER: No. We are all
from Alaska. Well, Anchorage, Alaska. And so we are not
here to advocate for a certain position or anything like
that. We are just here to collect feedback. We want to
collect that, package it up, and we are going to submit it
to the Secretary of the Interior. In other words, we want
to hear your voices and get information from you folks.
And we are going to pass that on up to our bosses, the
Secretary of the Interior. So that's what we are here for.

MR. LES SEGEVAN: They need to be prepared
for some heavy-duty gas and oil spill if they going to do
any poking around out there if they -- if they drill.

MR. MICHAEL ROUTHIER: Yeah. Yeah.

MR. LES SEGEVAN: We have got some
heavy-duty currents and wind and water out there.

MR. MICHAEL ROUTHIER: I agree.

MR. LES SEGEVAN: That's where we eat
from, fish, seals, bearded seals, whales, walrus.

MR. MICHAEL ROUTHIER: I think we can just
open it up to the public comments.

MS. SHARON WAREN: Let me clarify
something real quick. Let me just clarify something real
quick. We are at the lease sale stage. And what I have
here is a diagram of the OCS leasing process. It's a
four-stage process. So on this diagram -- and you are
welcome to take a copy of it, we are at where the green
blocks are. So we are at the lease sale stage. And like
Mike said, should the Secretary of Interior allow the
leases to go forward, then the companies will come in and
file an exploration plan. And that's the next stage, the
third stage.

Just to clarify, we do have an exploration plan
from Shell for the Chukchi Sea. However, we are not
formally doing anything with it. We have it in our
office. It's on our website. But we are only in
discussions with them. We are not doing anything with it
because we need to complete this document. We need to
have the Secretary's decision whether or not he is going
to continue to allow the leases out into the Chukchi Sea.

So we are back at the beginning, pretty much at
the beginning of the process. So I know there is a lot of
things happening because we are at the lease sale. I know
that people are talking in the media and out there
concerning the exploration, and the companies have also
expressed that they are going to go out and drill. But we
have to get through this first process first before that
can happen.

So I just wanted to clarify that because there
is a lot of things happening out in the communities and to
again say that we are at the lease sale. We are here to
collect your comments, your concerns so that we can take
them to the Secretary of the Interior. He will be looking
at this document as well as when he makes his decision on
the 3rd of October, we are still in litigation. It will
going back to the Court. There will be briefings. So we
are -- there is still a lot -- like Mike says, there is
still a lot that has to happen before exploration can go
out in the Chukchi Sea.

MR. Enoch Oktollik: What you are saying
is you are getting comments. Somebody should set foot on
the water out there from the shoreline all the way down to
the lease sale areas, you are trying to get comments, and
whenever kind of studies they are doing out there, bottom
sea, sea studies and whatnot, shallow water testing,
seismic work and all those -- all that put together all
the way to exploration and production and stuff like that,
that's what you are saying?

MS. Sharon Warren: Right. It starts with
the lease sale. So all that information prior to the
lease sale. So you have a lease sale. Then if there is
leases, the leases go, there will be an exploration. And
then after exploration, should the companies find anything
out there that they want to produce, then you have
production. And at each stage of the process, there is
review. You know, there is comment, public comment. We
will be coming out here and -- like on this chart it says
you will be seeing people coming back out in the community
or calling the communities to get the communities'"
community long-term. One -- another reason I support the idea of offshore oil is because our Prudhoe Bay is dwindling down and our tax dollars are dwindling down. With that comes budget cuts.

We need this money to continue to educate our students the way we are today. We are top notch in Alaska compared to the rest of the -- the rest of the state in different regions. We have -- we have the best water and sewer facilities in Alaska. So we need to continue to maintain and operate that. Without tax dollars we cannot.

We just need this thing. One, because there are a lack of jobs. We are -- we are -- we have a high unemployment rate across the North Slope. We do have concerns. I have concerns with offshore oil and gas, and that's having an oil spill. But the program that the industry has put together has comforted me a lot more than it used to just five years ago. I have a lot more confidence in what they can do to protect our waters and our land when it comes to an oil spill.

So I support their lease sale. Once you have your lease sale, then we can talk about ideas of how many ships, how do we mitigate the issues. We can do that later on. That will happen down the road once you complete your lease sale. So I do support your lease sale.

MR. LES SEGEVAN: My name is Les Segevan, and I agree with John Hopson. We are going to be needing the monies that we are accustomed to living with in Wainwright for our children, our grandchildren, whether we like it or not. We need the gas and oil that we are accustomed to getting monies from. And if there is a way to work it to keep the animals safe, the fish in the ocean where the lease sale is getting ready to lease out, then if it can be done, it should be done, as we going to need the monies in the near future. And the monies coming from Prudhoe are dwindling, and that's true.

And then if it can be done, you guys should just go ahead and start, do what you need to do, but you need to do it with public -- North Slope Borough people permission and to see which is the best way to go about it safely for the people and for the animals because we all live together up here. We need the animals and we need the money. If there is a way to do it, then let's go ahead and do it. Needs to be done. Thank you.

MR. ALLEN AHLALOOK: My name is Allen Ahlalook. I agree with this young man. Thank you.

MR. EARL KINGIK: Thank you. My name is Earl Kingik. I come from Point Hope, Alaska. My tribe takes a look at it and said it's time to stop this. We need to tell our own government to slow down. My tribe has already put money from oil companies and Shell Oil spent, and there is other oil companies that come from prudhoe bay. And that's going to dwindle down. What are our elders going to have what they need the money, you know? Our companies are making money off of the oil companies. And that's where dividends come from. I do support the -- the idea of a lease sale. Then we can negotiate talks with the industry within our local community and mitigate the issues. So thank you.

MR. SHARON WARREN: As I said earlier, we are just going to pass the mike around, and you can either pass and pass it to the next person or talk. And we are just going to continue to go around the room until everybody feels that they have had their say. And we will be here as long as it takes this evening. Thank you.

MR. ALLEN AHLALOOK: My name is Allen Ahlalook. I agree with this young man. Thank you.

MR. LES SEGEVAN: My name is Les Segevan, and I agree with John Hopson. We are going to be needing the monies that we are accustomed to living with in Wainwright for our children, our grandchildren, whether we like it or not. We need the gas and oil that we are accustomed to getting monies from. And if there is a way to work it to keep the animals safe, the fish in the ocean where the lease sale is getting ready to lease out, then if it can be done, it should be done, as we going to need the monies in the near future. And the monies coming from Prudhoe are dwindling, and that's true.

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MR. MARJORIE ANGASHUK: My name is Marjorie Angashuk. I had a friend who was concerned about
For thousands of years. Thank you.

MR. ENOCH OKTOLLIK: (Inupiak.) Go ahead, Billy. You look like you want to say something.

MR. BILLY NASHOALOOK, SR.: I'm Billy Nashoalook, retired from everything. And I was just reading the Sounder today. I don't know if most of you have read it. There were comments during the Summit down in Alyeska. We know the oil companies will keep coming. They are going to be coming and coming no matter what we say. But, the only way we can get most of what we want is to work with them and these other people that --

UNIDENTIFIED SPEAKER: House on fire.

(Off the record.)

MR. BILLY NASHOALOOK, SR.: Anyway, what we need to start doing, we need to go after the State lawmakers, maybe Governor Parnell, to work with us and work with the State of Alaska to get with the federal government to start helping. I would comment that our Congressional delegation is working with us, but not the State. And so we need to go after the State of Alaska to stand up in allowing this to get -- if we don't do that, they will just run over us anyway. We don't have any money to fight them with. They do. They have all kinds of money that they can use to get what they want.

But if we work with them [indiscernible] and for future generations to have what they need for our culture. And that's what they have to say on in the Arctic Sounder. I was reading. And these people.

MS. SHARON WARREN: The court reporter can't hear, so --

MS. CHELSEA THIBEAULT: He would like to get an introduction of who you are.

MS. SHARON WARREN: We are a federal agency, so we all work. Mary is a court reporter. She's the court reporter for us. But we work with the federal agency that does the offshore energy and minerals and regulates the offshore minerals. And we are within the Department of the Interior. We are not an oil company.

We are not a nongovernmental agency. We are federal.

MR. BILLY NASHOALOOK, SR.: I want our people to understand that people like this, we need to work with them and we need to also go after our State lawmakers, according to what I read today.

[indiscernible] Get together with what we need according to how we live up here.

MS. SHARON WARREN: Thank you very much.

MR. FRANK BESTER, JR.: My name is Frank Bester. I guess I'm halfway supporting and not supporting due to the fact of some of the endangered species. And I support it halfway because of money-wise. That's the

Environment, all the environmental organizations of Alaska put this thing together and took to court.

The government got to slow down. We got to consider how we are going to stop this if there is an oil spill because there is already a lease sale going on. Shell Oil already got their plan ready to go to Obama, and we'll be down there when Shell Oil submits their plan to Obama. Our tribe will be down there when DOE/RE submits their tribe [sic] to the Secretary of the Interior.

So you see we are not really against offshore, but we want to do it safe way because the next Coast Guard that would go up and clean up is 1,000 miles away. When I went down there to the Gulf, there was over 30,000 people cleaning up that oil spill. We don't have a long runway to bring in jets to bring these people. We don't have no room to have people to sleep and to eat. We don't have much stuff. We don't have commercial fishing boats to help the oil companies clean up.

So you see -- and that's how come we took the government to court because they were moving too fast. And they need to listen to us.

And I'm glad you are thinking about jobs, John. We are thinking about jobs too. There is alternative jobs. There is other ways we can make money. But we got to think about the animals we love and the world we live.

MR. CHARLES EKAK: Hello. My name is Charles A. Eakak. I'm a subsistence hunter. And what I think we need to do is have a little bit more understanding between the agency here and the community itself. If that can be materialized, then we can compromise and see what come down at the end. I don't know about the -- but the way things are going, with a little bit more explanation and understanding, we can compromise in the community. That way I think it will be -- we can work it out.

To me, it's -- I'm for it, I'm against it and not in between, but I can understand it and I know what it means. As long as you can make it more presentable, that will make it much easier on an Inupiaq village like us.

Thank you.

MR. ENOCH OKTOLLIK: My name is Enoch Oktollik. I'm the mayor of the community and I'm -- I'm the chairman for the North Slope Borough Fish and Wildlife and also chairman for the Nanook Commission and also a member of the walrus commission and member of the Northwest Caribou Working Group. And my comment, boy, I'm -- it's been blooming out, expanding.

And I grew up -- I grew up in Point Hope, and I grew up with this gentleman here. And I know what he
they write the language of hauling -- hauling our
material, like if I bought a -- I'll use an example of a
300 -- 400-pound snowmachine. If I got a snowmachine and
it cost me pretty well almost $7,000, and the weight of it
is almost --- I don't know. How many pounds is a
snowmachine, Isaac?
MR. ISAAC PANIK: 400.
MR. ENOCH OKTOLLIK: 400 pounds. And we
use Northern Air Cargo, and they charge us at almost 90
cents a pound, I guess, from Anchorage to Barrow. And 90
cents times 400 is how much?
UNIDENTIFIED SPEAKER: You mean 4,000?
MR. MIKE HALLER: About $400.
MR. ENOCH OKTOLLIK: $400, and then it's
probably about 80 cents a gallon -- I mean 80 cents a
pound from Era Aviation from Barrow to here. By the time
I'm trying to get a snowmachine up here, it cost me almost
extra two more thousand dollars.
It goes on in our lives like that. But what
does it all mean with all industry that is going out in
our area? But I'll tell you that 40 percent of our
community is employed and 60 percent is unemployed.
I have dreams in my head that start turning
because in our community, sometimes some people won't tell
you because we got 60 percent not employed. They are not
probably be another 2 to $300. You go to the store to go
get food, but you are fortunate enough, if you like to eat
Eskimo food, that will be noncost item. But not too many
of our children right now supplement themselves with our
Native food to go out there to go hunting.

But by the time you are going to go out to
gather our local food -- like right now it's for bearded
seals -- and also for walrus and for birds and whatnot.
If you don't get caught -- some of them are illegal birds.
Like this one guy say, there is probably some birds that
are endangered, and it's hard to catch -- hunt them
sometimes because they are endangered. And you are going
to try to put something into the table of a -- on the
table to eat, and it hurts sometimes when you have to try
to go hunt and you have to put almost $1,000 to go hunt in
one trip.

That trip might be from six hours to one day,
two days, to try to harvest something. If you don't see
what you are harvesting out there and you don't see the
weather right or stuff like that, you lost all that for
not harvesting something.

But that's the kind of stuff we see in our
community right now because cost of produce and goods and
the stuff we use to motorize our boats and stuff like
that, snowmachines, Hondas. Not too many of us do go

We are probably not as bad as they are because
you see the hurricanes and you see the tornadoes and
whatnot in the Lower 48 you are seeing.

We got a television now. In fact, we pay about
100-and-some dollars a month to watch good -- get good
channels and watch CNN and watch our local news, news
media and whatnot of how the world going out there.

But that's the kind of community you are looking
at here in Wainwright. Somewhere it's got to fit. And when
you go out -- like I told you, it start blooming things
into my head. I start thinking as the mayor, boy, if
we -- because the federal government says if you go out
there, if it benefit the federal, if it benefit the State
and if it benefit the private sectors and it benefit a
little local government, how much it would be -- how much
it would help us here if we try to decide, the people, if
they want to decide what kind of money we could get off
this oil and gas development or we could turn to the
natural gas, how much it would be easier for us in our
community in subsidizing what we use to heat our homes and
motorize our boats and going hunting out there.

I know that shipping going to be a big thing if
the activities start going in the Arctic Ocean. I see
probably almost over 1,000 ships that going to probably
travel to our ocean, the Arctic Ocean. And what route are

they going to use? Are they going to use the Bering
Strait to bring their ships through where our migratory
birds, our migratory whales, belugas, others that migrate
and go birth their young in the summertime? Most -- a lot
of birds, sea mammals, land animals come to the Arctic to
goose their young. And how it would be drastic if they
got hurt by an oil spill or stuff like that, how much we
would -- because we are consumers of these Native foods,
what were -- we got the right to hunt them right now.

Maybe we are the only unique kind of living
human beings that could benefit out from the ocean and
drain the land and from the sea -- I mean, from the air.
But it seems -- like I told you, it trickles my mind.
Boy, they going to come and they going to go and pump out,
produce 3.7 billion barrels of oil from the -- from the
popcorn area from Lease Sale 193. And they will probably
dump out another 3.7 billion barrels of oil from -- from
the Beaufort -- Beaufort area. What does it mean?

But when it open my mind to my community, I want
to try to get that -- that impact money, which is going to
the North Slope Borough now and which is not going to our
community, the most impacted community, this community and
Point Lay. The activities that are about to come, I
started looking at that impact money.

If we conclude together, my -- our community and
...aroy...
MS. CHELSEA THIBEAULT: If any of you didn't feel comfortable speaking tonight, they are telling you right now how you can make your comments without having to speak tonight. Okay?

MR. JOHN HOPSON: Make positive comments.

MS. SHARON WARREN: So even though you didn't comment tonight, this is another way. We will take your comments until July 11th.

MR. JOHN HOPSON: We as Inupiat people can work with other people. And we can -- and we can make work if we work with the federal government and work with the oil companies. If we take them to court, we can't talk to them much. They -- only the judge will speak for us or our lawyers will speak for us. When we work together, we can sit down and make things happen. Make positive comments. Thank you.

MR. SCOTT BLACKBURN: Okay. What she's handing out to you is -- it looks harder than it is. It's a step-by-step way of putting comments online. So you go to your computer. You go to your computer and use an internet connection. You start at step 1 on the first page and do what it says. It says go to the BOEMRE Alaska Region website, and that's in blue right below it. So if you type in that blue address, it will take you to a page that looks just like this. So it's showing you what will be on the computer screen. At the bottom of the page is step 2. It's in gray there, dark letters. And it tells you to find Alaska Region News and the appropriate link there, which is indicated in red in that screen. So it tells you where you need to go, and you click on that with your mouse.

You turn the page, and this is the screen that will show up. At that point, you click on the step indicated in red, step 3, and that's indicated at the bottom of the page. You can read that. It says find the Federal eRulemaking Portal in bold print two-thirds of the way down the page. And that's what's indicated in red.

So you click on that. And that will bring up this next page, regulations.gov. And there you will see our notice for this document. In order to submit a comment, all you need to do is click the orange button at the top where it says step 4 in red. And when you do that, it will bring up the next page. And these are the things, again, that you will see on the screen as you are going through it.

The next page shows you the actual page where you would input your comment. So you can -- you would need to write your name and your address, et cetera, and all the points that are indicated by the little blue stars.

And then in the space on the right are the page over here where it says step 6 in red. That's where you would write your comments. You can just type your comment in there. At that point you can be through and you can hit submit which is down in the right, the orange button. Or you can -- if you want to prepare a statement in a word processing program or some other program, you can prepare a statement and then upload that document. Okay? And these steps, 5, 6 and 7, walk you through that process.

At that point, if you are uploading a document, the next page shows you how to upload a document. If you are uploading a document, it will pull up the screen while you browse to your document in your computer and open that up and attach it.

But like I said, you can just type your comment into the box if you prefer and hit submit. And then it will tell you whether you have completed that successfully or not. If you completed that successfully, you will get the very last page and it will say success. Your comment has been submitted. And that's it.

And if there are questions about that may seem hard -- I don't think it will be when you sit down to do it. There is a phone number on the back, and you are welcome to call us. Hopefully they will send you to me.
better because we are Inupiaq-influenced speaking language.

I'll speak for me, anyway, because I speak broken English because I just -- I graduate from high school with a D from high school in English, but I never learned your dictionary too good. It's hard trying to speak English.

MR. SCOTT BLACKBURN: I think that's a good idea, and we --

MR. ENOCH OKTOLLIK: Probably would have -- I flunked maybe English bad.

MR. SCOTT BLACKBURN: Your suggestion has been made by others, as well.

MR. EARL KINGIK: Got the message these guys don't need to take to their boss because I had a chance to talk with their boss, which is Dr. Kendall, and he's willing to put somebody in the Borough office to coordinate these kind of meetings to educate the communities about this meeting, about issues that these people will have. That would be a good recommendation to Dr. Kendall, that you guys do get an interpreter. We heard that before in other villages.

MR. LES SEGEVAN: That would be the best because we have some Elders who would like to speak up, but they don't know English. They have been here longer.

MS. SHARON WARREN: We are going to take some time to expect results of these meetings that you are in there from the Secretary of Interior. That was good when they come out the first time that we be heard and included in there.

MR. SCOTT BLACKBURN: A lot of times we come out, we take comments but they don't know English. They have been here longer.

MR. ENOCH OKTOLLIK: Probably would have a computer, if somebody wants to write their comments and put them in the mail to us, we will also take them in the mail. So maybe some people don't have a computer, and if you want to write down your comments on a piece of paper, you can provide them as well. And if it's got the Inupiaq language on it, we can take that and we will get somebody to interpret that for us in the document. Okay.

MR. MIKE HALLER: Mr. Mayor, we have had some good interaction with Maggie and Stephanie, and they seem pretty good about operating with a computer because I've had e-mails back and forth with them. May I offer that perhaps they could put down some of your comments and send them to us and we could include them then?

MR. SCOTT BLACKBURN: When the final document comes out, part of it will have comments until July 11th, and the next document will be called the Final Supplemental Environmental Impact Statement, and it will be out the first part of September. We will be mailing them out to the communities like we did this time. We mailed a lot of them out. If you -- we are also going to be taking a look at who testified as well to get a hold of you to see if you want to have a copy of it come out. And we are also looking at ways best how to communicate the results from when we come out.

A lot of times we come out, we take comments from you, and then you don't see us again until the next time we want comments from you. So we are trying to work out a better way of getting feedback to you and how your comments were incorporated into the document. So we are working on that.

MR. ENOCH OKTOLLIK: It was good on this -- on that EIS for little local governments to be able to print this page and whatnot and what's written in there from the Secretary of Interior. That was good when they come out the first time that we be heard and included in there.

MS. SHARON WARREN: Right. Right. And when the final document comes out, part of it will have the appendices in it with all the transcripts, and then also in there we summarize the comments and we respond to them. So you know, you may see quotes from yourselves in there of how we, you know, took a look at what you were doing, what you told us, and then our analysts, our scientists, our oceanographers, will take a look at it and respond to the information.

A lot of times we do make changes in the document because we get correct -- you know, better information from the community, meaning how we said things.
and how we were first looking at them. So again, we will be sending out the final document sometime in early September because the Secretary by the Court has to make a decision. The Court wants a decision filed with the judge on the 3rd of October.

MR. ENOCH OKTOLIK: It's good all right to make comments, but you get to do it professional way to do comments and to be heard. And the borough mayor, he's got workers -- they get enough money in the borough to -- the borough mayor to make comments. He's got people working for him. But in our city here, we don't have that big of money -- big money to try to get a lawyer or people to write languages down to make comments. It's very hard, or to even review that EIS if we wish to make comments and stuff like that.

MS. SHARON WARREN: I know the EIS is large and it can be hard to read, as well, but there are some sections in it, like on subsistence; you will see some words and areas that we are looking at. And so maybe if you -- just like in our office, not one person writes the document. There is a lot of people that write the document because they are expert in their field in a certain area, so they just write in that area.

And then so I would ask -- like in the community, I'm sure there is individuals here that are experts in certain areas, and to take a look at those areas, you know, that you are interested in to make sure that we have it right and give us their comments. Even though we get comments from a lot of organizations and everything else, but getting comments from individual members of the community also is important because you are actually going out there. You are actually living. You have what the Elders handed down to you from your own family that maybe somebody else wouldn't have that would be important for us to consider.

UNIDENTIFIED SPEAKER: How far are you on this development program?

MS. SHARON WARREN: On that one? Okay.

Let me explain on that. This lease sale that we are talking about tonight was in the five-year program that was approved from 2007 to 2012. The Department of the Interior and our agency right now is working on the next five-year program for 2012 to 2017. And I believe that some of the folks in our organization came out here to do scoping meetings -- Mike, were you on that trip that came out and did scoping meetings?

MR. MIKE HALLER: I was.

MS. SHARON WARREN: Okay. That came out and did scoping meetings to start preparing a draft environmental impact statement.
I hope you understanding what I'm trying to get at. But I still want to get information from her what -- what the coastal management and what it -- what it is all about and how it ties in with the State, the federal and our -- the private people here.

MS. SHARON WARREN: Thank you. Yes, there has been studies out there in that area. We have a studies program. And in our document it mentions some of the studies they have done out there. We just need to do a better job to let you know about the studies that have been done out in that area and the studies that are ongoing. I did bring -- on our website there is a list not only of the ongoing studies, but also the completed studies that our agency has done.

Of course, there is many people out there who have been doing studies over the course of time out there, and I think it's just a matter of coming to the community, and those individuals who have done the studies to come to the community and say, you know, here is where the information is. At least how -- how it was collected by the federal government or from another research entity and all. So -- and I guess that information is not getting to the community members is what I'm hearing.

MR. MIKE HALLER: Mayor, would it help if we put together -- just thinking off the top of my head now, which is dangerous -- but just thinking about this because we have heard this other places. Would it be useful for us to bring a few folks, two or three, to come out at a time that's agreeable to you where we plan that time and we come and we review some of these various studies and step over the top of them and talk about them?

MR. ENOCH OKTOLLIK: Yeah, the people like this that do that kind of stuff, you got to bring them here and tell us about -- give us all that information, what the assessments are out there in our ocean.

MR. MIKE HALLER: We can talk about these things.

MR. ENOCH OKTOLLIK: Because it's going too fast, your getting the Eld and stuff like that. We don't even know what's assessed out there, what's got to be out there in the ocean, what's going to be impacted out there in the ocean.

MR. LES SEGEVAN: Which companies have been peaking around out there?

MS. SHARON WARREN: There has been companies -- there is research entities. Universities have been out there. I just don't have the list of the -- the -- our agency partners with a lot of entities to go out and do studies. We have an environmental studies program that has been going on for many, many years, for...
decades, and a lot of money has been spent going out there in the area to collect information. So we can see if what we can get from folks to come out here and let you know about the studies in the environmental studies program and then see who else has been out there. But there are entities that have gone out there to do research.

National Marine Fisheries Service, I think has been out there, NOAA. I think I just read in the paper that the Healy, NASA, was -- has a ship coming out here to do research, so --

MR. ENOCH OKTOLLIK: It’s not only oil and gas. It’s the Northwest Pacific Fisheries Service are looking at the Arctic Ocean, tourism in the Northwest Passage. A lot of things there in the Arctic Ocean. And we get to be prepared about --

MR. LES SEGEVAN: That’s true. They are getting ready to come. We need to find out what’s out there in order for us to protect it the right way.

MR. ENOCH OKTOLLIK: We know that they are doing the commercial fishing down there in Bristol Bay and them areas, and the Bering Sea and whatnot, and they are ground fishing that as hard as they can already. And we are going to see them pushing toward our area because it’s plentiful with pollock and crab in the Arctic Ocean. And those are the things that are going to push them this way.

MS. SHARON WARREN: We know. I don’t know. I don’t know.

MR. FRANK BESTER: So we need to elongate it so you know.

MR. ENOCH OKTOLLIK: 2030.

MS. SHARON WARREN: I don’t know. I mean, we are at the lease sale stage, and so if --

MR. FRANK BESTER: And you got to know all these studies and all that.

MS. SHARON WARREN: There is a lot that happens before you even get to production, because you have a lease sale, you go through -- the leases have to be affirmed in some manner that you still have leases out there, so that the companies will file an exploration plan, and then the companies will have to go out and explore, I don’t know.

MR. FRANK BESTER: Slow the oil companies down a little bit.

MS. SHARON WARREN: They have to go out and find what they are looking for and they have to find it in quantities that is economical to bring from out in the ocean forward. And then when they -- and if they do find that, then they have to file with us a production plan, and they have to tell us how they are going to produce that oil, how they are going to bring it to shore, what the infrastructure is, what’s the mitigation.

There is a lot of things that happen, and so there is not a set time frame of, oh, it’s going to happen in X amount of years. I don’t know. We are -- we are going through this process, and each step of the way there is further environmental review. There is further decisions that are made. So -- and depending on what the environmental review shows and the decisions that are made will depend on the timing of everything. And again, they have to find it. You know, they have to have some --

MR. FRANK BESTER: So they’re going to slow it down, in other words, huh?

MS. SHARON WARREN: Well, it takes time.

It takes time. You are out in an area, and we have a government process, a regulatory process that we take seriously when they go through all this and looking at the environmental information that’s needed, not only that we need in order to do that, to make sure that any operations that are out there are conducted safely, environmentally safe, and safety is also involved. So I don’t have a set -- but you will be -- with that chart it shows you where you can be involved in each step of the way where we will come out and ask you, you know.

MR. FRANK BESTER: Where are you at, planning on specific sale or --

MS. SHARON WARREN: Yes, we are on the
they explored and found out that, gee, that there is not anything economical that we can bring onto shore at this time.

MR. FRANK BESTER: So it's about less than a year for the post sale, right, about there?

MS. SHARON WARREN: Shell has filed with us an exploration plan that they want to go out and drill in 2012. So they want to go out next year to drill.

MR. FRANK BESTER: A little too early.

MR. LES SEGEVAN: That's what they want to do. But we have to get through this decision on the lease sale first.

MR. LES SEGEVAN: As soon as they start, the better because the revenues are falling. And when the revenues monies start falling, the jobs start declining and there will be -- instead of 60 percent unemployment in our village, it's going to be 80 percent. We need this money. Everybody knows that. Our grandchildren need it. Our great-grandchildren need it. Our village needs it. With everything going on right now with the subsistence animals unexplainably getting sick here and there, it's going to be hard.

It takes gas to hunt. It takes money to get an outboard boat. And our young people now today, they are used to money. They grew up with money. They're used to

MS. SHARON WARREN: Thank you.
MR. FRANK BESTER: One more question. How much -- if the oil start development, how will Wainwright benefit for that, you know, money-wise or --

MS. SHARON WARREN: I'm not sure. And so I would have to take that question back. We have it in the record, and I'll have to take that back to give you --

MR. FRANK BESTER: That's a big question.

MS. SHARON WARREN: -- an accurate answer. And I don't want to answer it off the top of my head and be wrong. I think it needs a correct answer. So --

MR. FRANK BESTER: Wainwright needs to be benefited.

MR. ENOCH OKTOLLIK: I know the North Slope Borough benefit from it, Frank, the impact money that we are supposed to get for Wainwright. But the North Slope Borough takes that impact money. Some kind of money was issued, impact money, and the North Slope Borough got it and we never -- we are the most impacted community, and we never got the impact money here when we -- what should have been used here in Wainwright for that lease sale -- where that lease sale area is at for that Chukchi Sea, anyway.

MR. LES SEGEVAN: Yeah, that needs to be corrected.

MS. SHARON WARREN: We have your question in the record and concern, and we will make sure that we respond to it so that you can have the answer.

MR. FRANK BESTER: We will be sheiks.

MS. SHARON WARREN: Is there any more that you would like to say before we close the record? If not, thank you again.

MR. FRANK BESTER: Thanks for coming.

(Proceedings adjourned at 9:16 p.m.)

REPORTER'S CERTIFICATE
I, MARY A. VAVRIK, RMR, Notary Public in and for the State of Alaska do hereby certify:
That the foregoing proceedings were taken before me at the time and place herein set forth; that the proceedings were reported stenographically by me and later transcribed under my direction by computer transcription; that the foregoing is a true record of the proceedings taken at that time; and that I am not a party to nor have I any interest in the outcome of the action herein contained.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my seal this _____ day of __________ 2011.

MARY A. VAVRIK, RMR
Registered Merit Reporter
Notary Public for Alaska
My Commission Expires: November 5, 2012
Revised Draft SEIS

Comment Letters

Federal Government
Tribal Governments and Alaska Native Organizations
State Government
Local Government
Environmental Organizations
Corporations and Industry Groups
General Public
United States Environmental Protection Agency Comment

Dear Ms. Warren,

The U.S. Environmental Protection Agency (EPA) has reviewed the Revised Draft Supplemental Environmental Impact Statement (SIS) for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska, as required under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. As the decision maker, the Federal Government must take into account the potential environmental impacts, including those that may result from actions taken during the planning and development phases, such as the planning and oversight of OCS Activities by BOEMRE.

This SIS was prepared to augment the previous Draft SIS for Oil and Gas Lease Sale 193 prepared in 2006, as well as the Supplemental EIS prepared in 2010 in response to the order from the Alaska District Court to evaluate impacts from natural gas, to determine missing information per 40 CFR 1902.22, and to determine the costs of obtaining missing information would be exorbitant or unknown. This revised SIS was developed specifically in response to comments from numerous stakeholders requesting that BOEMRE conduct an analysis of a blowout scenario. BOEMRE responded in March 2011 that it would issue the Supplemental EIS to include an analysis of a "Very Large Oil Spill" (VLOS) scenario.

We commend the BOEMRE for being responsive to the requests to perform such an evaluation and believe the analysis will help inform the public, other stakeholders, and the decision maker of the full range of potential effects from the project. Overall, we believe the Revised Draft Supplemental EIS provides an excellent and comprehensive analysis of a VLOS. We have zero concerns related to the potential impacts that would occur to many Arctic resources if such an event were to occur. We recognize the importance of such an event is very unlikely. We also believe that the additional mitigation measures implemented as a result of the Deepwater Horizon incident, as well as the additional planning and oversight of OCS Activities by BOEMRE will further reduce the potential for such an event. Therefore, we do not assign the rating of BC-1 (Environmental Concerns: Adequate Information) to the SIS. A copy of the rating system used to conduct our review is enclosed for your reference.

Sincerely,

Christine B. Reichgott
Manager
Environmental Review and Sediment Management Unit

Enclosure
Via Weli Portal
Dr. James Kendell,
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
1801 Commerce Dr. Ste. 500
Anchorage, Alaska 99503-5820

Re: Comments on the Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193

July 11, 2011

Dear Dr. Kendell,

Thank you for the opportunity to provide input on the Bureau of Ocean Energy Management, Regulations and Enforcement’s (BOEMRE) Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193. These comments are submitted on behalf of the Alaska Eskimo Whaling Commission (AEWC). The AEWC represents the eleven bowhead whale subsistence hunting villages of Barrow, Nanuak, Kaktovik, Point Hope, Wainwright, Kvichak, Wales, Shishmaref, Gambell, Little Diomede, and Point Lay. Our villages rely on the living resources of the Beaufort and Chukchi Seas for the majority of our food and for the continuation of our subsistence culture and society.

The AEWC was formed by the whaling captains of our constituent villages in 1983, for the purpose of protecting our bowhead whale subsistence hunt. We carry our responsibilities through locally elected tribal authorities that are elected by our community members. We have a unique relationship with the Bowhead Whale. Our subsistence subsistence livelihood predates any other subsistence hunting community in the United States. We acknowledge the importance of subsistence hunting communities, and we join the AEWC in opposing the rezoning of our subsistence resources.

The AEWC is concerned with the failure of the BOEM to provide appropriate recovery responses and provide an Explanation of Long- and Short-term Impacts. It is therefore critical that the decision maker is aware of the potential impacts of the proposed action. In the absence of such information, the AEWC is concerned with the failure of the BOEM to provide appropriate recovery responses and provide an Explanation of Long- and Short-term Impacts.
Alaska Eskimo Whaling Commission Comment

The potential detrimental effects to the bowhead whale and subsistence hunting due to seismic activity, the agency is taking a known risk that, unless mitigated through rigorous siting criteria or a CSA, places the burden of the adverse impact on our communities who depend on subsistence hunting instead of the lessees. Therefore, it is essential that BOEM/EE must sufficiently analyze the effects of seismic activity on subsistence hunting in light of MMPA requirements and that just state that significant effects will not occur due to mitigations under MMPA requirements.

B. MMPA Requirements Need to be Incorporated Into the Analysis of an Oil Spill’s Impact to Bowhead Whales.

The AEC suggests that the agency perform a more thorough analysis of the impacts to bowhead whales resulting from an oil spill by addressing MMPA requirements. The MMPA requires mitigation efforts to demonstrate how an oil spill will not result in take of the bowhead whale. BOEM/EE states that in the event of a large oil spill, biological resources may experience significant adverse impacts: “...most biological resources contacted by oil are expected to recover within two to three generations.” SEIS at 287.

If the agency allows the project to go forward under the revised SEIS, there is the potential for a major threat to the bowhead whale and local subsistence communities, depending on the level of deprivation, since bowhead whales have a lower potential rate of recovery than most other large species. Therefore, the SIS needs to examine more carefully the possible effects of a large spill on bowhead whale populations.

The AFTC notes, as well, the great frequency with which bowhead whales are discussed in Appendix A, along with the information that is not known about them. See Appendix A at A6, A7, A17, A18, A20, A21, A22, A23, A44, A45, A55, A56, A57, A60, A61, A62, A63, A64, A65, A67, A68, A69, A70, A71, A72, A73, A74. AFTC notes that the AEC/BOEM review this analysis with respect to the Impacts’ dependence on the bowhead whale and includes an analysis of how the recent take harms with the MMPA’s requirements.

III. NEW ALTERNATIVES MUST BE INCLUDED IN THE REVISED SEIS TO ADDRESS THE ENVIRONMENTAL IMPACTS TO SUBSISTENCE HUNTING AND THE BOWHEAD WHALE.

The AEC notes BOEM’s failure to propose new alternatives, including time and area restrictions, entering into an annual process for the requested development of mitigation measures, and entering into an oil spill contingency mitigation agreement that provides immediate access to alternative bowhead hunting opportunities, as measures that would mitigate the adverse impacts from oil and gas activities in the proposed lease area on bowhead whales and subsistence hunting as required by law. A susensible range of alternatives with various environmental impacts is necessary to enable the decision-maker to make an informed choice among the project alternatives.

3. Alaska Eskimo Whaling Commission Comment

The agency’s conclusion about the similarity of the impacts among the existing alternatives to the SEIS, SEIS at 31-39, SEIS at 286 (all alternatives have similar impacts to bowhead whales), ignores the importance of the alternatives analysis, which NPAA regulations describe, “as the heart of the EIS.” Alaska Alaska, 313 F.3d 1310 (9th Cir. 2002). If all the alternatives have similar environmental consequences, then BOEM/EE has failed to present a reasonable range of alternatives. “...because of the importance of alternatives in the NEPA process, BOEM/EE needs to consider alternative options, and include alternatives that will address impacts to bowhead whales and protect subsistence hunting.”

The AEC/BOEM proposes an alternative that includes the following mitigation measures, which have been negotiated directly between the ATWC, on behalf of our subsistence whale hunters, and oilfield operators:

GENERAL PROVISIONS FOR AVOIDING INTERFERENCE WITH BOWHEAD WHALES OR SUBSISTENCE WHALE HUNTING ACTIVITIES.

(a) Routing Vessels and Aircraft.
   (1) All vessels and aircraft routes shall be planned so as to minimize any potential conflict with bowhead whales or subsistence subsistence hunting activities. All vessels shall avoid areas of active or anticipated whaling activity (as reported pursuant to Section 22).
   (2) Dougihty Sea. Vessels transiting west of Dutch Point to the Canadian border should remain at least 3,200 (m) off-shore, during transit along the coast, provided sea and weather conditions allow.
   (3) Chukchi Sea. Vessels should remain at least 3,200 (m) off-shore during transit.
   (4) Aircraft Attitude Floor and Height Limits.
   (1) AIRCRAFT SHALL NOT OPERATE AT 1,000 FT. ABOVE THE AIRCRAFT is engaged in marine mammal monitoring, observing, locating, or taking, and/or engaged in providing assistance to a wildlife or in poor weather (low ceilings) or any other emergency situations. Aircraft engaged in marine mammal monitoring shall not operate below 1,000 ft. in areas of active whaling, such areas to be identified through communications with the Com.
   (2) Above, and the aircraft is engaged in marine mammal monitoring, it shall operate at least 7,500 (m) off-shore, and at a flight path that keeps the aircraft at least 50 (m) off-shore, unless the aircraft is directly on its off-shore destination, then the altitude shall be directly normal to its destination.

(c) Vessel Speeds.
   Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whales

3. Alaska Eskimo Whaling Commission Comment

unlikely. Vessel speeds shall be less than 10 knots in the vicinity of feeding whales or whale aggregations.

(d) Vessels Operating in Proximity of Bowhead Whales.
   If any vessel inadvertently approaches within 1,600 (m) (1 mile) of observed bowhead whales, except when providing emergency assistance to whales or in other emergency situations, then the vessel must immediately cease all marine mammal monitoring activities and remain at least 1,000 (m) from whales. Vessels may enter the area after obtaining permission from the USCG in accordance with the MMPA.

GEOPHYSICAL ACTIVITY LIMITATIONS.

The following operating limitations are to be observed: (a) conduct geophysical activity that will coordinate the timing and location of such activity so as to reduce, by the greatest extent reasonably possible, the level of noise energy entering the water from such activity at any given time and at any given location.

In addition, all geophysical activity in the Chukchi Sea shall be conducted in accordance with the terms set forth below.

(1) December 15, and ending with the close of the fall bowhead whale hunt, if adjacent to the Chukchi Sea. During the fall bowhead whale hunt, geophysical equipment shall not be used for a 30-mile area from any point along the Chukchi Sea coast. [Lessees] will contact the U.S. Coast Guard Association of the Chukchi Sea for approval unless the area is located within the 30-mile area where such activities may occur.

4. Alaska Eskimo Whaling Commission Comment

may have been provided previously.

4. Alaska Eskimo Whaling Commission Comment

the comments at this last test in the 2014 AEA. Note that the only eligible signatories on this document, other signatories have been provided previously.

Original text refers to "the Industry Participants."
(2) Safe harbor will be at sites selected by (a) Loosie) and the AEC. Safe harbor sites will be agreed upon no later than the beginning of operations. However, a vessel captain may select a site for his assets (vessel and personnel) as he deems fit under the Law of the Sea.

To assure compliance with current environmental laws, and to provide a template for implementing successful mitigation measures, the AECW also proposes that the alternative require leases to negotiate directly, on an annual basis, with the AECW, acting on behalf of and in consultation with its bowhead whale subsistence hunters, to develop additional mitigation measures that might be necessary in light of changed operational, hunting, or environmental conditions. Implementation of such an alternative demonstrates the AECW that the mitigation measures described in the NEPA acknowledge subsistence communities’ dependence on local resources, and the vulnerability our communities face if the proposed action occurs.

IV. THE AGENCY NEEDS TO PROVIDE SUFFICIENT MITIGATION MEASURES AND LEASE SAFETY STANDARDS IN THE SEIS.

NEPA requires that an agency include a discussion of mitigation measures in an environmental impact statement. 40 C.F.R. §§ 1502.14(b), 1502.16(b). NEPA regulations explain that “mitigation” includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.
(b) Minimizing impacts by selecting the degree or magnitude of the action and its implementation.
(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
(e) Compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.29. The Supreme Court has made clear that:

omission of a reasonably complete discussion of possible mitigation measures would undermine the “action-foiling” function of NEPA. Without such a discussion, neither the agency nor other interested individuals and groups can properly evaluate the severity of the adverse effects.


A. The Mitigation Measures in the Revised SEIS Need to Provide Specific Mitigation Measures to Ensure Protection of Subsistence Hunting.

NEPA requires specificity in mitigation measures and BIA cannot merely rely on the fact that there will be no adverse impact on the environment. NEPA requires that the NEPA includes specific mitigation measures that are necessary to prevent significant impacts from the proposed action.

6 Original text reflects the “Industry Participants.”

B. The AECW Should Provide Adequate NEPA Is Required to Incorporate MMPA Requirements in Its Environmental Impact Statement.

We strongly encourage the AECW to analyze the significance of potential impacts to subsistence hunting activities. The AECW should provide specific mitigation measures that address the impacts of the proposed action. The AECW should also include specific mitigation measures to protect subsistence activities, including hunting bowhead whales, for no less than the time period specified in the NEPA.

C. The SEIS Needs to Identify How Lease Safety Stipulations Will Mitigate Impacts.

The SEIS should provide a thorough analysis of the effects of the proposed action on the subsistence activities, including hunting bowhead whales. The SEIS should specifically address the impacts of the proposed action on the subsistence activities, including hunting bowhead whales. The SEIS should specifically address the impacts of the proposed action on the subsistence activities, including hunting bowhead whales. The SEIS should specifically address the impacts of the proposed action on the subsistence activities, including hunting bowhead whales. The SEIS should specifically address the impacts of the proposed action on the subsistence activities, including hunting bowhead whales. The SEIS should specifically address the impacts of the proposed action on the subsistence activities, including hunting bowhead whales.

V. THE AGENCY NEEDS TO REVISE ITS INFORMATION REGARDING THE FALL SUBSISTENCE HUNT IN THE CHUKCHI SEA-WINTER WHALE HUNTING AT ST. LAWRENCE ISLAND.

LESS VESSELS LEAVE THE CHUKCHI SEA NO LOWER THAN NOVEMBER 1.

BOEMlR does not acknowledge the fall bowhead whale hunt in the Chukchi for the conservation of the Chukchi, Point Hope, and Point Lay. SEIS at 16-17. These subsistence activities must be included in the analysis. By failing to identify these communities’ fall hunt, BOEMlR cannot perform a sufficient analysis of the alternatives and mitigation measures. The AECW recommends that BOEMlR revise the SEIS to include all available information on subsistence communities’ fall hunt.

Similarly, BOEMlR has not included a discussion of the water (late November through March) whale hunting at St. Lawrence Island. The timing of this hunt is significant because the whales are hunting in the Bering Strait just as winter whale hunting is finishing up at St. Lawrence Island.

The agency should also allow local traditional knowledge (TK) of the Inupiat subsistence community to develop a cohesive understanding of our cultural heritage and better understand the relationship and needs of the natural resources along the Chukchi Coast. This has become an increasingly important tool for protecting the delicate balance of local resources.

A focus on the UK of our communities will allow the agency to synthesize this information and reach in better information to protect the potential impacts of the Proposed Action.

20 See Attachment 2 for the city of the data on the proposed mitigation measures.

21 See Attachment 3 for the city of the data on the proposed mitigation measures.

22 See Attachment 4 for the city of the data on the proposed mitigation measures.
thresholds are set for impacts to water, air and other resources. SESSF at 74-75, that would have catastrophic consequences for our people, culture, and the environment upon which we depend.

BOEMRE must set significant thresholds that conform with applicable environmental laws instead of significance thresholds that assume major violations of statutes such as the Clean Water Act, Clean Air Act, and the MMPA. In essence what BOEMRE has done here is ensure that activities can be conducted in violation of numerous environmental laws without causing significant impacts. This practice is not supported by the CZM's definition of significance. 40 C.F.R. § 1508.27(b)(10).

VII. THE SESSF NEEDS TO ANALYZE IMPACTS TO THE BOWHEAD WHALE IN GREATER DETAIL.

A. The Agency Must Revise Its Analysis of the Impact of Vessel Strikes to the Bowhead Whale.
The revised SESSF fails to sufficiently address the probability of vessel strikes and analyze the threat to the bowhead whale. This is an especially critical issue for full migratory bowhead whales and other marine mammals moving through the Bering Strait as sea ice forms from near to south in the Chukchi Sea. In recent years, oil and gas development outside of the Arctic have increased at times even with the remotest locations. As vessel traffic increases, the risk of ship strikes will increase to the point that Bowhead whales will be at risk


BOEMRE discloses a failure to address the potential for increased noise or vessel traffic disturbance which could result in increased noise or vessel traffic for the Chukchi Sea and hence an increase in vessel traffic in the Chukchi Sea. Increase vessel traffic poses a serious risk to bowhead whales. A recent USGS report states:

"Once sea-ice melts begins in the spring, the fraction of the Arctic Ocean covered by low-level clouds and fog rapidly increases. Thus 20 to more than 65 percent. These low clouds can drastically reduce visibility, affecting ship and aircraft operations. As AOGCMs consistently project that the Arctic will become colder by mid-century, 12 BOEMRE needs to demonstrate how it will successfully counter adverse impacts to the bowhead due to increasing traffic and reduced visibility. This can be done through mitigation measures including time and area restrictions and limits on the amount of vessel traffic, which will also aid in ensuring compliance with MMPA requirements.

With the agency’s unsupervised concerns that vessel strikes will not be an important source of injury or mortality, and scientific studies indicating otherwise, it is essential that BOEMRE undertake a more thorough analysis of the impacts from vessel traffic on bowhead whales."

"Access to subsistence resources and subsistence-hunting areas could change if cumulative noise and traffic disturbance reduces the availability of resources or alters distribution patterns. Subsistence-hunters activities could be disrupted considerably by vessel and air traffic. [I]ncrease in vessel traffic might result in reductions of subsistence harvests, and results in vessel traffic in the region."

OIL SPILL CONTINGENCY AGREEMENT
BY AND BETWEEN
______________________________

AND

THE ALASKA ESKIMO WHALING COMMISSION, NORTH SLOPE BOROUGH, AND
INUPIAT COMMUNITY OF THE ARCTIC SLOPE

DATE

recognizes the critical importance of
subsistence hunting to the Alaska Eskimo Whaling Commission (“AEWC”), the North
Slope Borough (“NSB”), and the Inupiat Community of the Arctic Slope (“ICAS”)
(hereinafter collectively referred to as “the Community”). The Community’s centuries-old
cultural practices associated with subsistence hunting, particularly that of the bowhead
whale, are essential to its members’ sense of identity and vitality. Each year,1
Community members conduct their annual bowhead whale subsistence hunt and
participate in the customary practice of sharing among villages.

The International Whaling Commission (“IWC”) requires the Community to
demonstrate through peer-reviewed science that its allotted annual quota of whales is
necessary to meet the nutritional and cultural needs of the Community.

______________________________ understands that its activities (hereinafter,
“______________________________’s Activities”) as described in (____
insert name of
permit or plan that governs the company’s activities___)
(“______________________________’s Plan”) pose a risk of damage to the population
of whales in the Chukchi Sea Planning Area. Other marine life relied upon by the Community, including
beluga whales, ringed seals, bearded seals, walrus, polar bears, fish and waterfowl, may also be affected. The loss of any one of these species would place an additional
burden on the remaining species and on non-marine animals such as caribou.

______________________________ also understands the serious
consequences to the Community and its culture that would result from an inability to
engage in subsistence hunting and its associated activities due to
______________________________’s activities. While the effects of an oil spill might
be partially mitigated through costly measures such as hunting for subsistence
resources at a different location, trading quotas with other villages and transporting the
catch, or hunting alternate species, centuries of traditional hunting practices would be
disrupted. Villages outside the Community would also be affected by an oil spill, as
customary patterns of sharing and bartering among villages would be disrupted.

Accordingly, in addition to complying with all applicable federal, state and local oil
spill laws, regulations and permit conditions, ______________________________
agrees to mitigate the subsistence resource-related impacts that may result from a
triggering event (as defined in Section I.A) in accordance with this Agreement.

I. MITIGATION

A. Triggering Event

A triggering event occurs whenever
______________________________’s Activities result in any discharge (as defined in 33 U.S.C. § 2701(7)) of liquid
hydrocarbons (including, but not limited to, crude oil and diesel fuel), irrespective of
cause, including Acts of God, that:

1. causes liquid hydrocarbons to be present in the water of the Beaufort,
Chukchi, or Bering Seas, including ice and broken ice,
2. has the potential to adversely affect bowhead whales and their habitat, or
other species harvested for subsistence use and their habitat, and
3. is followed by a reduction in the availability of these species for subsistence
use in the area(s) in which they are traditionally hunted.

Adverse effects may be direct or indirect and may result from any cause associated with the
discharge, including but not limited to oil spills, hazing or other oil spill cleanup measures described in
Appendix I.
Evidence of a “reduction in availability for subsistence use” may include (but is not limited to) any of the following: changes in migratory behavior, reduced numbers of a subsistence resource population, contamination of the subsistence resource, increased travel times/distances to find the subsistence resources, forced reliance on alternative food sources, or a reduction in the IWC harvest quota resulting from an oil spill.

B. Financial Assurance

______________________________ shall provide financial assurance that it shall maintain a fund to assist the Community upon the occurrence of a Triggering Event. The fund shall be controlled by a trustee (“Trustee”) agreed upon by ______________________________ and the Community.

1. Financial Assurance Instrument

______________________________ agrees to obtain a financial assurance instrument (“Instrument,” attached as Appendix II) guaranteed by the United States Government or an FDIC-insured bank and made payable to the Trustee. The Instrument shall be held by the Trustee for the benefit of the Community and for disbursement to the Community in accordance with this Agreement. The funds represented by the Instrument shall be at least $20,000,000 (Twenty Million U.S. Dollars) in 2001 dollars adjusted annually [based on the rate of inflation appropriate for the North Slope of Alaska], or in the amount set forth in Appendix if it is greater.

The Community and ________ shall re-estimate the costs underlying the need for financial assurance at least once every three years, and shall provide for any increase in the costs by updating the Instrument to reflect increased financial insurance or providing an additional instrument.

______________________________’s liability under the Agreement is not limited to amount represented by the Instrument, nor is it limited by any failure to re-estimate the costs underlying the need for financial assurance.

2. Purposes for Which Trustee May Disburse Funds

Upon the occurrence of a Triggering Event and a timely (as defined in Part I.B.5) request by the Community, the Trustee shall disburse funds for any of the following purposes:

a. Expenses related to relocating subsistence hunters and their equipment to alternate hunting sites and safely returning the hunters, their equipment, and their subsistence catch to their villages.

b. Expenses related to the pursuit and acquisition of substitute or alternate food supplies to replace subsistence resources that are otherwise unavailable.

c. Counseling, healthcare services, and cultural assistance for affected persons of the Community to handle the disruptions to their lives and culture.

d. Assistance for AEWC to restore the IWC quota in the event it is affected by an oil spill.

e. Any other purpose mutually agreed to by the Community and ____________.

3. Trustee

Should the Trustee at any time be unable or unwilling to perform the duties required under the Agreement, and the Community shall select an Alternate Trustee.

5. Disbursement of Funds

The Trustee shall disburse funds within forty-eight hours of a timely written request to the Trustee by the NSB Mayor, the AEWC Chairman or Executive Director, and the ICAS President.

A request is timely if it is made within three years of the time at which Community noticed or should have noticed adverse effects (as described in I.A. note 6).

The meeting date shall be no later than six months from the date the Chairperson receives of the joint letter to the Chairperson requesting that the Chairperson convenes a panel of individuals with expertise in the areas of research and study necessary for making a determination as to whether a Triggering Event occurred or the time at which the Community should have noticed the adverse effects of a Triggering Event. The number of experts and the types of expertise required for this purpose will be at the discretion of the Chairperson. The Chairperson will inform the North Slope of Alaska, and the Community of his or her decision regarding panel selection.

2. Within 60 days of sending the letter to the Chairperson, the Community and ________ will provide the Chairperson with copies of all documents they have relating in any way to the Chairperson’s request to the Trustee by the NSB Mayor, the AEWC Chairman or Executive Director, and the ICAS President.

3. The Chairperson will select the earliest possible date and arrange a meeting place or teleconference for the panel to determine what additional information is required. The Chairperson shall inform the Community of his or her decision regarding additional information.

4. Any testimony from interviews by panel members with any third party will be written and made available to the Chairperson and the Community upon request.

5. The panel will hold a sufficient number of meetings or teleconferences lasting for an amount of time sufficient to enable the Chairperson and the panel members to confer and conduct their deliberations.

6. One scientist representing the NSB Department of Wildlife Management and one scientist representing may attend all panel meetings and teleconferences. Such observers will not participate in the panels deliberations and will not seek to affect panel decisions.

As of the date the Chairperson sends the letter, the Chairperson will send a joint letter to the Chairperson requesting that the Chairperson convenes a panel of experts as described in the previous paragraph. The Chairperson will inform the Community of his or her decision regarding panel selection.

The meeting date shall be no later than six months from the date the Chairperson receives of the joint letter to the Chairperson requesting that the Chairperson convenes a panel of experts as described in the previous paragraph. The Chairperson will inform the Community of his or her decision regarding panel selection.
7. The panel will provide a written report of its conclusions. The report will be delivered to the Community and ______________________________ no later than 45 days following the conclusion of the panel’s final meeting.

8. ______________________________ and the Community agree that the determination of the panel will be considered conclusive and binding as to whether a Triggering Event occurred and/or the time at which the Community should have noticed the adverse effects of a Triggering Event. This determination is not subject to review by the independent third party under Section II.B of this Agreement.

9. All costs and expenses associated with the dispute resolution process described in this subsection will be borne by ______________________________, including but not limited to, the Chairperson’s fees, fees charged by panel members, travel expenses for all participants, administrative costs and conference room rentals.

B. All Other Disputes Related to the Agreement

Should a dispute arise between ______________________________ and the Community or the Trustee regarding any issue relating to the Agreement other than those issues described in II.A, the aggrieved party shall provide written notice to the other party that the former wishes to exercise its rights under this clause. Following issuance of the notice, parties shall conduct good faith negotiations. If the dispute is still unresolved after 20 days, it shall be resolved through mediation in Barrow, Alaska or Anchorage, Alaska.

This mediation will begin upon at least thirty (30), but no more than sixty (60) days prior written notice given by the party seeking dispute resolution within the time for commencing a legal action involving the controversy. Such notice shall be given six months before the statutory time limit for commencing a legal action involving the controversy. The independent third party mediator will be selected by mutual consent of ______________________________ and the Community from a list of available members of the American Arbitration Association.

____________________________   __________________________
(insert name of company)            Date

Mayor, North Slope Borough            Date

____________________________   __________________________
Chairman, Alaska Eskimo Whaling     Date
Commission

____________________________   __________________________
President, Inupiat Community of the  Date
Arctic Slope

Appendix I

OIL SPILL SCENARIOS AND ACTION PLANS

Appendix II

FINANCIAL ASSURANCE INSTRUMENTS
2011 OPEN WATER SEASON
PROGRAMMATIC CONFLICT AVOIDANCE AGREEMENT

BETWEEN

ARCTIC CABLE COMPANY, LLC
BP EXPLORATION (ALASKA), INC.
ENI US OPERATING COMPANY, INC.
EXXON MOBIL CORPORATION
ION / GX TECHNOLOGY
PIONEER NATURAL RESOURCES ALASKA, INC.
SHELL OFFSHORE, INC
STATOIL

AND

THE ALASKA ESKIMO WHALING COMMISSION
THE BARROW WHALING CAPTAINS’ ASSOCIATION
THE KAKTOVIK WHALING CAPTAINS’ ASSOCIATION
THE NUIQSUT WHALING CAPTAINS’ ASSOCIATION
THE PT. HOPE WHALING CAPTAINS’ ASSOCIATION
THE PT. LAY WHALING CAPTAINS’ ASSOCIATION
THE WAINWRIGHT WHALING CAPTAINS’ ASSOCIATION

Final for Signature
March 31, 2011

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SECTION 101. APPLICATION.

Title I applies to all Participants.

Title II applies to all Participants, except as provided in Titles III or VI.

Title III applies to those Participants who operate barge or transit vessels in the Beaufort Sea or Chukchi Sea.

Title IV and V apply only to those Participants who engage in oil and gas operations.

Title VI applies to those Participants who engage exclusively in geophysical activities that are conducted at least 40 miles or more from the Alaska coast in the Beaufort Sea or Chukchi Sea.

Provisions that apply to a specific activity or are designated as specific to either the Beaufort Sea or Chukchi Sea apply only to Participants that engage in that activity or operate in that area, and provisions applicable to activities a Participant does not engage in or areas in which a Participant does not operate do not apply to that Participant.

SECTION 102. PURPOSE.

The purpose of this Agreement is to provide:

(1) Equipment and procedures for communications between Subsistence Participants and Industry Participants;

(2) Avoidance guidelines and other mitigation measures to be followed by the Industry Participants working in or transiting the vicinity of active subsistence hunters, in areas where subsistence hunters anticipate hunting, or in areas that are in sufficient proximity to areas expected to be used for subsistence hunting that the planned activities could potentially adversely affect the subsistence bowhead whale hunt through efforts on bowhead whales;

(3) Measures to be taken in the event of an emergency occurring during the term of this Agreement; and

(4) Dispute resolution procedures.
(12) The term "Open Water Season" means the period of the year when ice
conditions permit navigation by oil and gas operations to occur in the Beaufort
Sea or Chukchi Sea, as appropriate.

(13) The term "Participating" means all parties identified in this Agreement
by name and whose representative(s) has signed the Agreement, and all
contractors of such parties. When used alone the term includes both Industry
Participating and Subsistence Participants.

(14) The term "Primary Sound Source Vessel" means a vessel owned or
operated by or for an industry Participant that (A) employs air gun arrays greater
than 300 cubic inches or speakers greater that 20,000 kJ, for imaging the
subsurface environment, (B) is used to monitor any safety zone around a vessel
described in subsection (A), (C) is engaged in ice-breaking, or (D) is the lead
vessel in a group of barge or transit vessels.

(15) The term "sentry" means equipment, employed as hull mounted or towed
army, intended for the active location of surface or underwater vessels. The term
does not include vessel-mounted, generators, or sources such as Fahrherr
fish-finders, side-scan sonar, or other sources intended for engineering, cable
laying or towing, and/or transportation purposes.

(c) Limitations of Obligations.

The following limitations apply to this Agreement.

(1) No cooperators among the Participants, other than those required by this
Agreement, is intended or otherwise implied by their adherence to this
Agreement. In no event shall the signatures of any representative of the Alaska
Eskimo Whaling Commission (AEWC), or of the Barrow, Nuiqsut, Kaktovik,
Wainwright, Pt. Hope, or Pt. Lay Whaling Captains' Associations, or of any other
Whaling Captains' Association be taken as an endorsement of any Arctic
operations by Beaufort or Chukchi OCS operations by any oil and/or gas
operator or contractor.

(2) Adherence to the procedures and guidelines set forth in this Agreement
does not in any way indicate that any Inuit or Siberian Tushk whales or the
AEWC agree that industrial activities are not interfering with the bowhead whale
migration or the bowhead whale subsistence hunt. Such adherence does not
represent an admission on the part of the Industry Participants or their
contractors that the activities covered by this Agreement will interfere with the
bowhead whale migration or the bowhead whale subsistence hunt.

(3) No member of the oil and gas industry or any contractor has the authority
to impose restrictions on the subsistence hunting of bowhead whales or
associated activities of the AEWC, residents of the Villages of Nuiqsut, Kaktovik,
Barrow, Wainwright, Pt. Lay, or Pt. Hope, or residents of any other village
represented by the AEWC.

(4) In the event additional parties engage in oil and gas operations in the
Beaufort Sea or Chukchi Sea during the summer or fall of 2011 the Participants
shall exercise their good faith efforts to encourage those parties to enter into this
Agreement. Should additional parties enter into this Agreement at a date
subsequent to the date of the signing of this document and before the termination
of the 2011 bowhead whale subsistence hunting season, the AEWC will provide
to all Participants a supplement to this document with the added signatures.
SECTION 106. DISPUTE RESOLUTION.
Subject to the terms of Section 104(c)(7) of this Agreement, all disputes arising between any industry Participants and any Subsistence Participants shall be addressed as follows:

(1) The dispute shall first be addressed between the affected Participant(s) in consultation with the affected village Whaling Captains’ Association and the industry Participant(s)/Local Representative.

(2) If the dispute cannot be resolved to the satisfaction of all affected Participants, then the dispute shall be addressed with the affected Participants in consultation with the AEWC.

(3) If the dispute cannot be satisfactorily resolved in accordance with paragraphs (1) and (2) above, then the dispute shall be addressed with the AEWC and the affected Participants in consultation with representatives of NOAA Fisheries.

(4) All Participants shall seek to resolve any disputes in a timely manner, and shall work to ensure that requests for information or decisions are responded to promptly.

SECTION 107. EMERGENCY AND OTHER NECESSARY ASSISTANCE.

(a) Emergency Communications.

All vessels should notify the appropriate COM-CENTER IMMEDIATELY in the event of an emergency. The appropriate COM-Center operator will notify the nearest vessels and appropriate search and rescue authorities of the problem and advise them regarding necessary assistance. (See attached listing of local search and rescue organizations in Attachment 1.)

(b) Beaufort Sea Post-Season Joint Meeting.

Following the end of the fall 2011 bowhead whale subsistence hunt and prior to the 2012 Pre-Season Introduction Meetings, the Industry Participant that establishes the Beaufort and Chukchi COM-Centers will offer to the AEWC Chairman to host a joint meeting with all whaling captains of the Villages of Nuiqsut, Kaktovik and Barrow, the Marine Mammal Observer / Inupiat Communicators stationed on the Industry Participants’ vessels in the Beaufort Sea, and with the Chairman and Executive Director of the AEWC, at a mutually agreed upon time and place on the North Slope of Alaska, to review the results of the 2011 Beaufort Sea Open Water Season, unless it is agreed by all designated individuals or their representatives that such a meeting is not necessary.

(c) Chukchi Sea Post-Season Village Meetings.

Following the completion of the 2011 Chukchi Sea Open Water Season and prior to the 2012 Pre-Season Introduction Meetings, the Industry Participants involved, if requested by the AEWC or the Whaling Captain’s Association of each village, will host a meeting in each of the following villages: Walmatlog, Pt. Lay, Pt. Hope, and Barrow (or a joint meeting of the whaling captains from all of these villages if the whaling captains agree to a joint meeting) to review the results of the 2011 operations and to discuss any concerns residents of those villages might have regarding the operations. The “meetings will include the Marine Mammal Observer / Inupiat Communicators stationed on the Industry Participants’ vessels in the Chukchi Sea. The Chairman and Executive Director of the AEWC will be invited to attend the meeting(s).
(5) It is the MMOIC's responsibility to call the appropriate Com-Center as set out in Sections 202 and 203.

(6) The MMOIC will be responsible for all radio contacts between vessels owned or operated by each of the Industry Participants and whaling boats covered under Section 207 of this Agreement and shall interpret communications as needed to allow this vessel operator to take such action as may be necessary pursuant to this Agreement.

(7) The MMOIC shall contact directly subsistence whaling boats that may be in the vicinity to ensure that conflicts are avoided to the greatest possible extent.

(8) The MMOIC will maintain a record of his or her communications with each Com-Center and the subsistence whaling boats, as well as any marine mammal sightings by the MMOIC.

SECTION 202. COM-CENTER GENERAL COMMUNICATIONS SCHEME.

(a) Reporting Positions for Vessels Owned or Operated by the Industry Participants.

(1) All vessels (other than vessels covered under sections 302 and 303) shall report to the appropriate Com-Center at least once every six hours commencing with a call at approximately 06:00 hours. Each call shall report the following information:

(A) Vessel name, operator of vessel, charter or owner of vessel, and the port the vessel is working on.

(B) Vessel location, speed, and direction.

(C) Plans for vessel movement between the time of the call and the time of the next call. The final call of the day shall include a statement of the vessel's general area of expected operations for the following day, if known at that time.

EXAMPLE: This is Arctic Endeavor, operated by . . . for . . . at Chukchi Sea prospect. We are currently at . . . north, . . . west, proceeding SE at . . . knots. We will proceed on this course for . . . hours and will report location and direction at that time.

(2) The appropriate Com-Center shall notify if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from announced course, and each Com-Center shall notify all whalers of such changes. A call to the appropriate Com-Center shall be made regarding any unsafe or unanticipated ice conditions.

(3) In the event that the Industry Participant's participation includes seismic data acquisition, the operator reserves the right to restrict exact vessel location information and provide more general location information.

(b) Reporting Positions for Subsistence Whale Hunting Crews.

(1) Subsistence whaling captains shall report to the appropriate Com-Center at the time they launch their boats from shore and again when they return to shore.

(2) Subsistence whaling captains shall report to each Com-Center the initial GPS coordinates of their whaling camps.

(3) Additional communications shall be made on an as needed basis.

(4) Each call shall report the following information:

(A) The crew's location and general direction of travel.

EXAMPLE: This is . . . for . . . at . . . prospect. We are currently at . . . north, . . . west. I will call if our plans change.

(B) The presence of any vessels or aircraft owned or operated by any of the Industry Participants, or their contractors, that are not observing the specified guidelines set forth in Title V on Avoiding Conflicts.

(C) The final call of the day shall include a statement of the whaling captain's general area of expected operations for the following day, if known at the time.

(5) Any subsistence whale hunter preparing to tow a caught whale shall report to the appropriate Com-Center before starting to tow.

EXAMPLE: This is Arctic Alaskan, I am . . . north, . . . west. I have a whale and am towing it into . . .

(c) Responsibilities of Participants.

(1) Monitoring VHF Channel 16.

All vessels covered by Sections 207, 301, and 401 of this Agreement shall monitor marine VHF Channel 16 at all times.

(2) Avoidance of Whaling Hunting Crews and Areas.

It is the responsibility of each vessel owned or operated by any of the Industry Participants and covered by Sections 301 or 401 of this Agreement to determine the positions of all of their vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.

(3) Vessel-to-Vessel Communication.

After any vessel owned or operated by any of the Industry Participants and covered by Sections 301 or 401 of this Agreement has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Inupiat Communicator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

SECTION 203. THE COMMUNICATIONS SYSTEM COORDINATION CENTERS (COM-CENTERS).

(a) Chukchi Lead System Included in Com-Center Coverage.

In addition to the Beaufort Sea and Chukchi Sea, the communications scheme shall apply in the Chukchi Sea lead system, as identified and excluded from leasing in the current MMS Five-Year Leasing Program, 2007-2012.

(b) Set Up and Operation.

(1) Subject to the terms of Section 104(c) of this Agreement, the Industry Participants conducting operations in:

(A) the Beaufort Sea jointly will arrange for the funding of Com-Centers in Deadhorse and Kaktovik; and

(B) the Chukchi Sea will arrange for the funding of Com-Centers in Barrow, Wiseman, Pt. Lay, and Pt. Hope.

(2) All six Com-Centers will be staffed by Inupiat operators. GROUND TRANSPORTATION MUST BE PROVIDED FOR COM-CENTER OPERATIONS IN KAKTOVIK FOR POLAR BEAR AND BROWN BEAR SAFETY. The Com-Centers will be operated 24 hours per day during the 2011 subsistence bowhead whale hunt. One Industry Participant in the Beaufort Sea and one Industry Participant in the Chukchi Sea, or their respective contractors, will be designated as the operator of the Com-Centers for that Sea, in consultation with the AEWIC.

(3) Each Industry Participant shall contribute to the funding of the Com-Centers covering the areas in which it conducts oil and gas operations. The level of funding for the Com-Centers provided by each of the Industry Participants is intended to be in proportion to the scale of their respective activities, and shall be mutually agreed by the Industry Participants.

(4) The procedures to be followed by the Com-Center operators are set forth in subsection (d) below.

(d) Staffing.

(1) Each Com-Center shall have an Inupiat operator ("Com-Center operator") on duty 24 hours per day from August 15, or one week before the start of the fall bowhead whale hunt in each respective village, until the end of the bowhead whale subsistence hunt in:

(A) Kaktovik for the Kaktovik Com-Center;

(B) Deadhorse for the Deadhorse Com-Center;

(C) Barrow for the Barrow Com-Center;

(D) Wiseman for the Wiseman Com-Center.
Duties of the Com-Center Operators.  
(1) The Com-Center operators shall be available to receive radio and telephone calls and to call vessels as described below. A record shall be made of all calls from every vessel covered by Sections 207, 301, and 401 of this Agreement. Information reported regarding whales struck, lost, landed, or the location of whales struck, lost, or landed, or the number of strikes remaining, shall be confidential and shall not be disclosed to anyone other than the AEWC or the local Whaling Captains’ Association. The record of all reporting calls should contain the following information:

(A) Industry Participant Vessel:
   (i) Name of caller and vessel.
   (ii) Vessel location, speed, and direction.
   (iii) Time of call.
   (iv) Anticipated movements between this call and the next report.
   (v) Reports of any industry or subsistence activities.

(B) Subsistence Whale Hunting Boat:
   (i) Name of caller.
   (ii) Location of boat or camp.
   (iii) Time of call.
   (iv) Plans for travel.

(2) Report of Industry/Subsistence Whale Hunter Conflict. In the event an Industry/Subsistence whale hunter conflict is reported, the appropriate Com-Center operator shall record:

(A) Name of industry vessel.
(B) Name of subsistence whaling captain.
(C) Location of vessels.
(D) Nature of conflict, date, and time.

(3) If all vessels and boats covered by Sections 207, 301, and 401 of this Agreement have not reported to the appropriate Com-Center within one hour of the recommended time, the Com-Center operator shall attempt to call all non-reporting vessels to determine the information set out above under the Duties of the Com-Center:

(4) As soon as location information is provided by a vessel covered by Sections 207, 301, or 401 of this Agreement, the appropriate Com-Center operator shall plot the location and area of probable operations on the large map provided at the Com-Center.

(5) If, in receiving information or plotting it, a Com-Center operator observes that operations by Industry Participants might conflict with subsistence whaling activities, such Com-Center operator shall contact the industry vessel involved and advise the Industry Participant's Local Representative(s) and the vessel operators of the potential conflict.

SECTION 204. STANDARDIZED LOG BOOKS.
The Industry Participants will provide the Com-Centers and Marine Mammal Observers/Logbook Collectors with identical log books to assist in the standardization of record keeping associated with communications procedures required pursuant to this Agreement.

SECTION 205. COMMUNICATIONS EQUIPMENT.

(a) Communications Equipment to be Provided to Subsistence Whale Hunting Crews.

(1) In General. The Industry Participants will provide (or participate in the provision of) the communications equipment described in paragraphs (4) and (6) of this subsection and subsection (b) of this section.

(2) Bering Sea. The Industry Participants funding Com-Centers in Deadhorse and Kaktovik will fund the provision of communications equipment for the whaling captains of Kaktovik and Nuiqsut in the same proportion as they fund those Com-Centers.

(3) Chukchi Sea. The Industry participants conducting operations in the Chukchi Sea will coordinate with each other to participate in funding the provision of communications equipment for the whaling captains of Barrow, Wanwright, Pt. Hope, and Pt. Lay.

(4) All-Channel, Water-Resistant VHF Radios.

These VHF radios are specifically designed for marine use and allow monitoring of Channel 16 while using or listening to another channel.

(A) Kaktovik Subsistence Whaling Boats: 8
(B) Kaktovik Base and Search and Rescue: 2
(C) Nuiqsut Subsistence Whaling Boats: 12
(D) Nuiqsut Base and Search and Rescue: 3
(E) Barrow Base and Search and Rescue: 2
(F) Wanwright Base and Search and Rescue: 2
(G) Wanwright Subsistence Whaling Boats: 4
(H) Pt. Hope Base and Search and Rescue: 2
(I) Pt. Hope Subsistence Whaling Boats: 10

(5) Specific VHF Channels For Each Village.

The whaling boats from each of the villages have been assigned individual VHF channels for vessel-to-vessel and vessel-to-Com-Center communications as follows:

(A) Nuiqsut: Channel 12.
(B) Kaktovik: Channel 12.
(C) Barrow: Channel 12.
(D) Wanwright: Channel 12.
(E) Pt. Lay: Channel 12.
(F) Pt. Hope: Channel 13.

(6) Satellite Telephones.

The satellite telephones are to be used as backup for the VHF radios. The satellite telephones for use on subsistence whaling boats are for emergency use only and should be programmed for direct dial to the nearest Com-Center.

A. Kaktovik Base: 02
B. Kaktovik Subsistence Whaling Boats: 08
C. Nuiqsut Base: 02
D. Nuiqsut Subsistence Whaling Boats: 02
E. Barrow Subsistence Whaling Boats: 02
F. Wanwright Subsistence Whaling Boats: 04
G. Pt. Lay Subsistence Whaling Boats: 02
(7) Distribution and Return of Equipment.

The distribution of the VHF radios and satellite telephone equipment to whaling captains for use during the 2011 fall bowhead subsistence whale hunting season shall be completed no later than August 15, 2011. All such units and telephone equipment provided under this Agreement, whether in this section or otherwise, will be returned promptly by the subsistence participants to the industry participant or the person providing such units and equipment at the end of each Village's 2011 fall bowhead whale subsistence hunt.

(b) Communications Equipment On Vessels Owned or Operated by the Industry Participants and/or Their Contractors.

The Marine Mammal Observer / Inupiat Communicators onboard source vessels owned or operated by the industry participants and/or their contractors will also be supplied with all-channel VHF radios. The MMOCs have been assigned Channel 7 for their exclusive use in communicating with the com-center. Such radios shall be returned upon the completion or termination of the MMOC's assignment.

(e) Radio Installation and User Training.

The Whaling Captains of Nuiqsut, Kaktovik, Wainwright, Pt. Lay, and Pt. Hope, with assistance from the Industry Participants, will be responsible for the installation of the VHF radio equipment. The industry participants will provide (or participate in the provision of) on-site user training for the VHF and satellite telephone equipment on or before August 15, 2011, if requested and as scheduled by the Whaling Captains' Associations of Nuiqsut, Kaktovik, Barrow, Wainwright, Pt. Lay, and Pt. Hope, and the industry participant operating the Beaufort Sea Com-Centers or Chukchi Sea Com-Centers, as appropriate.

SECTION 206. INDIVIDUALS TO CONTACT.

Listed below are the primary contact names and phone numbers for each of the Participants.

(1) Arctic Cafe Company, LLC's Local Representative

TBD

(2) BP Exploration (Alaska), Inc.'s Local Representative

LOWRY BROTT will be BP's local representative on the North Slope during the Term of this Agreement and will be stationed at Northstar Island and will be available by telephone at (907) 670-3520 and when Mr. Brott is not available, his alternate, Jim Creek, will be stationed at Northstar Island and will be available by telephone at the above number.

(3) ENI's Local Representative

Here Neldig (907) 865-3341

(4) Exxon Mobil's Local Representative

TBD

(5) Ion / DK Technology's Local Representative

TBD

(6) Pioneer Natural Resources (Pioneer)'s Local Representative

PAT FOLEY will be Pioneer's local representative during the Term of this Agreement and will be stationed in Anchorage and will be available by telephone at (907) 343-2110.

(7) Shell Offshore Inc.'s (Shell) Local Representatives

JOHN MAKELA and HOWARD HILL will be Shell's local representatives on the North Slope during the Term of this Agreement and will be stationed at Barrow during Chukchi Sea operations and at Deadhorse during Beaufort Sea operations and will be available by telephone at (907) 770-3700.

SECTION 207. SUBSISTENCE WHALE HUNTING BOATS.

The following is a list of the number of boats each of the subsistence participants plan to use:

(1) Boats Owned/Used by Whaling Captains of Nuiqsut (NWCA)

The subsistence whaling crews of the Village of Nuiqsut plan to use (12) twelve boats for subsistence whale hunting during the late summer and fall of 2011.

(2) Boats Owned/Used by Whaling Captains of Kaktovik (NWCA)

The subsistence whaling crews of the Village of Kaktovik plan to use (8) eight boats for subsistence whale hunting during the late summer and fall of 2011.

(3) Boats Owned/Used by Whaling Captains of Barrow (NWCA)

The subsistence whaling crews of the Village of Barrow plan to use (40) forty boats for subsistence whale hunting during the late summer and fall of 2011.

(4) Boats Owned/Used by Whaling Captains of Wainwright (NWCA)

The subsistence whaling crews of the Village of Wainwright plan to use (4) four boats for subsistence whale hunting during the fall of 2011.

(5) Boats Owned/Used by Whaling Captains of Pt. Hope (Pt. LWCA)

The subsistence whaling crews of the Village of Pt. Hope plan to use (10) ten boats for subsistence whale hunting during the late fall of 2011.

(6) Boats Owned/Used by Whaling Captains of Pt. Lay (Pt. LWCA)

The subsistence whaling crews of the Village of Pt. Lay plan to use (4) four boats for subsistence whale hunting during the fall of 2011.

If any additional boats are put into use by subsistence whaling crews, the industry participants will be notified promptly through the com-center.
TITLE III – BARGE, TRANSIT, AND CABLE LAYING VESSEL OPERATIONS

SECTION 301. IN GENERAL.

A Participant may employ barges, transit, or cable laying vessels to transport materials or lay cable through the Beaufort Sea or Chukchi Sea during the term of this Agreement. Any Industry Participant who employs a barge or transit vessel to transport materials through the Beaufort Sea or Chukchi Sea during the term of this Agreement shall require the barge or transit vessel operator to comply with Sections 201, 205(b) and 302 of this Agreement while providing services to that Industry Participant.

SECTION 302. BARGE AND TRANSIT VESSEL OPERATIONS.

(a) Reporting Positions for Barge, Transit or Cable Laying Vessels Owned or Operated by Industry Participants.

(1) All barge, transit, or cable laying vessels shall report to the appropriate Com-Center at least once every six hours commencing with a call at approximately 0600 hours. Each call shall report the following information:

(A) Barge, transit, or cable laying vessel name, operator of vessel, charterer or owner of vessel, and the project or entity the vessel is transporting materials for.

(B) Barge, transit, or cable laying vessel location, speed, and direction.

(C) Plans for barge, transit, or cable laying vessel movement between the time of the call and the time of the next call. The final call of the day shall include a statement of the barge or transit vessel's general area of expected operations for the following day, if known at that time.

EXAMPLE: This is the Arctic Endeavor, operated by , for , in the Chukchi Sea. We are currently at , proceeding SE at ___ knots. We will proceed on this course for ___ hours and will report location and direction at that time.

(2) The appropriate Com-Center shall be notified if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from scheduled course, and such Com-Center shall notify all whalers of such changes. A call to the appropriate Com-Center shall be made regarding any unsafe or unanticipated ice conditions.

(b) Operator Duties.

All barge, transit, or cable laying vessel operators are responsible for the following requirements:

(1) Monitoring VHF Channel 16. All barge and transit vessel operators shall monitor marine VHF Channel 16 at all times.

(2) Avoidance of Whale-Hunting grounds and Areas. It is the responsibility of each Industry Participant and barge or transit vessel operator to determine the positions of their barge or transit vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.

(3) Vessel to Vessel Communication. After any barge or transit vessel owned or operated by any Industry Participant has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Inuit Coordinator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

(c) Routing Barge, Transit, and Cable Laying Vessels.

(1) All barge, transit, and cable laying vessels routes shall be planned so as to minimize any potential conflict with bowhead whales or subsistence whaling activities. All barges and transit vessels shall avoid areas of active or anticipated whaling activity, as reported pursuant to Section 232.

(2) Beaufort Sea. Vessels transiting east of B Boten Point to the Canadian border shall remain at least 5 (5) miles offshore during transit along the coast, provided ice and sea conditions allow.

(3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at all times at least 5 (5) miles offshore during transit.

(d) Vessel Speeds.

Barge, transit, and cable laying vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whales hunting unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

Title IV – Vessels, Testing, and Monitoring

SECTION 401. INDUSTRY PARTICIPANT VESSELS AND EQUIPMENT.

(a) List of Vessels and Equipment Required.

Each Industry Participant engaged in oil and gas operations shall provide a list identifying all vessels or other equipment (including but not limited to boats, barges, aircraft, or similar craft) that are owned and/or operated by, or that are under control to the Industry Participants, for use in the Beaufort Sea or Chukchi Sea for oil and gas operations or for implementation of such Industry Participant’s monitoring plan. Vessels and equipment used for oil and gas operations shall be listed in Attachment II, and vessels and equipment used for monitoring plans shall be listed in Attachment III.

(b) Only Listed Vessels and Equipment (or Like Vessels and Like Equipment) May Be Used.

(1) NONE OF THE INDUSTRY PARTICIPANTS INTENDS TO OPERATE ANY VESSEL OR EQUIPMENT (EXCEPT FOR LIKE VESSELS OR LIKE EQUIPMENT) NOT IDENTIFIED IN THE LISTS REQUIRED UNDER SUBSECTION (a) DURING THE TERM OF THIS AGREEMENT.

(2) Notwithstanding paragraph 1, if any Industry Participant decides to use different vessels or equipment or additional vessels or equipment, such vessels and equipment shall be used only for purposes identified in Attachments II or III; and the ASWC and the whaling captains of Nupluk, Kaktovik, Barrow, Warmer, Pt. Hope, and Pt. Lay shall be notified promptly through the appropriate Com-Center, as identified in Section 203 of this Agreement, and in writing, of their identity and their intended use, including location of use.

...
SECTION 402. SOUND SIGNATURE TESTS.

(a) Sound Source Verification Testing.

(1) Geophysical Equipment. For purposes of obtaining a sound signature for Industry Participants' geophysical equipment, the Industry Participants shall have initiated a test of all geophysical equipment within 72 hours of initiating or having initiated operations in the Beaufort Sea or Chukchi Sea. Such tests shall be conducted as set forth in section 402(b).

(2) Vessels. For vessels engaged in geophysical activity, Industry Participants shall conduct a sound source verification test for all geophysical equipment used for geophysical activity. Each Industry Participant shall establish a sound source verification range or Industry Participants may participate jointly in establishing a range for the Chukchi Sea and Beaufort Sea, or both. A separate range shall be used for the Chukchi Sea and Beaufort Sea, and vessels shall use the appropriate range for each sea in which they operate. For testing each vessel shall proceed through the range and record information on the date, time, vessel speed, vessel route, vessel load, weather conditions, and equipment operating on the vessel (all noise generating equipment on the vessel, other than geophysical equipment subject to separate testing under paragraph (1), shall be in operation while the vessel is proceeding through the range). The range should be established near a location where details on wind speed and direction are regularly monitored and archived.

(b) Mutual Agreement on Site for Testing: Advance Notice Required.

(1) In General. Each geophysical equipment sound signature test shall be conducted at a site mutually agreed upon by the Industry Participant conducting such test and the AEWG. Each Industry Participant conducting such sound signature test(s) will make a good faith effort to provide the AEWG with sound source verification test(s) within 15 days advance notice to the AEWG and the NSB DWMA of its intent to perform each test.

(2) Beaufort Sea Testing. For geophysical equipment sound signature tests conducted in the Beaufort Sea, the Industry Participant conducting such tests shall provide transportation for an appropriate number of representatives from: the AEWG, the whaling captains of the Villages of Barrow, Naknek, and Kaktovik, and the NSB DWMA to observe the sound signature tests.

(3) Chukchi Sea Testing. For geophysical equipment sound signature tests conducted on vessels to be used in the Chukchi Sea, the Industry Participant(s) conducting such tests shall provide transportation for an appropriate number of representatives from: the AEWG, the whaling captains of the Villages of Barrow, Wainwright, P. Lay, and P. Hope, and the NSB DWMA to observe the sound signature tests.

SECTION 403. MONITORING PLANS.

(a) Monitoring Plan Required.

(1) Each Industry Participant agrees to prepare and implement a monitoring plan to collect data designed to determine the potential effects of its oil and gas operations on fall migrating bowhead whales.

(2) The Monitoring Plans shall be designed in cooperation with the AEWG, the NSB DWMA, NOAA Fisheries, and the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE). No additional outside review is requested by any of the above entities, the Industry Participant will evaluate the request on a case by case basis.
(2) Beaufort Sea. Vessels transiting east of Skillet Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.

(3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at least five (5) miles offshore during transit.

(b) Aircraft Altitudes Floor and Flight Path.

(1) AIRCRAFT SHALL NOT OPERATE BELOW 1500 FEET unless the aircraft is engaged in marine mammal monitoring, assessing, landing or taking off, or unless engaged in providing assistance to a whale that is in poor weather or other emergency situations. Aircraft engaged in marine mammal monitoring shall not operate below 1500 feet in areas of active whaling. Such areas shall be identified through communications with the Com-Centers.

(2) Except for airplanes engaged in marine mammal monitoring, aircraft shall use a flight path that keeps the aircraft at least five (5) miles inland until the aircraft is directly south of its offshore destination, then at that point it shall fly directly north to its destination.

(c) Vessel Speeds.

Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whales unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(d) Vessels Operating in Proximity of Bowhead Whales.

If any vessel inadvertently approaches within 10 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whales or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interactions with the bowhead whales by taking one or more of the following actions, as appropriate:

(1) reducing vessel speed to less than 5 knots within 900 feet of the whale(s);

(2) steering around the whale(s) if possible;

(3) operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group.

3. Geophysical activity allowed in this area after August 25 shall include a source array of no more than 12 air guns, a source layout no greater than 8 x 8 m, and a single source volume no greater than 885 m³.

3 The bowhead whale subsistence hunt will be considered closed for a particular village when the village Whaling Captains' Association declares the hunt ended or the village quota has been exhausted (as announced by the village Whaling Captains' Association or AEWC), whichever occurs earlier.

(b) Limitations on Geophysical Activity in the Chukchi Sea.

All geophysical activity in the Chukchi Sea shall be conducted in accordance with the terms set forth below.

(1) Beginning September 15, and ending with the close of the fall bowhead whale hunt, if in Wainwright, Pt. Lay, or Pt. Hope intend to whale in the Chukchi Sea, no more than two geophysical activities employing geophysical equipment will occur at any one time in the Chukchi Sea. During the fall bowhead whale hunt, geophysical equipment will not be used by participants within 30 miles of any point along the Chukchi Sea coast. Industry Participants will contact the Whaling Captains' Association of each of those villages to determine if a village is prepared to whale and will notify the AEWC if any response.

(2) Safe harbor will be set at sites selected by the Industry Participants and the AEWC. Safe harbor sites will be agreed upon no later than the beginning of operations and shall be listed in Attachment IV. However, a vessel captain will seek safety for his assets (vessel and personnel) as if his duty under the Law of the Sea.

(3) Any vessel operating within 60 miles of the Chukchi Sea coast will follow the communications procedures set forth in Section 501 of this Agreement. All vessels will adhere to the conflict avoidance measures set forth in Section 106 of this Agreement.

(4) If a dispute should arise, the resolution process set forth in Section 106 of this Agreement shall apply.
SECTION 503. DRILLING AND PRODUCTION.

For exploratory drilling and production between 144 deg. W and the Canning River (~146 deg. 4 min. W), zero discharge of:

1. drilling fluids;
2. cuttings after 20’ casing;
3. treated sanitary and gray water; and
4. ballast and bige water.

(b) Drilling Operations in the Beaufort Sea East of Cross Island.

No drilling equipment or related vessels used for at-sea oil and gas operations shall be on site at any offshore drilling location East of Cross Island from 25 August until the close of the bowhead whale hunt in Nuiqsut and Kaktovik. However, such equipment may remain within the Beaufort Sea in the vicinity of 71 degrees 35 minutes N and 146 degrees 4 minutes W, or at the edge of the Arctic ice pack, whichever is closer to shore.

(c) Drilling Operations in the Beaufort Sea West of Cross Island.

In 2011, no drilling equipment or related vessels used for at-sea oil and gas operations shall be moved on site at any location outside the barrier islands west of Cross Island until the close of the bowhead whale hunt in Barrow.

SECTION 504. SHORE-BASED SERVICE AND SUPPLY AREAS.

Shore-based service and supply areas used by Industry Participants shall be located and operated so as to ensure compliance with the terms of this Agreement.

(b) Operator Duties.

All vessel operators subject to this title are responsible for the following requirements:

1. Monitoring VHF Channel 16: All vessel operators shall monitor marine VHF Channel 16 at all times.

2. Avoidance of Whale Hunting Zones and Areas. It is the responsibility of each Industry Participant and vessel operator to determine the positions of their vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.

3. Vessel-to-Vessel Communication. After any vessel owned or operated by any Industry Participant has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Shipset Communicator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

(c) Routing Vessels.

1. All vessel routes within 60 miles of the Alaska coast shall be planned so as to minimize any potential conflict with bowhead whales or subsistence whaling activities. All vessels shall avoid areas of active or anticipated whaling activity, as reported pursuant to Section 202.

2. Beaufort Sea. Vessels transiting east of Bullee Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.

3. Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at all times at least five (5) miles offshore during transit.

(d) Vessel Speeds.

Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whales unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(e) Vessels Operating in Proximity of Bowhead Whales.

If any large or transit vessel inadvertently approaches within 1.6 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whales or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:

1. reducing vessel speed to less than 5 knots within 900 feet of the whale(s);
2. steering around the whale(s) if possible;
3. operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;
4. operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and
5. checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.

(f) Marine Mammal Sighting Data.

Industry Participants whose operations are subject to this title will submit to the AEWC and NSB OWI all marine mammal sighting data.
TITLE VII – PARTICIPANTS

This Agreement shall be binding and effective when signed by the duly authorized representatives of the Participants. Signatures may be by facsimile on separate pages.

Harry Brower
Chancellor, AEW
AEWC Commissioner for Barrow
Dated: 

Rex Rock
AEWC Commissioner for Pt. Hope
Dated: 

Julius Rexford
AEWC Commissioner for Pt. Lay
Dated: 

Joe Kalvik
AEWC Commissioner for Kaktovik
Dated: 

Isaac Nukapigak
AEWC Commissioner for Nuiqsut
Dated: 

Rosman Peetook
AEWC Commissioner for Wainwright
Dated: 

ATTACHMENT I

LOCAL SEARCH AND RESCUE ORGANIZATIONS - CONTACT

(Please always dial 911)

North Slope Borough
Search and Rescue (Pilots)
Director Hugh Paktakak
852-2822 Wk 852-4844 Home

Barrow Volunteer
Search and Rescue Station
President: Oliver Leavitt 852-7032 WK 852-7032 Home
Vice- Pres. Price Brower 852-8633 WK 852-7844 Home
Secretary: Lucille Adams 852-0250 WK 852-7200 Home
Treasurer: Eli Solomon 852-2808 Wk 852-6261 Home
Coordinator: Arnold Brower, Jr. 852-0290 WK 852-5000 Home
Director: Jimmy Navaqik 852-0200 WK 852-JENS Home
Director: Johnny Adams 852-0250 WK 852-7724 Home

Nuiqsut Volunteer
Search and Rescue Station
480-6613 (Fire Hall)

Kaktovik Volunteer
Search and Rescue Station
640-6212 (Fire Hall)
President: Lee Kaytuk 640-5693 Wk 640-6213 Home
Vice Pres. Tom Gordon 640-
Secretary: Nathan Gordon 640-6925
Treasurer: Don Kaytuk 640-2947
Fire Chief: George T. Tagarook 640-6212 WK 640-6728 Home
ATTACHMENT II
VESSELS TO BE USED FOR AND IN SUPPORT OF INDUSTRY PARTICIPANTS’ OPERATIONS AS IDENTIFIED IN SECTION 40103(B)(1)(B)
[ ALL VESSELS TO BE IDENTIFIED BY COMPANY ]

NOTE:
COPY OF PRESENTATION OF THE INDUSTRY PARTICIPANT ATTACHED IDENTIFYING VESSELS TO BE USED FOR AND IN SUPPORT OF THE INDUSTRY PARTICIPANTS’ OPERATIONS.

ATTACHMENT III
VESSELS TO BE USED FOR AND IN SUPPORT OF THE INDUSTRY PARTICIPANTS MONITORING PLANS AS IDENTIFIED IN SECTION 40103(B)(1)(B)
[ ALL VESSELS TO BE IDENTIFIED BY COMPANY ]

NOTE:
COPY OF PRESENTATION OF THE INDUSTRY PARTICIPANT ATTACHED IDENTIFYING VESSELS TO BE USED FOR AND IN SUPPORT OF THE INDUSTRY PARTICIPANTS’ MONITORING PLAN.

ATTACHMENT IV
SAFE HARBOR

Arctic Slope Regional Corporation Comment
Corporation Headquarters • P.O. Box 129 • Barrow • Alaska 99723 • Phone: (907) 442-8800 • Fax: (907) 442-8801

July 11, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation, and Enforcement
Alaska OCS Region
3801 Centerpoint Drive
Suite 500
Anchorage, Alaska 99503-5820

Re: Comments on Revised Draft Supplemental Environmental Impact Statement, Lease Sale 193 Chukchi Sea

Dear Regional Director:

This letter provides comments on the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) Chukchi Sea Planning Area Oil and Gas Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement ("SEIS") (May 2011) for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 by Arctic Slope Regional Corporation ("ASRC"). These comments supplement the comments ASRC submitted on November 29, 2010, on the original Draft Supplemental Environmental Impact Statement ("Draft SEIS").

ASRC appreciates the additional steps the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and we believe the SSIF rightly determines that a very large oil spill remains highly unlikely. ASRC agrees that BOEMRE needs to take all thoughtful precautions, and we feel that this most recent SEIS appropriately concludes that development of Alaska’s offshore resources subject to Lease Sale 193 in the Chukchi Sea can proceed safely.

Introduction

ASRC is an Alaska Native Regional Corporation created at the direction of Congress under the terms of the Alaska Native Claims Settlement Act of 1971 ("ANCSA"). See 43 U.S.C. § 1606. This landmark legislation extinguished Alaska’s aboriginal land rights, and authorized and directed Alaska Natives to adopt a western corporate model, managing lands, funds, and natural resources. Although the western corporate model was foreign to Alaska Natives, our people were able to manage our own coexistence with our own sovereignty over and values. Under ANCSA, Alaska Native corporations living on the North Slope in 1971 were enrolled as shareholders in ASRC. ASRC has since issued additional shares to their descendants, giving ASRC a shareholder base of approximately 11,000 Iñupiaq Eskimos.
Arctic Slope Regional Corporation Comment

Through ANCSA, Congress created ASRC and provided ASRC with the ability – and duty – to use the North Slope’s natural resources to benefit Inupiat people financially and culturally. Congress authorized ASRC to provide benefits to its shareholders who are Natives or descendents of Natives or to shareholders’ immediate family members who are Natives or descendents of Natives to promote the health, education or welfare of such shareholders or family members.” 43 U.S.C. § 1696(e) (emphasis added). Consistent with this unique legislation, ASRC is a for-profit business that is committed both to providing sound returns to our shareholders and to preserving our Inupiat way of life, culture, and traditions.

Operating in one of the least hospitable natural climates in the world, we have built businesses to provide jobs for our people, to revitalize our villages and homelands, and to supply dividends for our shareholders. At the same time, we have integrated maintenance and protection of the Inupiat cultural and traditional practices in the ASRC business.

In carrying out its congressionally-mandated mission, ASRC and its subsidiary companies are active participants in North Slope oil exploration, development, and production. This is the source of many jobs for ASRC’s Inupiat shareholders and many contracting opportunities for ASRC’s subsidiaries. This includes work on contractors and field development, engineering work, maintenance of pipelines, and leasing property for exploration and development.

ASRC has historically been very concerned about Arctic OCS explorations and its effects on the subsistence activities of our communities and shareholders. Our concerns have centered around four fundamental areas:

- Impacts to the marine mammals our culture is dependent on;
- Impacts to the environment our marine mammals depend on;
- Risks of a catastrophic oil spill that would affect our ocean and communities; and,
- Industry’s ability to clean up a spill in ice-covered waters.

These concerns form the basis of BOEMRE’s Very Large Oil Spill analysis new in the May 2011 Draft SEIS since ASRC has already commented earlier on the removal items in our November 2010 letter.

Very Large Oil Spill Analysis

ASRC is very pleased that BOEMRE has incorporated detailed Very Large Oil Spill (VLOS) analysis in the Revised Draft SEIS. As stated above, ASRC has been concerned about the potential effects of a catastrophic oil spill on our communities, our country and our subsistence marine mammals. We also have had questions about the ability to respond to a spill in ice-covered waters. We applaud BOEMRE’s inclusion to address this significant issue; however, there are some areas that ASRC would like to see further defined.

The ASRC family of companies includes ASRC Energy Services, Inc., ASRC Construction Holding Company, LLC, Penn Royall Inc., ASRC Federal Holding Company, LLC and other entities and subsidiaries.

Arctic Slope Regional Corporation Comment

We found the manner that BOEMRE streamlines its evaluation of a VLOS with spill response efforts (and related worst-case discharge analysis) to be somewhat confusing. ASRC acknowledges that BOEMRE’s purpose in evaluating a VLOS scenario is to ensure proper analysis of impacts from a very large oil spill in the Chukchi Sea – it is not designed to serve as a basis for spill response planning – that is what the worst-case discharge exercise is designed for. While the BOEMRE’s Revised Draft SEIS does attempt to make this distinction (page 126 of the Revised Draft SEIS), it also includes a significant discussion of oil spill response activities, often as a "qualitative discussion of operational procedures." We also note that the discussion of the VLOS scenario does not take into account an easterly ability to respond immediately to an emergency that results from a well control situation while operating in the Chukchi Sea.

To avoid the confusion noted above, ASRC suggests BOEMRE more clearly distinguishes the impacts analyzed in the VLOS analysis from spill response efforts and worst-case discharge analyses. We do note that BOEMRE includes the Shell spill response plan as an appendix, it is entitled to point out that the Shell plan is designed for those exploration plans and not the VLOS used in the Revised Draft SEIS, and that Shell plan represents the plan of only one operator.

Another area of concern we have is that we do not feel BOEMRE has clearly presented that the probability of a VLOS is an event of low probability. Our concern stems from the very real potential for the general public to overestimate the impacts of a VLOS without having a more robust discussion in the test of the Revised Draft SEIS of the extremely low probability of such a scenario occurring. Although the Revised Draft SEIS does state in various places that a VLOS is a “low-probability, high-impact event,” there is no quantitative assessment of the probability of a VLOS occurring, and the test of the Revised Draft SEIS does not include sufficient analysis or discussions of the low quantitative probability of such an event, or even a cross-reference to Appendix B, which appears to provide the statistics that should be used in that analysis. Indeed, Appendix B, BOEMRE confirms that there have been no well control incidents in the Alaskan OCS Region or Atlantic OCS Region, and that there have been a relatively small number of well control incidents in the other regions, specifically well control incidents leading to a large spill. These statistics are further confirmation of the “few probability” status of a VLOS (Appendix B, at B-1).

While we note that BOEMRE appropriately presents a detailed analysis of the potential impacts of a VLOS in the Revised Draft SEIS, we are very concerned that the discussion does not adequately put the risk of those impacts in appropriate context. Appendix B appears to provide the databases for this analysis, but it does not provide the quantitative assessment of the probability, nor is there data or information cross-referenced or summarized in the test of the Revised Draft SEIS. As a result, the public is left without a meaningful way to evaluate the likelihood of the impacts of a VLOS.

In conclusion, while the Revised Draft EIS recognizes that a VLOS in the Chukchi Sea is a low-probability event (preempted based on OCS incident history, including the Argo), ASRC would like to see a more robust discussion of the low-probability VLOS stage in the test of the

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Aggie Frankson-Henry Comment

Mr. J. W. Bozeman, Chief, Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) decision on the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221 and Beaufort Sea Lease Sale 209 and 217 and I suggest Alternative 1, Beaufort and Chukchi Sea No Lease Sale and I am opposing the National Pollutant Discharge Elimination System (NPDES) permitting Program in the Arctic Multi-sale in the Beaufort Sea and Chukchi Sea Planning Areas Oil and Gas Lease Sales 209, 212, 217 and 221.

Explanatory:

For the record I am Aggie Frankson-Henry a Tribal Secretary and Tribal Member of the Native Village of Point Hope I am opposing the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) decision on the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221 and Beaufort Sea Lease Sale 209 and 217 and I support Alternative 1, Beaufort and Chukchi Sea No Lease Sale and I am opposing the National Pollutant Discharge Elimination System (NPDES) permitting Program in the Arctic Multi-sale for a multiple sale EIS for the Chukchi Sea Sales 212 and 221 and Beaufort Sea Lease Sale 209 and 217.

As a representative for thelide it’s of the utmost interest of restoring courage, stand up for our children’s future and their next generation to have the opportunity to utilize our subsistence resources. This time I will stand.

This time I will voice for the good for the Inupiaq people of the Arctic Slope, it is currently denied to have the opportunity to utilize our subsistence resources. We are, an even, tribal member of the Native Village of Point Hope and most of a Whaler and Harvester dependant on the Chukchi Sea and Beaufort Sea for means of survival. Being Inupiaq is an inherent tradition to hunt/harvest from the sea, from sea to me to my family and extended families across Alaska and Korea. The Chukchi and Beaufort Sea provides nutritional food supply on my table without any type of shaped habitat off oil or gas exploratory drilling.
Appie Frankson-Henry Comment

Anupi, Alaska, is surrounded by the Chukchi and Beaufort Seas. I live in this distant whaling community in North America and our future generation historically is in jeopardy with a climate change in the Arctic Slope. As it is my best interest to voice my concern to hope for the best to preserve our culture because climate change is the vast ocean is facing with. I pray for a healthier ecosystem behavior for bowhead whales, walruses, polar bears, seals, ducks, fishes, birds, snakes, plamntons, oysters, clams, seaweed, worms, k litter, whales, mor-nar whales, right whales, beluga whales, grey whales and all the mammals of these great blue beasts that we the people of Point Hope are blessed with.

I live from an ecocenic distress community that relies 70% on subsistence resources to maintain a healthy diet. The majority of diseases is our children. Our boundary is rich in herds, bison, plants, naturally grown dietary supplements for a healthy living environment for our people, and animals that rely on these natural resources. As we the people realize what is really matters in the well-being of our children’s future and our subsistence resources that will be impacted to strive to sustain traditional knowledge, traditional lifeways, cultural heritage, cultural land use which incessantly poses a potential damage to our environment in the Arctic Slope.

The Inupiat people has political rights and we must argue that it is enabling to obstruct the settlement given to the Inupiat people by political or personal gain of regret in our byword the arparat 2012-2013 Outer Continental Shelf Oil and Gas Lease Program settled by the companies permits without even giving the Inupiat the right to vote by the people of the North Slope Borough Communities.

We have the right to vote, to meet freely for the well-being of the residence of the people in the coast communities whether it be by government to government consultations meetings giving your testimony to the entire thing that goes into your communities much to the next generation of subsistence infra. We, no courage then you will not be heard for your inherited rights. It will cause a big effect at your community and the royalties will be dispersed to other people and from your community. The royalties will not been to the rightful stakeholders interests or financial gain.

Community leaders I encourage you to speak up and stand up for what is only right because it is the essence of a cost cultural interest of our future generation responsibility to maintain without plausible cause the right of entry on our land and your children’s rights to be as I am living freely without any restrictions on our own property to subsist on. Receiving a living being is simply knowing that we are real people truly respect and on means for survival in Inupiat.

On the basis of current cultivation in Yukon, Alaska it is not my best interest to harm this great state with offshore oil and gas activities according to the Chukchi and Beaufort Sea. I am seeking my right to life quality and liberty. I appeal the government to issue permits for discharge of toxic drilling wastes into Arctic waters from oil and gas exploration activities to protect the Inupiat ecosystem and traditional way of life. Global warming or climate change is a significant example of the devastation we are seeing in the future by cutting foresting and violent storms.

And a disaster in the Gulf of Mexico by human error. I believe today that we have to be very on how the federal government and industrial servants decide where to locate the drilling site in the 250 states of oil and gas activities that can lead to another disaster to our land, air, rivers, oceans that will effect and decline our subsistence resources that we rely on for means of survival thus this harshness in the years ahead.

Page 2 of 3

INUPIAK COMMUNITY of the ARCTIC SLOPE Comment

The Obama Administration has repeatedly said it is committed to science-based decision-making. That includes incorporation of traditional knowledge of the Inupiat people that have lived in the Arctic and depend on its resources for millennia. The National Commission on the 8th Deepwater Horizon Oil Spill, the National Ocean Policy Task Force, and the recently released U.S. Geological Survey’s report evaluating the science needs for informed energy development in the Arctic Ocean all acknowledge that many questions about the potential effects of oil and gas activities in the Arctic Ocean cannot yet be answered. For example, the U.S. Geological Survey report states in its conclusion that: “Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the spectrum from the specific subsistence animals themselves through their food chain and ecosystem.” It also concludes throughout that it is critical that research into the Arctic and the effects of oil and gas activities (including local traditional knowledge. However, in the revised DEIS, as with the original draft DEIS, BOEMRE has decided that it has no obligation to fill gaps in information before finalizing analysis of lease sale 193. It has decided that it does not need even minimal data on things like key habitat areas for species like beluga and bowhead whales or the effects of noise and disturbance from oil and gas activities to make decisions about what areas to offer for such activities. We find this unsatisfactory to seek answers to fundamental questions about how oil and gas activities in the Chukchi Sea will affect the sea, its animals, and our communities deeply troubling. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of its decision.

In the revised DEIS, BOEMRE acknowledges for the first time that a very large oil spill is possible in the Chukchi Sea as a result of oil and gas exploration and drilling. The revised DEIS’s analysis also acknowledges that there is a very large oil spill could have catastrophic impacts on the marine species, habitat, and Arctic communities of the Chukchi Sea. While concluding that a very large oil spill will have devastating effects, the revised DEIS fails to sufficiently acknowledge that there is no proven way to adequately clean up an oil spill there. Oil and gas development gullies our home and our way of life. Our communities will bear the ultimate consequences of an oil spill.

BOEMRE should undertake a new complete and thorough analysis of all missing information concerning the Chukchi Sea and the Arctic environment, improve its analysis of natural gas development and a very large oil spill, and reevaluate the impacts of the lease sale in light of the new information. It should also adequately describe for decision-makers and the publicability to clean up an oil spill in the Arctic Ocean. It should then assess anew whether to cancel, modify or affirm the leases.

Sincerely,

Doreen Lumper
President
I am writing on behalf of Konig, Inc. in support of the afirmation of lease sale 193 as held in 2008. Konig, Inc. is one of 13 regional native corporations established by Congress under the terms of the Alaska Native Claims Settlement Act (ANCSA) to settle the aboriginal land claims of Alaska Native people. We offer the following points for consideration:

- The ISR provides sufficient information and analysis to support an informed decision offering sale 193.
- Reviewing the issues and making a fact-based reevaluation of the Company's survey and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska’s future economy and the nation’s long-term energy security.
- The Chukchi OCS is an important future source of oil and gas supply with up to 25 billion barrels of oil and 200 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered one of the most potentially untapped oilfields in the country. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world’s highest safety and environmental standards. Activities will be governed by stringent federal stipulations. Numerous mitigation measures, including planned operating restrictions, will minimize potential impacts, and conflict avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Drilling in the Arctic offers distinct advantages that deepwater exploration and development in the Gulf of Mexico do not.
- An estimated average of 5,200 new jobs would be created and sustained over 10 years by OCS-related development in Alaska. An estimated $2 billion in payroll would be paid to employees in Alaska as a result of OCS development.

Regards,

Charlie
Vice President Corporate Affairs

Native Village of Kotzebue Comment

While the Tribe concerns with the court that it is important to address the environmental impacts of natural gas development and a VLOS and the BOEM attempts to do this is revised draft SEIS, without a sufficient level of understanding of the ecological processes in place it is unlikely that this NEPA process will be sufficient to inform sound mitigation strategies for the many and varied environmental impacts likely to occur.

NOAA chief Jane Lubchenco summed up this concern well in a June 21, 2011 article in the Anchorage Daily News, when she stated, “we have relatively little understanding of the true vulnerabilities of many Arctic ecosystems to the kinds of changes that are under way now,” she said. “And there’s a very urgent need to acquire additional information to be making better decisions.” She added that development decisions should be made cautiously, “because of the potential for either irreversible changes, or changes that would take a long, long time to undo.”

On the practical side, other federal agencies (NOAA and the Coast Guard in particular) have recently expressed concern about the lack of necessary infrastructure in place (including icebreakers, port sites, staging areas, and logistics involving response, personnel housing and bases), or the ability of the agencies to provide critical data such as weather and ice forecasting. In what appears to be every area of needed capacity for the federal government to effectively manage development, or to even assess the impact in the Chukchi Sea, concerns have been expressed by the agencies over the lack of preparedness. This situation does not lend itself to increasing the confidence in the completion of the environmental and development of the Lease 193 area can currently occur in a manner protective of the environment.

In order to meet this need there must be an ongoing commitment from the Administration and Congress to aggressively fund and seek to increase the capacity of the federal government to effectively manage Arctic OCS development. Slogans and rhetoric are clearly absurd as a way to support offshore energy production – putting money where the mouth is – would be the only responsible way forward. This is common sense and is no longer remotely pertinent to the matter before us in the VLOS scenario put forward in this document – that is the question of whether the federal agencies could ever respond in such an event. While BOEM and other federal agencies have to rely on budgetary priorities put forward by Congress and the Administration they can be persuaded by making it known at every opportunity possible that federal capacity must be increased for managing Arctic OCS development.

All sides of the debate over offshore development speak about the commitment to ‘responsible development’, however it seems that the responsible part of this equation was allowed to atrophy in recent years. The BOEM is the first line of defense in ensuring that exploration and development of the Chukchi Sea oil and gas is done in the most responsible and protective manner possible and we hope that it has learned many lessons over the course of the last year and will recommit to the Nation that it is first and foremost committed to putting the RESPONSIBLE back into development.

Thank you for your consideration.

Alex Wiltsie
Environmental Specialist

Noah Naylor
Executive Director

Native Village of Kotzebue Comment

Native Village of Kotzebue
Kotzebue IRA

June 28, 2011

Regional Director
Alaska OCS Region, BOEM
3801 Corporate Drive, Suite 500
Anchorage, AK 99505-5820

REI: Chukchi Sea Planning Area Oil and Gas Lease Sale 193 revised Draft SEIS

The Native Village of Kotzebue appreciates the opportunity to comment on the recent release of the revised draft SEIS for the Chukchi Sea Oil and Gas Lease Sale 193 to address the issues specified by the U.S. District Court for Alaska in regards to insufficiencies with the original Lease Sale 193 EIS.

The members of the Tribe continue to rely on the healthy populations of fish and wildlife that are the Chukchi Sea for feeding, reproduction and overall survival. The Tribe believes that the high quality of the current environment of the Chukchi Sea provides for robust and healthy populations of marine wildlife and negative impacts on this habitat through poorly informed development would pose an unnecessary risk to this continued quality. It is firmly for this reason that the Tribe has been undertaking and supporting continued research into the ecology of the Chukchi Sea and Kotzebe Sound. One of the main takeaways from the marine mammal research that has been occurring is how important the Chukchi Sea is for many coastal communities from Bristol Bay to Kotzebue from its central role in the lives of the marine mammal these communities depend on. While the communities directly adjacent to the lease area are the main focus of discussion of impacts it should not be forgotten that many communities rely on this area to produce healthy marine mammals which feed their families. If major environmental impacts occur they will significantly impact many communities that are not adjacent to the lease area.

To illustrate this point one only has to look to the results from the marine mammal tracking research that has occurred with the Tribes participation over the last decade. Many of the seals tagged in Kotzebue Sound have traveled in or near the lease area within a very short time of being released back into the sound. In ground breaking research the Tribe participated in with the NMFS, it was shown that adult bearded seals fed in areas adjacent to the lease area for a few months during the period when there is open water and when development activities would be in high gear. An example of marine mammal use in the area is attached in map form as part of the Tribes comments, although it should be remembered that this map demonstrates use based on an extremely small sample size in relation to the total population of marine mammals found in the Chukchi. It is reasonable to assume if you extrapolate this one out over the entire marine mammal populations that no areas of water would be left to be used and that the entire Chukchi Sea would be covered with use areas. This sample map should demonstrate how important and utilized the Chukchi Sea is to the marine mammals that Alaska coastal communities depend on for basic nutritional and cultural needs.

Unfortunately, the current level of baseline environmental information makes it very challenging, if not in the majority of cases impossible, to track changes in the environment, or harm to fish and wildlife caused by industry during the exploration phase of the Lease 193 area. This makes it difficult to know what impacts actually occur, or may occur, or whether mitigation plans put to place are effective. The OCSIA recently completed a report synthesizing what is currently scientifically known about the Chukchi Sea environment, and this report should be made available to the community by the BOEM during the entire issue 193 processes on whether certain information is relevant to potentially significant effects and whether the information is essential to making a reasoned choice.

335 Shaye Avenue • P.O. Box 294 • Kotzebue, Alaska 99752
Phone: (907) 442-5070 • Fax: (907) 442-5160
We are gravely concerned about the potential effects of oil and gas development on the Arctic Ocean. We are worried that BOEMRE is not taking its job seriously with respect to Chukchi Sea Lease Sale 193. Instead of working to gather information needed to fully assess the potential effects of the lease sale and fully inform our community about those effects, BOEMRE seems to be rushing ahead to justify a decision it has already made. The revised DSEIS is the second document BOEMRE has issued in response to a court order directing the agency to redo its analysis of missing information about the Chukchi Sea and possible natural gas development. However, as with the original draft SEIS in October, BOEMRE refuses to meaningfully assess missing information about the Arctic Ocean and its marine resources and the potential effects of natural gas development on the region. It is as if BOEMRE intends to justify why it originally held lease sale 193 rather than meet its obligations under the court to improve its analysis and reconsider the decision in the face of that new analysis. We are encouraged that BOEMRE has now for the first time admitted that a very large oil spill is possible in the Chukchi Sea from oil drilling. But the analysis contained in the revised DSEIS is confusing and does not give a clear picture of what an oil spill would look like or how it would affect our Ocean and coasts. For example, it does not tell us what the oil plume would look like, and it only gives big ranges of the amount of the coast that would be covered if there were an oil spill. We urge BOEMRE to complete an analysis that addresses these shortcomings and provides a clearer picture of the consequences of a large oil spill. We also urge BOEMRE to discuss more deeply the shortcomings of oil spill response in the Arctic Ocean, with its harsh and remote conditions.

The Obama Administration has repeatedly said it is committed to science-based decision-making. Many agencies have acknowledged that many questions about the potential effects of oil and gas activities in the Arctic Ocean cannot yet be answered. Most recently, the U.S. Geological Survey issued a detailed report of all that is still unknown. Of deep concern to us, the report concluded that: “Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the ecosystem.” We urge BOEMRE to get this information—including by seeking local traditional knowledge—before making decision that put our community at risk.

We support and join the more detailed comment letter submitted by Alaska Wilderness League and a number of other conservation groups on the revised DSEIS.

Sincerely,

Caroline Cannon

Native Village of Point Hope

Native Village of Point Hope
Point Hope, Alaska 99766
(907) 368-2330
Fax: (907) 368-2332

VIA FEDERAL RULEMAKING PORTAL

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centreport Drive, Suite 500
Anchorage, AK 99503-5802

Re: Comments on Revised Draft Supplemental Environmental Impact Statement for Lease Sale 193

Dear Regional Director:

The Native Village of Point Hope submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) revised draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (revised DSEIS).

The Native Village of Point Hope is a federally recognized tribal government that is responsible for the well being of its members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life by hunting bowhead whales, walruses, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, groceries must be flown in and are extremely expensive, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean suffers, so will the physical health of our people. Hunting is also central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.

We are concerned that the report concluded that: “Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the ecosystem.” We urge BOEMRE to get this information—including by seeking local traditional knowledge—before making decision that put our community at risk.

We support and join the more detailed comment letter submitted by Alaska Wilderness League and a number of other conservation groups on the revised DSEIS.

Sincerely,

Caroline Cannon

Native Village of Point Hope

July 11th, 2011

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0062
Comment from Kevin Eischens, USIAQ

Submitter Information

Name: Kevin Eischens
Address: 3820 Remington Circle
Anchorage, AK - 99518
Email: keischens@hotmail.com
Organization: USIAQ
Government Agency Type: Tribal

General Comment

I am writing in response to the OCS Lease sale 193.
I am urging that the lease sale be affirmed as held in 2008. I believe this lease sale is critical to the long term energy security and economic stability of our nation. With the demand for energy on the rise the U.S. should develop and secure more of its own oil and gas resources. This OCS Lease sale would go along ways in securing our nations Energy Independence!
evaluates incomplete, missing, or unavailable information pursuant to 40 CFR 1502.22 
(Appendix A1), and (3) analyze a hypothetical very large oil spill (VLOS) scenario.

It is apparent from our review of the Revised Draft SEIS that BOEMRE has addressed the court’s and the public’s concerns in a comprehensive manner. We urge the Secretary to affirm Lease Sale 193 without delay. The State of Alaska submitted comments supporting the Draft Supplemental EIS for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193 on November 29, 2010 recognizing BOEMRE’s quality analysis of environmental impacts from natural gas development as well as their approach and methodology in addressing what was claimed “missing information” from the Lease Sale 193 Final EIS. Any reference made to the Alaska Coastal Management Program (ACMP) that were initially included in the Draft Supplemental EIS should be removed considering that program met its statutory sunset date as of July 1, 2011. We provide additional comments below that specifically address the inclusion of the VLOS scenario, as well as cite where there is specific mention of Alaska’s ACMP program that should be rewritten or deleted from the text.

1. Chapter I, L.A. Background, page 2: A Very Large Oil Spill (VLOS) is described as being greater than 150,000 bbls. The scenario described later in Chapter 4 describes a Very Large Oil Spill with a high flow rate over a 74 day period which would yield a total spill volume of 2,160,000 bbls. Since the two volumes differ by a substantial order of magnitude, BOEMRE should provide an explanation of (1) the definition of a Very Large Oil Spill and (2) the volume of the Very Large Oil Spill being considered in the Chukchi Lease Sale 193 scenario. This explanation would avoid confusion on what volume is being considered when a Very Large Oil Spill is being discussed.

2. Chapter I, L.D.3 Land Use and Coastal Management, page 6: This section will need to be rewritten since Alaska no longer has an approved coastal management program following the sunset date of July 1, 2011. An explanation could be added to paragraph one and paragraphs two and three could be deleted.

3. Chapter I, L.D.4 Notices and Information Provided to Lessees, page 8: References to consistency with the Alaska Coastal Management Program should be removed.

4. Chapter I, L.D.4 Notices and Information Provided to Lessees, page 9: As noted earlier, references to consistency with the Alaska Coastal Management Program should be removed.

5. Chapter I, L.F.2 Exploration Plans, and Development and Production Plans, page 11, paragraph one: References to the state’s Coastal Zone Management Plan should be removed.

6. Chapter I, L.F.3 Pipeline Regulations, page 11, paragraph one: It should be noted in this paragraph that the State of Alaska standards regulations that come into play when the OCS pipeline lies on on-shore facilities, pump stations, or pipelines.

**“Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans”**

Alaska Department of Natural Resources Comment

July 11, 2011

Page 2 of 5

Chapter IV, IV.D.1. Background, Government Reports and Recommendations, page 123: The section on the Council on Environmental Quality (CEQ) quoted from a report that reviewed NEPA (new BOEMRE) NEPA policies, recommending that BOEMRE “ensure that NEPA documents provide decision makers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf.” This statement appears to conflict with the description of the hypothetical reservoir in Appendix D, page D1, paragraph two. The description in Appendix D discusses a hypothetical reservoir that has characteristics that drive high flow rates, but the scenario specifically notes that it does not consider whether the hypothetical reservoir could actually contain oil. It is not clear from this description whether the VLOS is a “reasonably foreseeable impact” or a “remote and speculative impact” as defined by NEPA. If the scenario could not contain analogues reservoirs in other areas that have similar geological characteristics and had oil present, that would make this hypothetical scenario much cleaner. The Oil Pollution Act of 1990 has the responsible party taking precautions against foreseeable acts, so it should be made clearer that this VLOS discharge volume is being calculated solely for the purposes of determining the environmental effects of an unrestricted oil well blowout that has no direct relationship to the worst case discharge considered in exploration plan scenarios. Furthermore, it should be noted, and to help better clarify and describe whether the VLOS scenario is a “reasonably foreseeable impact” or a “remote and speculative impact” that at the present Preliminary Draft SEIS and projections, the leasing stage of the Chukchi Sea Oil and Gas Lease Sale 193, information on what the associated or gas reservoirs may produce during a VLOS are not inherently speculative, with the possibility to be better understood once exploration and seismic testing of the purchased oil and gas leases are actually completed. This leasing stage is then followed by multiple permit applications and a thorough review and approval of associated plans, not to exclude the approval of worst case discharge considerations included in exploration plan scenarios.

8. Chapter IV, IV.D.2 Very Large Oil Spill (VLOS) Scenario, page 130, paragraph two: This paragraph includes a discussion of spill response efforts contained within an exploration plan. It should be explained more clearly in this section that the Very Large Oil Spill (VLOS) scenario discussed in this section is not the same as the worst case discharge contained in an exploration plan’s oil discharge prevention and contingency plan (ODPCP). It could be worthwhile to summarize the Worst Case Discharge (WCD) discussion on page 126 here.

9. Chapter IV, IV.D.2. Very Large Oil Spill (VLOS) Scenario, page 136: The final sentence on this page notes that “for the purposes of this analysis, effectiveness of response techniques is not factored into the spill volume posed by this scenario and considered during OSRA modeling.” This factor should be made more clear in the discussions of the duration of the spill, volume of the spill on pages 130-131 and the discussion of the volume of oil reaching shore on pages 132-133, rather than being mentioned at the end of the discussion.

10. Chapter IV, IV.E.2. Water Quality, page 148: The discussion of drilling a relief well discusses the USEPA NPDES Coastal Permit Authorization. It should be noted that this permit is currently undergoing renewal and in the future there will be separate NPDES permits for the Chukchi Sea and the Beaufort Sea.

Alaska Department of Natural Resources Comment

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Page 3 of 5

11. Chapter VI, VC.4.CZMA Consistency Review, page 343: This paragraph should be revised to include a note that the Alaska Coastal Management Program ceased on July 1, 2011.

12. Appendix B, page B9, paragraph 2: The discussion of factors not explicitly considered by the oil spill risk assessment (OSRA) model should be moved to the introductory section for 4.1 Conditional Probabilities in order to make it more clear to the reader from the outset how the OSRA model works.

13. Appendix B, pages B6-B9: The trajectory models discussed in this section are based on the oil staying in the water for 30 days. It should be made clearer that this scenario is based on a hypothetical situation where spill response is ineffective or unavailable. Alaska’s spill response standards require the responsible party to plan for containing and controlling the spill within 72 hours. These models appear to be based on extrapolations and should be expanded. These trajectory models should make it clear that this is a hypothetical scenario to determine the environmental effects of an uncontrolled oil well blowout and that allowing oil spill and spread unabated would not be allowed within state waters or if the oil spill was forecast to impact state waters or shorelines.

14. Appendix D page D1, Description of Relief Well Model: The length of the well blowout is based upon worst case travel time for a second drill rig to mobilize from outside the theatre of operations. It should be noted in this section that Notice to Lessees (NTL) No. 2010-N06 requires an application for permit to drill (APD) to contain information on the availability of a rig to drill a relief well and rig package constraints. It further requires the application to specify as accurately as possible the time it would take to contract for a rig, move it onshore, and drill a relief well. It should be made clearer in this section that regulatory standards exist that could prevent or mitigate an oil spill and that this hypothetical scenario assumes that everything that could go wrong, would go wrong.

In closing, aside from the additional comprehensive assessment of parameters included within this Revised Draft SEIS for the Chukchi Sea Oil and Gas Lease Sale 193, as well as the instances included in the previous Draft SEIS, the State concludes that the Revised Draft SEIS for Chukchi Lease Sale 193 provides more than sufficient support for the Secretary to affirms the Chukchi Lease Sale 193. It is well past time for lease holders to proceed to the next phase of exploration.

Thank you for this opportunity to provide comments on the Revised Draft SEIS.

Sincerely,

Tim S. Sullivan
Commissioner

Alaska Department of Natural Resources Comment

July 11, 2011

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Alaska Department of Natural Resources Comment

July 11, 2011

Page 5 of 6
July 8, 2011

James Kendall, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall:

I believe we need to act now; we have sufficient information to conduct this exploration safely and efficiently. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

And while understandable and prudent that we proceed with caution, drilling in the Outer Continental Shelf offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is substantially greater than in Alaska’s shallow water drilling areas. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEMRE to conclude that exploration can and should move forward in the Chukchi.

The original directive of Lease Sale 193 in 2008 was to produce oil from the Alaska OCS and boost domestic production from our world-class energy deposits. OCS production could potentially refill the TransAlaska pipeline, a crucial point now that the pipeline is operating at only one-third of its 1988 peak flow. The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place and considered to be the most prospective unexplored offshore basin in the country.

Given the continuing demand for energy and the impact of high energy prices on American citizens and their economy, the U.S. has a duty to develop all domestic energy sources, both onshore and offshore. Allowing Lease Sale 193 to move forward will help alleviate these problems and protect the United States from unpredictable events across the globe and ensure our energy stability in the long term.

Sincerely,

Rep. Mia Costello
Alaska State House, District 27
Session: Tel: 907-465-4968 Alaska State Capitol, Juneau AK 99801 FAX: 907-465-2040
Interim: 716 W. 4th Ave., Anchorage, AK 99501 Tel: 907-269-0117 1-800-773-4968 Fax: 907-269-0116
Rep.Mia.Costello@legis.state.ak.us
Senator Cathy Giessel Comment

June 27, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

Alaska’s Constitution was ratified by our citizens. It was also supported by the Alaska Statehood Act that was approved by Congress and signed by the President. As an elected legislator in the Alaska Senate, I have sworn to uphold the United States and State of Alaska Constitutions. Both the Statehood Act & the Alaska Constitution presume development of our natural resources. New oil from state and federal lands is essential to keep the TransAlaska Pipeline System (TAPS), Alaska’s economic lifeline, viable. TAPS is also an economic, petroleum resource and jobs lifeline for all America. Areas of the Beaufort and Chukchi Seas are under lease. Those leased areas need to be explored and produced now.

As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

Respectfully,

Senator Cathy Giessel

July 7, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
C/O Regional Director James Kendall
BOEMRE – Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall,

I am writing to express my strong belief that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) should move forward with the approval of Lease Sale 193.

We would all agree that since the passage of the Outer Continental Shelf Lands Act nearly six decades ago, government agencies such as BOEMRE have provided an invaluable service to the long-term accountability of the resources possessed in Alaska’s Outer Continental Shelf (OCS). This service has been provided by due diligence paid to the economic, environmental, and equitability issues raised by the exploration and production of our natural resources. I feel strongly that Lease Sale 193 would be another positive chapter in this history.

The American government faces three critical crises at present that Chukchi Sea oil and gas production could help alleviate. First, energy prices continue to rise and will steadily do so in the absence of a legitimate steady-state of domestic production that is not provided. In addition to the abundance of natural gas that can be found in OCS, it is estimated that 27 billion barrels of oil remains, waiting for the needed development. Second, the American economy is struggling due to the lack of a healthy job market, while burgeoning national debts are putting weight on our recovery. Lease Sale 193 would create thousands of jobs and inject billions of dollars in revenue that could help to retire a portion of this debt. Third, our nation is continuously under threat from petro-terrorism in unsettled parts of the globe that uses our energy consumption to fund their regime. This situation has been made worse by recent events in the Middle East, most notably in Egypt and Libya. We need to expedite national energy production; Lease Sale 193 would accomplish this.

Even with these benefits in place, I recognize that any time energy production is proposed in these regions, environmental and societal concerns must be weighed. I would offer, however, that Lease Sale 193 has been properly vetted on these fronts and the May 30th Supplemental Impact Statement should be approved. The final phase of this process is public comment; once it is positive, I would recommend approval.

I would like to reiterate my strong belief that you should move as quickly as possible to approve Lease Sale 193 and allow its positive impacts on our economy, energy prices, and national security to be realized.

Sincerely,

Jeannie Haddaway-Riccio

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
C/O Regional Director James Kendall
BOEMRE – Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 28th. Lease Sale 193 has undergone extensive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is crucial to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $10 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Mark Honadel
Wisconsin State Representative

July 7, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
C/O Regional Director James Kendall
BOEMRE – Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall,

I am writing to express my strong belief that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) should move forward with the approval of Lease Sale 193.

We would all agree that since the passage of the Outer Continental Shelf Lands Act nearly six decades ago, government agencies such as BOEMRE have provided an invaluable service to the long-term accountability of the resources possessed in Alaska’s Outer Continental Shelf (OCS). This service has been provided by due diligence paid to the economic, environmental, and equitability issues raised by the exploration and production of our natural resources. I feel strongly that Lease Sale 193 would be another positive chapter in this history.

The American government faces three critical crises at present that Chukchi Sea oil and gas production could help alleviate. First, energy prices continue to rise and will steadily do so in the absence of a legitimate steady-state of domestic production that is not provided. In addition to the abundance of natural gas that can be found in OCS, it is estimated that 27 billion barrels of oil remains, waiting for the needed development. Second, the American economy is struggling due to the lack of a healthy job market, while burgeoning national debts are putting weight on our recovery. Lease Sale 193 would create thousands of jobs and inject billions of dollars in revenue that could help to retire a portion of this debt. Third, our nation is continuously under threat from petro-terrorism in unsettled parts of the globe that uses our energy consumption to fund their regime. This situation has been made worse by recent events in the Middle East, most notably in Egypt and Libya. We need to expedite national energy production; Lease Sale 193 would accomplish this.

Even with these benefits in place, I recognize that any time energy production is proposed in these regions, environmental and societal concerns must be weighed. I would offer, however, that Lease Sale 193 has been properly vetted on these fronts and the May 30th Supplemental Impact Statement should be approved. The final phase of this process is public comment; once it is positive, I would recommend approval.

I would like to reiterate my strong belief that you should move as quickly as possible to approve Lease Sale 193 and allow its positive impacts on our economy, energy prices, and national security to be realized.

Sincerely,

Jeannie Haddaway-Riccio
As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

New oil from state and federal lands is essential to keep the Trans-Alaska Pipeline System in use consistent with the public interest.

Conclaimed oil in production will threaten the viability of TAPS if new production does not come on-line. Areas of the Beaufort and Chukchi Sea are under lease, those leased areas need to be explored and produced now.

As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

Sincerely,

Senator Kevin Meyer
Alaska State Senate Majority Leader

July 1, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

Your agency is preparing the Revised Draft Environmental Impact Statement for Lease Sale 193 in the Chukchi Sea. I urge you to affirm the lease sale so environmentally responsible oil and natural gas development can begin as soon as possible.

While I applaud and encourage efforts to develop alternative and renewable forms of energy, the fact remains that our country will have to rely on non-renewable energy sources for decades to come.

Alaska’s Chukchi Sea OCS is the most promising unexplored offshore basin the United States. It holds up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas. That amount of oil can refill the Trans-Alaska Pipeline and energize the country with tens of thousands of new jobs and billions of dollars in new revenue for decades to come.

OCS development will also help heal the country’s spiraling debt crisis. The federal government stands to collect an estimated $167 billion in new revenue.

Sincerely,

Representative Charisse Millett
District 30

Now is not the time to rely on foreign countries like Brazil to meet our future energy needs. It is time to meet our energy needs with plentiful and safe domestic oil and gas reserves.

Sincerely,

Rep. Charisse Millett
DATE: July 11, 2011
TO: Regional Director, BOEMRE; Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
FROM: Senator Tom Wagoner, Alaska State Senate
RE: Comments on Revised Draft SEIS - Lease Sale 193 Chukchi Sea

This is purposely short and to the point.

1. Affirming Lease Sale 193 is supported by the SEIS information and analysis.
2. Alaska’s economy and the nation’s long-term energy solutions need Lease Sale 193 to go forward.
3. The Chukchi OCS has substantial potential and is huge unexplored national basin.
4. Alaska’s North Slope has been massively studied and Alaska’s permitting structure requires safeguards so that exploratory and development activities will have minimal environmental impacts, including species impacts.
5. America must develop our domestic energy sources and lessen the stranglehold of foreign sources.

I support Lease Sale 193, as held in 2008, and ask that this be included as public comment to NOT rescind the leases and allow development in this area.

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
3801 Centerpoint Drive, Ste. 500
Anchorage, AK 99503

July 1, 2011
Re: Support for Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall,

As an Alaska State Representative and Vice-Chair of the House Resource Committee, I strongly urge the Bureau of Ocean Energy Management, Regulation & Enforcement to affirm Lease Sale 193, and expedite permit approvals that allow exploration and development of Alaska’s resources.

New oil from state and federal lands is essential to the nation’s future energy supply, as we strive to become less dependent on other nations for the oil and gas that keeps our country running. As stated by Rebecca Watson, attorney for the Western Energy Alliance, “These are resources held by the American people and they are meant to be developed for the good of the American people.”

An important part of the nation’s interconnected energy system is the Trans Alaska Pipeline System (TAPS). TAPS is an incredible asset that is not only Alaska’s economic lifeline; it has also served as a lifeline for oil and jobs to the lower 48 for over thirty years. But the pipeline needs to have a continuing supply of oil and gas to keep it viable. Alaska has the oil and gas to fill the pipeline again and provide for the country’s energy needs.

Shell has spent more than $3 billion on its Arctic exploration program so far, including over $2 billion in payments to the government for leases in the Chukchi Sea. The company stands ready to deploy the most robust Arctic oil spill response system known in the industry and has shown that their oil spill response capability meets or exceeds worst-case discharge volume for the proposed wells. Those leased areas need to be explored and energy produced for America now.

Kindest Regards,

Representative Peggy Wilson
House District 2
Alaska State Legislature
MAYOR NORTHWEST ARCTIC BOROUGH

P.O. Box 1110
Kotzebue, Alaska 99752
(907) 442-2500 or (800) 478-1110
Fax: (907) 442-3740 or 2930

July 6, 2013

James Kendall, Ph.D.
Regional Director, Alaska Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)
3801 Centennial Drive, Suite 500
Anchorage, AK 99503-2620

Re: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Dr. Kendall:

The Northwest Arctic Borough (Borough) submits the following written comments regarding the Revised Draft Supplemental Environmental Impact Statement (DEIS) addressing Oil and Gas Lease Sale 193, Chukchi Sea, Alaska. The Borough’s comments are provided per the Notice of Availability announcing the Revised Draft DEIS published in the Federal Register on May 27, 2011.

Addressing the proposed action, the revised Draft DEIS updates the analysis of the Sale 193 Final Environmental Impact Statement (FEIS) to address the Extensive Comment’s request to address issues related to revisions of natural gas development and leasing information. In response to comments on the draft DEIS, BOEMRE has included an analysis of the potential environmental impacts of a very large well as the revised draft DEIS. The sale area encompasses approximately 6,156 square mile and partial blocks (about 34 million acres) within the Chukchi Sea portion of Alaska’s OCS.

In the 2011-2012 Five-Year OCS Program Planning Process, the Secretary of the Interior excluded from the sale a corridor (buffer) located offshore in the vicinity of Point Hope, Point Lay, Waterways, and shores near the State of Alaska’s northern coast. The corridor, located at a distance of up to 50 miles from shore, includes a polynya or spring-fed system.

BOEMRE did not identify any additional alternatives for the scenarios discussed in the DEIS. The alternatives analyzed in the Sale 193 FEIS are carried forward for consideration in the

MAYOR NORTHWEST ARCTIC BOROUGH

P.O. Box 1110
Kotzebue, Alaska 99752
(907) 442-2500 or (800) 478-1110
Fax: (907) 442-3740 or 2930

Revised Draft SEIS: The Revised Draft SEIS relies on the existing analysis provided by the Sale 193 FEIS where appropriate and adds new analyses with respect to the District Court’s concerns instructing BOEMRE to:

1) Analyze the environmental impact of natural gas development;
2) Determine whether missing information identified by BOEMRE in the Sale 193 FEIS was essential or relevant under 40 C.F.R. 1502.22; and
3) Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

The Borough’s mission is to improve the quality of life for its residents, and its vision is to be a vibrant region of successful people and communities. Acting on these key principles, the Borough’s comments address inadequate government-to-government consultation, lack of local and traditional knowledge, and lack of geographically explicit spill trajectory models as described below.

Lack of Government-to-Government Consultation

With the exception of the Native Village of Kotzebue, BOEMRE did not consult with the Borough’s six coastal villages (Noatak, Kivalina, Dillingham, Buckland, Selawik, and Noorvik) that potentially would be directly impacted by the environmental impacts resulting from oil and gas Lease Sale 193 in the Chukchi Sea. Additionally, residents in these communities benefit from economic activity resulting from offshore oil and gas development in the region.

In either case, community residents may be impacted by the proposed action. In accordance with Executive Order 13176 of November 6, 2000 (Consultation and Coordination with Indian Tribal Governments), and a related Presidential Memorandum issued on November 3, 2009, BOEMRE should meet with leadership in these villages to: 1) clearly describe the criteria for submitting substantive written comments and oral testimony during the public comment period; and 2) fully describe the scope of the Revised Draft SEIS such that residents could better understand and comment on proposed actions that might affect their lives.

Further justifying the need for government-to-government consultation, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling emphasized the potential impact that oil and gas development would have on the Arctic species and communities:

Oil and gas development has the potential, directly or indirectly, to affect hunting success or the habitat of species essential to subsistence. (Of course, offshore oil development could play a positive economic role in the native communities; some Inupiat whaling

The indigenous subsistence community is extremely knowledgeable about the environment, societies, and changing conditions of the Arctic. Local traditional knowledge is essential and must be incorporated into all of the above analyses and decision making. The indigenous subsistence community is particularly knowledgeable about the changing conditions of the Arctic and the potential impact that oil and gas development would have on the Arctic species and communities.

Lack of Geographically Explicit Spill Trajectory Models

The Borough appreciates inclusion of information about spill trajectories in the revised draft SEIS. This information, however, is incomplete, especially where the potential impacts within the Borough.

Spill trajectory models do not provide information regarding how a very large oil spill would impact coastal villages in the Northwest Arctic Borough.

Arctic | Buckland | Carbon | Deering | Kaktovik | Koslak | Kivalina | Noorvik | Shungnak | Selawik | Waterways
Mayor Northwest Arctic Borough Comment

NORTHWEST ARCTIC BOROUGH
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Kotzebue, Alaska 99752
(907) 442-2500 or (800) 478-1110
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• The need for geographically explicit spill trajectory models is essential to evaluate potential cumulative environmental impacts of a very large oil spill on coastal villages in the Northwest Arctic Borough.
• Without this information, decision makers can neither adequately evaluate the proposed action nor provide for comprehensive planning and coordination.

We urge you to address the issues raised in the letter in the final revised SEIS. Please contact Ukkutvak Tom Olitaq, Planning Director, if you have any questions about this letter. Ukkutvak can be reached at (907) 442-2500 ext 105 or via email at tomolitaq@northwestarctic.org.

Thank you for your consideration of these comments.

Sincerely,

[Signature]
Marcia Marbas Oetting
Mayor

successful full bowhead whale hunts. (Personal communication with Billy Adams, NSF Subsistence Research Coordinator)

Page 97 and 106, “Studies of gray, bowhead, and humpback whales have shown that received levels of impingement in the 160-170 dB re 1 micra appear to cause avoidance behavior in a significant portion of the animals exposed.” This statement is incorrect; avoidance response occurs at 120dB as recognized in previous NMS NPEA documents and IHA applications submitted to NMFS. See Minerals Management Service, Alaska OCS Region, “Final Programmatic Environmental Assessment, Arctic Ocean Outer Continental Shelf Leasing Studies” (2008) (“The 120-dB threshold is the approximate zone where Richardson et al. (1999) found at 20 kilometers (km) almost total bowhead whale avoidance.”)

Bowhead whales at 20 km range from 117-133 dB re 1 micra root-mean-square (dB re 1 Pa rms) and 107-126 dB re 1 Pa rms at 30 km, and it is level recommended by the 2001 Open Water Workshop participants as with significant responses by bowhead whales in the Beaufort Sea occur.”)

Pages 301-302, V.C.1. ESA Section 7. This section does not explain the numbers of Threatened Steller’s or Endangered Eiders that industry can “take.” An exact number should be given by species, and the procedure in effect should be clearly stated. What was these respondents do if they find these birds when they begin work?

II. Missing Information Analysis

In our November 2006 comments on the draft SEIS, we highlighted the relevance of the upcoming USGS data gap analysis. Since the last comment period, USGS has released this analysis. This report underscores NSB’s longstanding concerns regarding the lack of baseline science available to support intelligent planning for any offshore oil and gas development. BOEMRE should undertake a comprehensive review of this analysis and reconsider the requirements of 40 C.F.R. §1152.22 in light of this analysis. NSB fully supports any additional time necessary for BOEMRE to incorporate and address the findings of the USGS document.

The LS 193 Alternatives are based largely on a logical inference that activity occurring further from the coast will result in fewer impacts to coastal residents and residents. The approach ignores the resilience of residents upon migratory marine resources and the importance of other areas to those marine resources.

If OCS development occurs, it must occur in a manner that minimizes adverse impacts to residents and the ocean ecosystem upon which our residents rely. It is both NSB’s hope and BOEMRE’s mandate that human, marine, and coastal environments be protected. Without a comprehensive understanding of the relative importance of offshore areas it is impossible to plan intelligently to reduce impacts and achieve our goal of protecting the environment.

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consideration for the downtime associated with moving equipment from Anchorage or Dutch Harbor to the Chukchi Sea VLOS well area. Additionally, the anticipated number of boats, workers, and airplanes that the scenario assumes will respond to a VLOS in arctic-like conditions. Limits caused by foreseeable physical conditions should be incorporated into the scenario.

The recurring theme of missing information is evident in the VLOS analysis. Little is known about surface circulation and current. More information is needed to evaluate where boats should be deployed and where responses efforts should be prioritized. More information is needed regarding the efficacy of dispersants and their impacts to the environment.

D. Modeling

More information should be provided on the type of modeling performed by the (AVALON/MERLINS) software and the Oil Spill Risk analysis model (OSRA). The document should provide complete information on:

1. List of variables that are used in the model, including their source and range of values
2. Model assumptions
3. Number of model iterations run
4. Length of time used in the model input
5. Model structure (algorithms, model equations and rationale)
6. Model uncertainty and sources of error

The document should set out how many simulations were run. If only a small number of simulations were run, the numbers in these tables might include a non-ignorable component of Monte Carlo error. There would be two sources of uncertainty. First, the distributions of possible values for model parameters represent uncertainty about these parameters. Second, the sampled values drawn from those distributions to run through the model have a random component: even for the same distributions as in the previous sentence you would get different sampled values (and hence different model projections) if the simulation experiment were repeated. This second source of variance is not accounted for in these tables. Generally, when a source of variance is ignored, upper and lower bounds for quantities like permit contact will be too narrow.

Conversely, if the percentages are calculated from a systematically chosen set of parameter values (e.g., combinations of “high”, “median”, and “low” values for each parameter), then the percentages in the tables in Appendix B are meaningless because they are strongly affected by the particular design of the Monte Carlo experiment.

Page 133. “In addition, episodes of severe storms characterized by strong winds (25 to 30 miles per hour) and precipitation can disrupt the movement of oil across the landscape following a VLOS occurring during summer or winter.” These are far from severe storms events, much higher wind speeds have been recorded at Barrow.


Mayor North Slope Borough Comment

mention of potential remolding of onshore surfaces in which oil could be released. Then initially states the following: “In first-year ice, most of the oil spilled...” How much is “most”? Where is your reference?

Appendix B, Section 3. Very Large Oil-Spill Weathering. “The weathering for very large spills follows the same methodology described in the Site (10) EIS (Appendix A, Section 4.4), and the results for very large spills are described below. The oil weathering input parameters are as follows: The crude oil properties will be similar to a light crude oil of 25 API. Of course the properties will “be similar” since the weathering of a very large oil spill is based on a light crude oil of 35 API to begin with. In reality, the choice of this oil is not fine for one type of oil, but this document could be improved by modeling at least these to four oil types and not just oil of 35 API. The Table 193 Revised Draft SEIS, (page 1) states that “generally, oils can be divided into three groups of compounds: (1) light-weight, (2) medium-weight, and (3) heavy-weight compounds.” Either all three should be modeled, unless there is a reason to expect only the light crude oil, in which case, this reason should be outlined.

Table B-4 describes the fate and behavior of a hypothetical 600,000-barrel crude oil spill in the Chukchi Sea. Under the footnote it states “Meltalix Spill (November 1-May 31).” Spill is assumed to occur into first-year pack ice, pools 2-centimeter thick on ice surface.” The document should explain why “Meltalix Spill” was only considered until May 31, when in fact ice can persist into July. Second, the Ice Present section (2.1) states that “in first-year ice, most of the oil spilled at any one time would percolate up to the ice surface...” and the pools on the ice surface would concentrate the oil, but only to about 2 millimeters thick (85-96); yet the text describes pools of oil to 2 centimeters thick on the ice surface. It is not clear whether the centimeter to millimeter change is a mistake or whether there is a significant difference between the table and the text.

Appendix B, Section 4.1. Conditional Probabilities. “For purposes of analyzing the oil could freeze into the ice and melt out in the Arctic spring or summer.” This is too simplistic. Are there the only possibilities considered? What happens to oil and its movement during freeze/thaw cycles?

E. Public Hearings

We would like to acknowledge improvements in the public hearing process in this last round of public meetings. Last fall, when BOEMRE visited the Borough’s coastal communities with the draft EIS, the hearing room did not provide copies of the documents, did not present maps to explain the planning area, and overall, the presentation was difficult to follow. In the most recent iteration of public meetings the agency arrived prepared with both CD and paper copies of the document, maps illustrating the area at issue, took the time to verbally explain the history of the EIS and supplemented brief presentation with flip charts for a visual component. Agency staff listened attentively to residents’ comments and concerns and approached exchanges with residents with a receptive demeanor. BOEMRE’s community liaison was attentive to advertising the availability of the document and the public hearings. And, the agency displayed the necessary flexibility in scheduling meetings to accommodate the affected communities. These were
As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska’s Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska’s Outer Continental Shelf would have a tremendous ripple effect throughout the nation’s economy – creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska’s OCS are significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide with a cumulative payroll of $154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 15,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans.
The Revised Draft Supplement proposes to move forward with leasing decisions in the absence of critical scientific information. The document appears designed to justify BOEMRE’s earlier decision to hold Lease Sale 193 rather than to provide a meaningful means to inform reconsideration of the decision. This approach is inconsistent with BOEMRE’s obligations under the law.

The Revised Draft Supplement does not resolve the flawed analyses of missing information or the effects of natural gas development contained in the first draft supplemental environmental impact statement (Original Draft Supplement) in October. On November 30, 2010, the undersigned groups submitted comments to the Original Draft Supplement, and we renew those comments and incorporate them by reference here. We summarize our comments where necessary and provide additional comments on BOEMRE’s new analysis of a very large oil spill in the Chukchi Sea, which in this document the agency for the first time admits is possible.

Since BOEMRE published the Revised Draft Supplement, the Secretary of Interior has released a major and critically relevant report from the U.S. Geological Survey (USGS): An evaluation of the science needs to inform decisions on outer continental shelf energy development in the Chukchi and Beaufort Seas, Alaska.\(^7\) The report confirms that critical questions, particularly about which areas of the Chukchi Sea are important to the species that inhabit the region and how and when they use those areas, remain unanswered because of a lack of scientific data. As explained further below, the USGS report demonstrates the inadequacy of BOEMRE’s current approach to analyzing missing information and the indefensibility of the agency’s conclusion that no information essential to the lease sale decision is missing. The report compiles a fundamental reconsideration of BOEMRE’s approach and offers ample justification for BOEMRE to extend the remand period to address missing information.

At the lease sale stage, BOEMRE makes important decisions about whether to offer areas of the ocean for oil and gas activities, and if so, under what conditions. These decisions are concrete and consequential—once leases are validly issued, the government’s discretion is more constrained. Without the benefit of the revised Section 1502.22 analysis, BOEMRE cannot revise the Section 1502.22 analysis and reaches the same conclusion. The agency does not respond or amend the hundreds of submissions that it cannot consider fundamenta[l] informations about the basic ecology of the Chukchi Sea and the potential effects of oil and gas activities there. For example, the agency admits that it still “lack[s] site-specific data on the habitat-use patterns, routes, and timing to assess impacts” on birds, which “have high probability of experiencing substantial negative impacts” from oil and gas activities.\(^8\) It is still “unable to determine at this time if significant impacts will or will not occur” to marine mammals or “if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on non-endangered and non-threatened marine mammals.”\(^9\) But nevertheless, BOEMRE concludes that it does not need to answer these or myriad other questions before making leasing decisions in the Chukchi Sea. The conclusion was untenable in October, and it is even more so in light of the USGS report and other evidence described below.

A. The USGS Report Compels Reconsideration of BOEMRE’s Approach

The newly published USGS report demonstrates the fallacy of BOEMRE’s approach. The report is a culmination of a year-long study by the USGS designed specifically to analyze data gaps and research needs for the Arctic Ocean in connection with oil and gas activities in the region.\(^1\) The report concludes that there are large information gaps about the Arctic Ocean. Many of these gaps are directly related to understanding the importance of different areas of the Ocean to different species and to the ecosystem as a whole. “The Arctic Ocean is highly variable both physically and biologically, but scientific understanding of those differences is not well developed, which serves as a major constraint to a defensible science framework for critical Arctic decision making.”\(^2\) The USGS report confirms that essential missing information about the Chukchi Sea is missing and offers ample justification for BOEMRE to extend the remand period to address this information.

A fundamental element of a lease sale decision is spatial: BOEMRE must decide which areas to open to oil and gas leasing. As BOEMRE itself has acknowledged, data about the importance of different areas in the region under consideration—for example when and how various species use particular areas and how important that use is to the health of the population and broader ecosystems—is critical to determining the appropriate balance of short-term and long-term interests. BOEMRE itself has clearly acknowledged that this type of spatial and temporal information is missing for the overwhelming number of species in the Arctic Ocean and the Chukchi Sea:

- For bowhead whales, “the understanding of essential spatial and temporal habitat needs . . . particularly the oceanographic parameters that most influence foraging, breeding, raising young, and migrating” is insufficient.\(^3\) For beluga whales, “the present understanding of the essential spatial and temporal habitat needs . . . in the Arctic is limited and constrained the ability to sufficiently and efficiently mitigate potential anthropogenic noise impacts.”\(^4\) For gray whales, “present understanding of the essential spatial and temporal habitat needs . . . in the Arctic is limited and constrained the ability to presently sufficiently understand and efficiently mitigate potential anthropogenic noise impacts.”\(^5\) For seals, “[t]here is a basic lack of information about ice seals. Key information about the abundance, distribution, and vital aspects of ice seals is incomplete.”\(^6\) For walruses, “[b]etter understanding and inventory of essential spatial and temporal habitat needs . . . during its summering in the Chukchi Sea, particularly the oceanographic parameters that determine foraging, are needed.”\(^7\) For birds, “[i]nformation about status and trends, habitat requirements, relative distribution and abundance, and knowledge of life history stages of marine fish is incomplete and unavailable for large expanses of Arctic nearshore and foraging waters.”\(^8\) For birds, “[t]he studies to examine seasonal dynamics of seabirds in the Chukchi Sea related to oceanography, climate, sea-ice dynamics, primary and secondary productivity and movements of birds from breeding colonies (for example, Cape Lisburne)” are, and “[t]he studies” are “to increase the understanding of seasonal and interannual variation in short-lived use (numbers of birds, timing of their use, change in site quality) of key post-breeding areas, especially coastal areas where oil development is likely to occur” are “incomplete and unavailable for large expanses of Arctic nearshore and foraging waters.”\(^9\) The list goes on.

The USGS report’s conclusions and recommendations underscore the type of information that is missing is precisely the type of information that is critical at the lease sale stage: namely, what areas of the Chukchi Sea are ecologically important. The lack of such prior information constrains agencies’ abilities to assess the potential impacts of industrial activity in the Chukchi Sea, let alone rationalize plans and manage those activities. BOEMRE cannot credibly assert that information that does exist is sufficient to “support sound scientific judgments and reasoned managerial decisions”\(^10\) about where to allow oil and gas activities when it does not know what areas of the sea are biologically significant. It cannot credibly defer

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\(^{1}\) USGS Report at 33.

\(^{2}\) Id. at 10.

\(^{3}\) Id. at 7.

\(^{4}\) Id. at 8.

\(^{5}\) Id. at 10.

\(^{6}\) Id. at 11.

\(^{7}\) Id. at 12.

\(^{8}\) Id. at 15.

\(^{9}\) Id. at 16.

\(^{10}\) Id. at 17.

information gathering to later stages, because the information that is missing is critical to the lease sale decision—the decision about where—and the lease sale decision constrains later decisions, particularly in terms of spatial choices. By underscoring the critical nature of missing information about the Chukchi Sea, the USGS report highlights the arbitrariness of BOEMRE’s out-of-hand rejection of the importance of all missing information to the lease sale decision. It compels a full reconsideration of BOEMRE’s approach to missing information in the Chukchi Sea.27

B. BOEMRE Should Have The Recommendations Of The National Commission On The BP Deepwater Horizon Oil Spill And Offshore Drilling And Of The Presidential National Ocean Policy Task Force


Id. at 250.

Id. at 301.

BOEMRE should obtain this information before making decisions about Lease Sale 193.

At 286.

BOEMRE should follow this advice and coordinate with NOAA and USGS, among others, in preparing its analysis of missing information, natural gas development, and the effects of a very large oil spill.


See, e.g., Revised Draft Supplement at A.49.

See, e.g., Revised Draft Supplement at A.49.


Id. at 303.

Id. at 303.

MPPA 1438.}
cannot reasonably discount the relevance of missing information about the effects of noise on marine mammals in reliance on uncertain mitigation measures of questionable efficacy.

The USGS report also underscores that large gaps exist in information relating to the effects of noise on marine mammals. “[L]arge uncertainty still exists in extrapolating how impacts of noise on individual animals may affect survivorship or reproductive rates of population,” and “[n]owhere is it clear how best to evaluate the effects of noise on marine mammals. In current practice, however, there is not enough information to be a reason to choose among alternatives.” These statements contradict assertions in the final 2007 EIS that the likelihood of a large oil spill will differ among lease sale alternatives.

BOEMRE should clarify its analysis. Furthermore, as discussed in our November 30 comments, it is not correct to state that BOEMRE has concluded that the effects of oil spills will be the same under all alternatives. The final 2007 EIS asserts that there are differences in oil spill effects under alternatives. The problem is that BOEMRE could only describe these differences in the most general terms given the lack of data. To the extent each of the alternatives do in fact result in the same or similar effects, BOEMRE may not have chosen an adequate range of alternatives for the lease sale analysis, and it should revisit the range here.

The Revised Draft Supplement contains an analysis of a very large oil spill that concludes that such a spill could have significant effects. The discussion does not acknowledge that there is incomplete or unavailable information relevant to the analysis, as required by 40 C.F.R. § 1502.22 (When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear such information is lacking). As BOEMRE cannot reasonably conclude that there is no information relevant to the analysis of a very large oil spill, its analysis is incomplete or unavailable. As such, the analysis of its smaller oil spills is clearly also relevant to its analysis of a very large oil spill. BOEMRE should acknowledge and analyze the missing information for the very large oil spill.

The Council on Environmental Quality’s (CEQ) promulgation, on February 10, 2010, of revised regulations is similarly flawed. The slick’s total area is estimated by adding up all of the area though which linear trajectories from the trajectory model pass. However, BOEMRE does not, however, disclose whether or how slicks will behave differently if they originate from different areas and how that may differentially affect resources and species. Again, this spatial information is critical to the lease sale decision at issue here. BOEMRE also fails to integrate its conclusions about oil spreading into its impacts analysis, even after acknowledging that a VLOS will spread to cover a vast area. Hence, the analysis is premised on the trajectory model, which assumes that oil spills do not spread, cannot contact multiple locations at once, and stop moving after landing. BOEMRE cannot adequately assess the risk posed by an oil spill without accounting for the actual behavior of oil spills, including spreading, in its impacts analysis.

BOEMRE should improve its VLOS analysis to explain how the trajectory model data on which it relies relates to real-world effects and should analyze and describe whether and how slicks from different locations will behave differently and have different effects on the Chukchi Sea environment.

III. Greenhouse Gas Analysis

BOEMRE should analyze the contribution to climate change from burning the one billion barrels of oil and 2.25 billion cubic feet of natural gas forecast to be produced as a consequence of Lease Sale 193. The 2007 Final EIS concluded that the contribution of burning oil produced from Lease Sale 193 would be “minor.” It did not model the impact of an increase in oil supplies on total carbon emissions, because it assumed that levels of oil consumption would not change.59 The Revised Draft Supplement, however, offers a range of new and different rationales for declining to analyze these impacts, including that there are no reliable methodologies for estimating the impact of changes in oil and gas supplies on consumption patterns, that the productivity of the Chukchi is unknown, and that burning oil and gas is not a reasonably foreseeable or proximate consequence of Lease Sale 193.60 None of BOEMRE’s newly asserted rationales are supportable.

BOEMRE’s assertion that there are no reliable methodologies for estimating the impact of changes in oil and gas consumption is likewise flawed. The Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) modeled the impact on world oil markets of their Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards.61 BOEMRE’s assertion is also inconsistent with its own internal analyses, which predict that conservation measures and new technologies will reduce greenhouse gas emissions significantly.

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that annual production will peak at 80 million barrels.65 With respect to natural gas, BOEMRE forecasts that 2.25 trillion cubic feet will be produced.66 Burning a barrel of oil as fuel releases 43 tons of CO₂ equivalent,67 and about 90% of oil consumed in the United States is burned as fuel.68 Therefore, the one billion barrels of oil that BOEMRE assumes will be produced as a result of lease sale 193 will generate approximately 387 million tons of new greenhouse gas emissions.69 For the years of peak production volumes, the contribution to global greenhouse gas emissions will be approximately 33 million tons each year. The burning of natural gas will add over 116 thousand tons to the life of the project.70 These contributions to greenhouse gas emissions are so large that BOEMRE can no longer credibly conclude that they are minor, even allowing for some uncertainty concerning their magnitude. If BOEMRE concludes that the effect of new production on levels of consumption is determinable, in light of the CEQ’s drafting guidance, re-adopt its prior conclusion that the effect is minor.

BOEMRE is also incorrect in its new conclusion that the use of oil and gas for energy is not a foreseeable and proximate consequence of Lease Sale 193. BOEMRE has adopted one billion barrels of oil and 2.25 trillion cubic feet of gas as a foreseeable production scenario.71 Both BOEMRE and other agencies managing oil and gas resources routinely employ estimates of future production to guide analysis of environmental impacts under NEPA.72 NEPA requires the same approach with respect to greenhouse gas emissions. The lease sale stage, where BOEMRE is deciding whether and where to offer an area for oil and gas development, is the appropriate stage at which to analyze the greenhouse gas effects of the fuels that would be produced as a result of the sale.

65 Final EIS V-5: Revised Draft Supplement at 76-77.
66 Revised Draft Supplement at 73.
68 Stephanie Clifford, Oil Drift Through Your Far, N.Y. Times (June 25, 2001) (“About 46 percent of [a typical barrel of oil] is refined into gasoline, and another 40 percent or so is turned into jet and (coal) oil. Only about 2 percent becomes petrochemicals like polyethylene and becomes for everyday products (with the rest going to other uses).”); U.S. Energy Information Administration (EIA), U.S. Energy Flow, available at http://www.eia.gov/dnav/pet/PET_PNP_PCT_DC_NUS_PCT_A.htm; EIA, Annual Energy Review 2009, at 149 (Table 5.11).
69 Final EIS V-1: Revised Draft Supplement at 77.
70 Stephanie Clifford, Oil Drift Through Your Far, N.Y. Times (June 25, 2001).
71 Oil production from Lease Sale 193 will also reduce conservation and switching from oil to natural gas. The annual energy production from this lease sale is equivalent to more than 500 million barrels of oil.50
72 Revised Draft Supplement at 77.
73 Final EIS V-5: Revised Draft Supplement at 76-77.
74 Final EIS V-5: Revised Draft Supplement at 76.
75 Final EIS V-5: Revised Draft Supplement at 76-77.
76 Mike Dalton, Spill Commission Report, comments from NOAA, available at 102, 104.
77 Id. at 102.
78 Id. at 104.
79 Id. at 102.
80 Id. at 104.
**IN THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT**

| NATIVE VILLAGE OF POINT HOPE, et al., | No. 09-73942 |
|Petitioners,| |
v.| |
KEN SALAZAR, Secretary of the Interior, et al.,| |
Respondents,| |
and| |
SHELL OFFSHORE INC., et al.,| |
Intervenor-Respondents.| |

| ALASKA ESKIMO WHALING COMMISSION, et al., | No. 09-73944 |
|Petitioners,| |
v.| |
KEN SALAZAR, Secretary of the Interior, et al.,| |
Respondents,| |
and| |
SHELL OFFSHORE INC., et al.,| |
Intervenor-Respondents.| |

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**Declaration of David E. Bain**

I, DAVID E. BAIN, declare the following:

1. This Declaration is submitted in support of the Petitioners in Nos. 09-73942 and 10-70166. The statements contained in this Declaration are true and correct to the best of my knowledge and, in the case of my opinions, I believe them to be true based on my education and professional experience developed during my more than thirty years as a research biologist on marine mammals.

2. I am currently a contracting scientist for the National Marine Fisheries Service. I received my B.A. with majors in Biology and Psychobiology with Physics in 1980 and Ph.D. in Biology in 1989 from the University of California at Santa Cruz. A copy of my curriculum vitae is attached to this Declaration.

3. I have authored over 30 peer-reviewed papers and reports on the behavioral ecology of marine mammals, especially of killer whales (Orcinus). A substantial portion of this work has been concerned with audition, sound production, and other aspects of the acoustic ecology of these species. I have conducted studies for the National Marine Mammal Laboratory and other branches of the National Marine Fisheries Service, Minerals Management Service, and U.S. Geological Survey on the impacts of acoustic disturbance on individuals and populations of marine mammals. Reports based on these and other disturbance-related studies have been published in books and peer-reviewed journals and

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**Declaration of David E. Bain in Support of Case Nos. 09-73942 and 10-70166**

4. In preparing this Declaration, I have reviewed relevant parts of the Shell 2010 Camden Bay Drilling EA, the 2009 Shell Camden Bay FONSI, the Shell 2010 Chukchi Sea Drilling EA, the 2010 Shell Chukchi Sea FONSI, the July 2008 Bowhead Biological Opinion, “An Update on Feeding by Bowhead Whales near an Offshore Seismic Survey in the Central Beaufort Sea” (IWC SC/61/BRG3), and key papers cited by these documents.

5. The conclusions I draw and the opinions I express are supported by texts and research that are generally accepted as reliable by experts in my field. For reasons outlined below, I believe the proposed drilling projects pose a serious risk of harm to bowhead whales.

6. The flexibility in the drilling schedule allows for a wide range in the number of bowheads affected depending on the actual timing of the work.

7. The drill sites are central to the migration route of bowhead whales. As a result, a large proportion of the population will be exposed to the drilling project.

8. The Camden Bay sites are in a location where the migration corridor is narrow. This will require nearly all bowheads passing by a drill site while it is active to be exposed to biologically significant levels of noise.

9. The Chukchi Sea sites are in a location where the migration corridor is widening (see Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. Arctic. 53:432–447). Although this will bowheads to give a wider berth to drilling activities, the area is used by newly born calves, the members of the population most vulnerable to harm from disturbance.


11. The waters near the Camden Bay drill site include an important resting area. The noise associated with drilling and drilling support will likely divert whales away from this area. The loss of use of resting areas such as Camden Bay will require greater energy expenditure.

12. The waters near the Camden Bay drill site include an important feeding area. Industrial noise associated with drilling will deflect whales away from this feeding area. The loss of feeding areas will reduce food intake.

13. Taken together, these two factors will impair the energy balance of affected individuals (see Bain, D. E. 2002. A model linking energetic effects of whale watching to in killer whale (Orcinus Orca) population dynamics. Contract report submitted to Orca Relief Citizens’ Alliance).


15. Lactation requires approximately twice as much energy expenditure by new mothers than by non-reproductive females (Ofstedal, O.T. 1997. Lactation

16. Impairing the energy balance will increase the interval between successful calf recruitment (Lockyer, C. 1984. Review of baleen whale (Mysticeti) reproduction and implications for management. Rep. Int. Whal. Commn (Spec. Iss. 6):27-50). In turn, this will result in a reduction in the number of calves recruited to the population.


18. Such a long lifespan requires successfully overcoming disease. Many diseases inhibit feeding until the immune system overcomes the infection.

19. To survive this period of non-feeding, individuals must have an adequate blubber layer.

20. Impaired energy balance reduces the probability that an individual will survive an infection. In turn, this would lead to additional mortalities in the population.
21. Further, females who die young will not produce as many calves as they would have if they lived a normal lifespan.

22. The distance at which individuals will avoid the drill site will vary with a number of factors.


24. Some individuals are disturbed by low levels of noise, and will avoid the drill sites by many tens of kilometers.

25. Most individuals are likely to be displaced by a couple tens of kilometers.

26. Some individuals are not easily displaced by noise, and will be exposed to noise levels which may cause temporary or permanent hearing loss (Camden Bay EA).

27. Hearing loss will impair their ability to hear vocalizations.

28. Vocalizations are important for finding mates. Failure to find mates could result in a reduction in calf recruitment.

29. Echoes from vocalizations are likely to provide important information on ice thickness. Failure to correctly assess ice thickness could result in an increase in mortality.

30. Predators can be detected at greater distances acoustically than visually by healthy individuals. Hearing loss would increase vulnerability to predation, which in turn could increase mortality.


32. That is, when looking at the biological impact on bowhead whales, drilling in the Beaufort cannot be considered separately from other planned activities, including similar activities in the Chukchi Sea.

33. Further, if exploratory drilling results in future production, the cumulative effect of production in the core of the migration route needs to be considered.

34. Cumulative effects on the population are likely to increase at a steeper than linear rate. That is, doubling exposure to disturbance is likely to more than double population level effects (the life or death effects, Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (Orcinus Orca) population dynamics. Contract report submitted to Orca Relief Citizens’ Alliance).

35. The number of individuals that would be added to the population in the absence of disturbance can be estimated using the equation:

$$\Delta N / \Delta t = rN \left(1 - \left(\frac{N}{K}\right)^p\right)$$

where N is the current population size, K is the carrying capacity, r is the intrinsic rate of increase (i.e., the rate at which the population would grow in the absence of intraspecific competition), and 0 is a shape parameter that specifies how population consequences of intraspecific competition vary with population size (Olesiuk, P. F., G. M. Ellis and J. K. B. Ford. 2005. Life History and Population Dynamics of Northern Resident Killer Whales (Orcinus Orca) in British Columbia. CSAS Research Document 2005/045, 1-81).

36. Excluding whales from feeding areas effectively reduces K. In turn, this reduces the rate of population increase. This is equivalent to removing individuals from the population.

37. Excluding whales from resting areas requires individuals to expend more energy. They thus need to eat more to survive. This effectively increases the amount of intraspecific competition, and hence reduces K. In turn, this reduces the rate of population increase. This is equivalent to removing individuals from the population.

38. When the shape parameter is 1, the per capita growth rate peaks when the population is at 50% of carrying capacity.

39. However, for marine mammals, the shape parameter tends to be large. That is, intraspecific competition does not become important until the population size is closer to carrying capacity than 50%. However, intraspecific competition becomes much more important near carrying capacity when the shape parameter is large than when it is small.

40. Disturbance has the effect of causing the population to behave as though it is closer to carrying capacity than it would in the absence of disturbance. As a result, the population consequences of disturbance are much stronger when the population is near carrying capacity than when it is depleted.

41. As a result, a population that grows in the presence of disturbance is not a sign that disturbance is unimportant. Rather, depleted populations are capable of some growth in conditions that are obviously harmful to populations near carrying capacity (Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (Orcinus Orca) population dynamics. Contract report submitted to Orca Relief Citizens’ Alliance).
42. Bowheads are believed to be near carrying capacity now, although they would have been depleted when the population was still growing in the presence of disturbance (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 pp.).

43. That is, the depleted population was capable of growth in the presence of disturbance in the 1990’s, but an increase in disturbance to the population now, while it appears to be near carrying capacity, could result in slowed growth or a loss of individuals.

44. This analysis suggests that there will be little difference in the effect on the population regardless of whether many individuals are affected a small number of times or a small number of individuals are affected many times or for a prolonged period of time.

45. The relative degree of exposure among individuals determines which individuals are likely to bear the burden of the population scale effects. That is, individuals extensively affected are less likely to be able to overcome the impact, whereas individuals little affected are more likely to be able to overcome the impact at the expense of non-exposed individuals as they more aggressively try to obtain the additional resources needed to offset short-term effects.

46. Individuals within a population near carrying capacity are more likely to die or experience reduced reproduction than individuals in populations well below carrying capacity, when exposed to disturbance (Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (Orcinus Orca) population dynamics. Contract report submitted to Orca Relief Citizens’ Alliance).

47. That is, individuals in this bowhead population are quite vulnerable to harm from disturbance due to the proposed drilling project.

48. The methods used in the Eas to estimate the number of individual bowheads likely to be harmed systematically underestimate the expected and maximum numbers.

49. First, only individuals within the 120 dB contour were considered as subject to harm. In fact, lower levels of noise have been shown to deflect migrating bowheads and exclude them from habitat.

50. Second, Shell and MMS selected specific dates within the drilling season on which to base their estimates. However, given the flexibility in the drilling schedule requested, these dates may not be representative for the numbers of bowheads likely to present on the dates drilling would actually occur.

51. Third, only the number likely to be affected at any given moment was estimated. In practice, bowheads are likely to move past drilling sites. The result is that many more individuals will be affected, although each individual will be affected for only a portion of the drilling season.

52. Fourth, the number affected was based on the mean density, with an arbitrary range of uncertainty assigned to the estimate. In practice, bowhead density can vary far more than allowed for in the EAs.

53. In particular, the tendency of some bowheads to travel in groups (Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. Arctic. 53:432–447) means that if a group approaches a drill site, the density will be far higher than estimated based on individual density.


55. The number of whales potentially exposed to noise should be calculated based on the number passing by the drilling site during operations, not the average density. When bowheads are migrating, new individuals will be exposed on an ongoing basis.

56. The drilling plan allows for flexibility in the drilling schedule. As a result individual bowheads may be exposed multiple times. Although the average swimming speed may be high enough that a bowhead could swim from one site to the other faster than the ship would change sites, bowheads do not necessarily swim continuously and in a straight line. That is, they may stop to rest and feed. Their course may be indirect due to natural factors and as they avoid sources of disturbance. Such detours would allow the drill ship to relocate faster than some individual bowheads.

57. Repeated exposure of the same individual to multiple disturbance events increases the risk of long-term harm relative to single exposures.


61. Maintaining the BCBS bowheads is the best way to ensure survival of the species as a whole. Protecting them from expanding threats such as oil exploration and drilling, and the associated activities that may have limited the recovery of other stocks, are important steps in sustaining this species.

62. In summary, there is serious risk of harm to bowheads due to consequences of disturbance, direct injury due to exposure to dangerous levels of noise, and ship strike.

63. Belugas also occur in both the Chukchi and Camden Bay drilling areas during summer and autumn. Mothers with young would be expected in greater numbers than older males in the habitat closest to the drill sites.


66. Belugas are known to be highly disturbed by icebreaker noise over 50 km away.

67. In contrast, the EA estimates the number of belugas to be affected only out to the 120 dB contour at 7.4 km.

68. This seriously underestimates the number of belugas to be affected not only due to the underestimate of the area of the zone of influence but also due to higher densities of belugas 50 km offshore of the drill site than within 7.4 km of the drill site (see Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. *Arctic*. 53:432-447).

69. Masking of communication signals is also likely to be a problem at this distance. Although beluga communication signals contain high-frequency components that are less vulnerable to masking by low frequency noise than low-frequency components, the high-frequency components are directional and attenuate faster than low-frequency components. That is, the omni-directional low-frequency component used for long distance communication among widely spaced belugas is vulnerable to masking (see Miller, P. J. O. 2006. Diversity in single underwater impulses from a seismic watergun. *J. Acoust. Soc. Amer.* 111:2920-2940).

70. Support vessel traffic will be disturbing to the part of the beluga population using lagoons and other nearshore habitats.


73. Unlike bowheads, belugas cannot store sufficient blubber to successfully rear calves when food intake is reduced.

74. In addition to lactation, wake riding is an important mechanism for transferring energy from the mother to a calf. The energetic cost of this increases dramatically with increased swimming speed as may occur in the event of flight from disturbance.

75. Like bowheads, not all belugas flee from noise sources all the time. That is, some belugas may be exposed to injurious levels of noise (Camden Bay EA and National Research Council. 2003b. Ocean noise and marine mammals. National Academies Press. Washington, DC. 192 pp.).

76. Population censuses of the Eastern Chukchi and Beaufort stocks of belugas have not been conducted in the last 10 years. Therefore, population trends are unknown. In contrast to bowheads, no evidence of population growth was seen when censuses were still being conducted (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 p.).

77. In summary, drilling will not take place within the core of the beluga distribution or migration route, but the belugas most likely to occur near the drill sites, mothers with calves under 6 months of age, are the most vulnerable to harm from the project.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge.

Dated: March 5, 2010

David E. Bain

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**CURRICULUM VITAE OF DAVID E. BAIN**

**ACADEMIC BACKGROUND**

- University of California at Davis (Post-Doctoral Fellow) 1989-1991
- University of California at Santa Cruz (Ph.D. in Biology) 1981-1989
- San Francisco State University (Master’s program in Biology) 1980-1981
- University of California at Santa Cruz (B.A., with majors in Biology and Physics with Psychology) 1978-1980
- New College, University of South Florida 1977-1978
- NSF Summer Science Training Program, Humboldt State University 1976
- University of Maryland at College Park (summer sessions) 1974, 1975

**EXPERIENCE**

- Contractor, National Marine Fisheries Service, Research Director, Global Research and Rescue, 2005-2007
- Affiliate Assistant Professor of Psychology, University of Washington, 1993-2006
- Killer Whale Research Director, Marine World Foundation, 1979-2001
- NRC Research Associate at National Marine Mammal Laboratory, 1991-1992
- Post-Doctoral Fellow, University of California at Davis, 1989-1991
- Consultant for Active Environments, 1990-1991
- Consultant for Dolphin Research Center, 1990
- Research Assistant, University of California at Santa Cruz, 1988-1987
- Teaching Assistant, University of California at Santa Cruz, 1982-1986
- Research Assistant, Marine World Research Foundation, 1978-1979

**AFFILIATIONS**

- Charter Member, Society for Marine Mammalogy
- Director, Cascadia Environmental Science Center
- Science Advisor, Killer Whale Tales
- Science Advisor, Global Research and Rescue

**SERVICE**

Peer reviewer for the SRKW ESA listing and draft Critical Habitat designation
Member of the Killer Whale Recovery Team convened under SARA in Canada

**AWARDS AND HONORS**

- American Cetacean Society, Monterey Bay Chapter, Award, 1982
- National Science Foundation Graduate Fellowship, 1981-1984
- B.A. with Honors with Majors in Biology and Physics with Psychology, University of California at Santa Cruz, 1980
- New College Out-of-State Tuition Waiver, 1977
- Earthwatch Scholarship, 1977
- National Science Foundation Summer Science Training Program at Humboldt State University, 1976
- Johns Hopkins University Study of Mathematically and Scientifically Precocious Youth, Scholarship, 1974

**FUNDING HISTORY**

- Graduate Fellowship, 1981-1984: $20K
- Earth Island Institute, Contract: 2K
- Northwest Straits Commission Grants, 2001-2002: 60K
- Orca Relief Citizens Alliance Grant, 2001: 4K
- Center for Biological Diversity Contract, 2001: 2K
- Oiled Wildlife Care Network Grant, 2000-2001: 20K
- Woods Hole Oceanographic Institution, 1997-1999: 4K
- BioLogic Laboratories, 1997: 9K
- National Academy of Sciences COBASE Project Development Grant, 1995: 2K
- British Columbia Ministry of Parks, 1995: 2K
- National Science Foundation Doctoral Dissertation Research Improvement Grant, 1985-1987: 5K
- National Science Foundation Graduate Fellowship, 1981-1984: 20K
PAPERS


Alaska Wilderness League et al., — Fourteen Environmental Organizations Comments


Alaska Wilderness League et al., — Fourteen Environmental Organizations Comments


Alaska Wilderness League et al., – Fourteen Environmental Organizations Comments


SELECTED UNPUBLISHED PRESENTATIONS


Alaska Wilderness League et al., – Fourteen Environmental Organizations Comments


Alaska Wilderness League et al., – Fourteen Environmental Organizations Comments


Seismic surveys and shallow hazard surveys may impact marine life through a variety of environmental consequences of exposing marine mammals to noise. Further, the population consequences can depend on the health of the relationships to noise. The different magnitudes of takes will have different population consequences of behavior change in conjunction with population dynamics models to calculate the population effects of Level B takes is a topic of contemporary research. For example, Bain (2002a) explored using energetic mechanisms. In particular, it was found that Level B harassment may lead to Level A takes through indirect mechanisms.

The population effects of Level A takes on populations are relatively easy to assess, as individuals that are killed are obviously removed from the population, and those that are injured are more likely to die whenever the population is next exposed to stress. Calculating the population effects of Level B takes is a topic of contemporary research (Trites and Bain 2000). For example, Bain (2002a) explored using energetic consequences of behavior change in conjunction with population dynamics models to estimate population effects of Level B takes. Stress concurrent with Level B harassment would have additional population consequences. Stress may occur in the absence of behavioral change, or the absence of change in significant behavioral patterns such as foraging or nursing, or exclusion from optimal habitat. Lusseau et al. (2006) concluded disturbance caused a decline in and posed a significant threat to the survival of the bottlenose dolphin population in Doubtful Sound, New Zealand. While they noted vessel strikes were occurring (Level A takes), cumulative behavioral effects (Level B takes) were believed to be the primary threat to the population. That is, the population declined without being exposed to noise above 160 dB.

It is likely that different magnitudes of effect, whether physical harm, behavioral change that leads to physical harm, disruption of significant behavioral activities, or behavioral changes that pose negligible risk to populations when they occur only rarely but can become significant when exposure is prolonged or repeated, will have different relationships to noise. The different magnitudes of takes will have different population consequences. Further, the population consequences can depend on the health of the population (Bain 2002a). All these factors need to be considered when evaluating the environmental consequences of exposing marine mammals to noise.

Unconditional Effects

Richardson et al. (1995) addressed the concept of zones of influence. The zone of most concern is the one in which there is risk of immediate injury or death. Three primary mechanisms have been proposed to be of concern. One is damage to the ears that causes permanent threshold shifts (PTS). (Syka and Popper 1980, Blaikie et al. 1978, Nielsen et al. 1978, Solecik and Gerken 1990, Clark 1991, McCauley 2002). There is great uncertainty over received levels that may cause this. Estimates have been based on research on a handful of terrestrial mammals, birds, and fish. A often stated assumption is that the threshold for PTS must be higher than the threshold for Temporary Threshold Shift (TTS), which has been addressed in a few marine mammal species (Nechigal et al. 2003).
expenditure of significant amounts of energy. Asuming animals were in optimal habitat, moving out of that habitat is likely to have consequences such as reduced foraging efficiency. This is of particular importance in the Arctic, where nutrients from fresh water sources, ice cover, bottom topography, currents, and other factors influence prey density (NRC 2003a, MMS 2004). Such factors vary temporally, resulting in the location of patches of high-quality habitat varying through time. Feeding studies noted that prey density averaged 230 mg/m³, while feeding appears to require a density of 800 mg/m³ for bowheads (MMS 2004). Such highly productive patches are likely to be rare, so displacement from these areas would negatively affect individuals. While large whales can go extended periods of time without eating much, small cetaceans (e.g., harbor porpoises), along with individuals in poor condition, face a risk of death if they are unable to feed for periods as short as 48-72 hours (personal observation). They may also move into habitat where they face increased risk of predation.

Separation of individuals from social units is another consequence of noise exposure that may lead to mortality. In 2003 in Hans Strait, some killer whales responded to mid-frequency sound by seeking shelter behind a reef. Others chose to flee, resulting in splitting of a pod that historically spent all of its time together as a single unit. While noise levels changed from the particular incident, other killer whales have been observed separated from their social units resulting in death prior to reunion or requiring human intervention to restore the individual to its social unit (Schroeder et al. 2007).

TTS may conditionally lead to harm. Impaired hearing ability increases vulnerability to ship strike. In 2003, blunt force trauma was identified as a cause of death in the investigation of harbor porpoise mortalities following exposure to mid-frequency sound in Washington State. A minke whale was nearly struck by a research vessel in the area where one had been observed fleeing mid-frequency sound exposure. These species are familiar with boats in that area, and normally avoid them by a wide margin when they can hear them coming (personal observation).

Impaired auditory ability may also increase predation risk. For example, Dahlheim and Trowell (1994) reported an attack by killer whales on white-sided dolphins. The approach by the whales went undetected due to the noise of the research vessel. Further, impaired hearing may impair foraging ability and communication (Bain and Dahlheim 1994).

Relationship of Noise Level to Impact

Major behavioral changes appear to be associated with received levels of around 135 dB in killer whales. Bain and Dahlheim (1994) observed individuals in a captive killer whale exposed to 135 dB (in a band below 5 kHz) and Bain (1995) used noise with a received level of around 125 dB (with a predominant frequency at 300 Hz) to drive killer whales from Banks Lake, where two individuals in the group had previously died rather than leave. Killer whale watching guidelines prohibit close approaches that would result in received levels exceeding about 135 dB (Bain 2001). Olesiuk et al. (2002) found noise from acoustic harassment devices with a source level of 195 dB excluded harbor porpoises within a radius of 3 km (individuals may have been kept farther away, but porpoises are difficult to see at all but beyond that range), where received levels probably dropped below 135 dB. Belugas have been observed to respond to icebreakers by swimming rapidly away at distances of up to 80 km, where received levels were between 94 and 105 dB. Bowhead whales appeared to be displaced to distances of about 30-40 km when seismic devices were inactive, and distances of 30-40 km when airguns were active (Miller et al. 1999), suggesting major behavioral effects to noise in the 105-125 dB range (NRC 2003b). Minton and Symonds (2002) found the same type of acoustic harassment devices as studied by Olesiuk et al. (2007). In the first study, only excluded killer whales from the area around the devices, they kept them from accessing the area beyond the devices. It is reasonable to conclude that site clearance surveys could similarly prevent various whale species from accessing areas around the surveys.

Minor behavioral changes can occur at received levels from 90-130 dB re 1 µPa or lower. Porpoises avoid pingers with source levels of about 130 dB at distances from 100-1000 m, depending on experience and environmental context (Bain 2002b, Barlow and Cameron 1999, Cameron 1999, Cox et al. 2001, Gearin et al. 1996 and 2000, Kraus et al. 1997, Lutke et al. 1999, 1998, 1999). Kastelein et al. (1997, 2001) found behavioural responses to even lower levels. Bain et al. (2006a) and Williams et al. (2006a, 2009) found killer whales exhibited behavioral changes in the presence of a single vessel producing a received level in the neighborhood of 105-110 dB re 1 µPa. Belugas exhibited minor behavioral changes such as changes in vocalization, dive patterns and group composition at distances up to 50 km (NRC 2003b), where received levels were likely around 120 dB. It should be further noted that these behavioral responses occurred when noise was barely detectable above ambient noise, suggesting that noise whose total level is below ambient but occurs at a frequency where ambient noise is low may have effects. In addition, the range at which effects are observed would be expected to vary with natural ambient noise, with effects occurring at greater ranges on quiet days and shorter distances on noisy days. North Atlantic right whales exhibited changes in diving behavior when exposed to noise below 135 dB (Nowacek et al. 2004).

It is clear from the above review that marine mammals respond to noise at levels far below 160 dB. Thus implications of takes must be considered at far lower received levels of noise, which will occur over much larger areas, and hence affect much greater numbers of individuals than when 160 dB or higher is set as the threshold for concern. There are three main ways that minor behavioral changes, when experienced by numerous individuals for extended periods of time, can affect population growth. These include increased energy expenditure, reduced food acquisition, and stress (Trites and Bain, 2000).

Killer whales are active part of the time and rest part of the time. Travelling around a noise source results in noise over the full range from around 125 dB (with a replaces resting with active time. Manatees typically have a metabolic scope of about 6. That is, energy consumption at rest is about 6 times lower than from 1st (Klein 1995).

When whales are displaced from optimal habitat, rates of energy acquisition are reduced. As noted above, whales typically forage where prey density is at least four times higher than average prey density. Thus displacement from optimal foraging habitat may result in a four-fold reduction in food intake.

The actual situation may be worse, as foraging may be abandoned altogether when conditions are poor. For example, killer whales are 40% less likely to forage at all when whales are nearby (Lusseau et al. 2009), perhaps because vessel noise masks echoes from prey, making the probability of foraging successfully negligible (Bain and Dahlheim 1994). This likely reduction in food intake is significant to food limited populations (e.g., killer whales: Ford et al. 2005, Olesiuk et al. 2005, Fisheries and Oceans Canada 2008). These energetic consequences are most significant to a population approaching carrying capacity, as bowheads are (NRC 2003a, MMS 2004). The increased competition with respect to specific taxa that consume more energy than they would if undisturbed, and reduced effective foraging capacity due to inaccessibility of prey protected by anthropogenic noise could be used in conjunction with population dynamics models to calculate the net change in population growth rate resulting from reduced fecundity and increased mortality (Bain 2002).

In addition to energetic consequences, stress can increase mortality rates through impairing the immune system and reducing calf production through abortion of fetuses or prevention of conception (Roland et al. 2006).

Sound Sources

Sound sources are typically divided into continuous and pulsed categories. This recognizes the different mechanisms for injury. Direct injury is typically related to the cumulative exposure. This depends on the total duration of the exposure. Intermittent sounds produce effects while signals are received, but not in the "silence" between pulses.

However, behavioral effects are related to received level rather than cumulative sound energy. That is, behavioral effects last longer than noise exposure. As long as the next pulse is received before behavior returns to normal, the behavioral effects are likely to be independent of the repetition rate and duty cycle, and depend primarily on the duration of the survey.

The exception to this is when masking causes behavioral changes. In this case, reverberation becomes important. Intermittent pulses can result in continuously received noise when sound arrives via multiple paths. That is, sound that bounces between the bottom and the surface will take longer to reach an animal than sound traveling via a direct path. If the range of travel times is longer than the interval between pulses, the sound will effectively be continuous. In fact, noise can mask signals for a brief period before and after it is received, meaning an almost continuous received noise can mask signals continuously.

Another characteristic of pulsed sources is known as the "time-bandwidth" product. That is, any sound with a finite duration (that is, any real-world sound) contains additional frequencies to the nominal frequency. That is, pulsed sources that nominally have a frequency that is low or too high to hear, may, in fact, be audible, as the source may contain other frequencies that are detectable. Similarly, directional sources and arrays produce significant energy in directions other than their primary direction.

Number of Takes

Underestimate of Bowhead Takes

In addition to overestimating the noise threshold for takes, NMFS has underestimated the number of bowheads likely to be taken for two reasons. First, during migration, the number of whales likely to be exposed to noise is higher than during the feeding season. Second, NMFS has used models to estimate density in the Chukchi from data in the Beaufort that underestimate the numbers observed empirically.

Takes during migration versus feeding

When estimating number of takes, it is important to know whether individual whales have little net movement, as would be the case for individuals in a feeding area, or are passing through as would be the case for migratory individuals.

In the case where there is little natural movement, the number of individuals in the ensonified area is an index of the number of takes. Exposed individuals can accumulate noise exposure or move out of the area. A summing optimal foraging, displaced individuals will move to those areas or change feeding behavior or converge with individuals for food in comparable habitat. When competition outside the ensonified area occurs, the fitness of all individuals involved will be reduced, although only those exposed to noise are typically counted as taken.

However, when individuals are migrating through an area, new individuals are exposed to noise as they approach the noise source. Rather than taking density based on density in the ensonified area, it is more appropriate to draw a line across the ensonified area and estimate the number of individuals that would be expected to cross that line during the survey.

For example, Funk et al. (2006) estimated bowhead density at 3 / 100 km² in offshore waters in mid-season. The 120 db contour is at about 23 km, giving a diameter of the ensonified area (661 km²) of about 64 km. Initially, 50 whales would be in the
ensonified area, and this would be an estimate of takes if whales and sound source were relatively stationary.

A 46 km by 4.5 km box (the diameter of the ensonified area by the one hour travel time at a typical migration speed for bowheads reported by Y. Kosi et al. (2002)) on average would contain 6 whales in an area of about 200 km². At a migration speed of 4.5 km/h, it would take an hour for these 6 whales to pass the sound source. In the same time, on average, another 6 whales would enter the area. How many whales would approach the sound source depends on how long the survey operated during the migration. For example, in 24 hours, approximately 144 whales would enter the ensonified area or be deflected to avoid it. In 21 days, over 3,000 individuals (21 days times 144/day) would be exposed. As can be seen, the number of migrating whales exposed is far higher than would be the case if the sound source and whales were relatively stationary. These calculations are not intended to be exact. The longer the overlap between the survey and the migration, the more whales will be taken. The timing of the survey and migration will be important as the average density of bowheads is ten times higher in mid-season than early season (Funk et al. 2006). Location and speed of migration vary from year to year and also will be important. For example, numbers approaching the ensonified area would be highest at the peak of the migration, along the core of the migration route, and when migration speed is high. The numbers used here are well within the range of possibilities and serve to illustrate that far more whales might be exposed during migration than during a feeding season. As noted in the application, whales are expected to be migrating during much of the survey period.

Failure of density models

NMFS modeled takes in the Chukchi in September based on sightings in the Beaufort. However, the model is demonstrably inaccurate based on existing data from the Chukchi. Further, NMFS misinterpreted the data that formed the basis of their extrapolation. NMFS cites three reasons for believing densities would be 20 times lower in the survey area than in the Beaufort in September. First, NMFS claims the migration corridor is narrower in the Beaufort. While this may be true to some degree, this is irrelevant. The reported density for the Beaufort depends on how well the design survey identifies the corridor boundary. Regardless of whether the average density is correctly identified, the density will vary across the corridor. That is, when the corridor widens, the average density will decline, but concentrations may still occur, as appears to be the case for the survey area (see plot in M. Moore et al. 2000).

Second, NMFS maintains that bowheads are more likely to migrate non-stop through the Chukchi, in contrast to the Beaufort where they sometimes linger. As discussed in detail above, this will increase rather than decrease the number of whales taken.

Third, NMFS states that most of the whales will migrate north of the survey area. To the contrary, the survey area is in the center of the migration route. Quakenbush (2007).

NMFS used a second model for estimating upwarp densities. Although no bowheads were sighted in formal surveys in the Chukchi summarized in M. Moore et al. (2000), NMFS calculated density as though one whale was seen. The model performs a little better than the September model. It predicts densities will range from 0.0004 to 0.0008 km⁻². Observed early season densities were 0.00309 (Funk et al. 2006), or about 7.5 times higher than predicted by NMFS.

The reason this model fails is that it assumes only one bowhead was missed. Even if NMFS concluded estimating abundance from missed sightings rather than existing sighting data were the best approach, the assumption of one missed sighting is the worst methodology. Rather, NMFS should identify the lowest density which would result in a small probability that all whales would be missed (scientists typically use 0.05, 0.01, or 0.001 as the definition of a "small probability").

Richardson and Thomson (2002) noted whales might be missed because they are underwater, the whales are at the surface near the track line but are not noticed, and they are at the surface but are hard to see because they are not close enough to be easily seen. Further, sighting conditions such as sea state, glare, etc. can increase the chance that whales will be missed. While these factors can be incorporated in corrections when calculating abundance, adverse sighting conditions reduce the chance that any individuals will be sighted during a survey.

In summary, the models used for estimating bowhead density are based on faulty assumptions and underestimate bowhead density by an order of magnitude.

Underestimate of Effects on Harbor Porpoises

Two main factors have contributed to the underestimate of the effects of the proposed survey on harbor porpoises. First, harbor porpoises are far more easily disturbed by noise than the default marine mammal. Second, it is likely that the affected harbor porpoise stock will be smaller than currently recognized. In addition, it is possible that levels of takes from other sources are higher than currently recognized, and that all our estimates are too low.

As a noted above, Olesiak et al. (2002) found noise from acoustic harassment devices with a source level of 195 dB excluded 95% of harbor porpoises within a radius of 3 km (individuals may have been kept farther away, but porpoises are difficult to see at distances beyond that range), where received levels probably dropped below 135 dB. Behavioral changes, including exclusion from an area, can occur at received levels from 90-110 dB re 1 μPa or lower. Porpoises avoid pingers with source levels of about 130 dB at distances of from 100-1000 m (received levels around 70-90 dB), depending on experience with the noise source and environmental context (Bran 2002a, Ballow and Cameron 1999, Cameron and associates 2001, Geistlin and associates 1996 and 2000, Kastelein and associates 1997, Letcher and associates 1997, 1998, 1999, 2000). A. Alden et al. (1997, 2001) found behavioural responses to even lower levels. That is, porpoises are likely to exhibit short-term (weeks) exclusion to the 70 dB contour, and long-term exclusion to the 90 dB contour (throughout the survey period).

Ireland et al. (2009) reported received levels from 2 to 10 m² and 4 to 10 m² arrays (p. 3-73). They provided equations that fit the data, which allows calculation of received level contours. Takes were calculated based on the location of the 160 dB contour, which occurs at about 750-1250 m depending on array size and propagation conditions.

However, biologically significant behavioral changes can occur at far lower levels. The 90 dB contour will be at 55-60 km, covering an area roughly 2500 times larger than that used for calculating takes. The 70 dB contour would be at 69-90 km, an area roughly 5000-10,000 times the area used to calculate takes.

While it is possible that distance as well as received level should be considered when predicting whether porpoises will avoid a noise source, I have observed harbor porpoises moving away from a large array at a distance of over 60 km (B and Williams 2004), so even though the small arrays are quieter, it is realistic that porpoises will be displaced at tens of kilometers, disrupting feeding behavior.

This sensitivity to noise is compounded by the over-inclusive division of the harbor porpoise population. A. Allen and Wiersma (2001) noted, “in areas outside of A-laska, stocks have shown that stock structure is more fine-scale than is reflected in the A-laska Stock Assessment Reports. At this time, no data are available to reflect stock structure for harbor porpoises in A-laska. Moreover, when comparisons with other regions, smaller stocks are likely. Should new information on harbor porpoise stocks become available, the harbor porpoise Stock Assessment Reports will be updated.” That is, the stock to be affected by the survey is likely to be far smaller than currently recognized. The implication is that the population is far less able to tolerate takes than expected based on the current stock definition.

A further point of concern is that NMFS is reviewing new data on other sources of takes, but will not complete the analysis until next year (A-lan in A-iglis and A-prl.). These data are needed to assess the cumulative effects of the proposed survey and other factors that impact the population.

Finally, the density estimates for harbor porpoises may be low. The values used in the application appear to be based on observer sightings. While efforts were made to equalize data quality (Funk et al. 2006), it is unlikely the data are as reliable as data from dedicated surveys, and small species like harbor porpoises are easily missed.
Impact on Gray Whales

The Chukchi Sea is an important feeding habitat for gray whales. As can be seen in Figure 2, the distance offshore and water depth of the survey area is prime gray whale habitat (Rugh et al. 1999, Moore et al. 2000).

Gray whale movement is known to be affected by noise levels of 120 dB (Richardson et al. 1995), which is far lower than the 160 dB used in calculating takes. The 120 dB contour would occur about 23 km from the survey vessel.

The significance of the survey to the gray whale population depends on its true conservation status. In recent decades, recovery of commercial whaling, gray whales were removed from the endangered species list in 1994, and their population increase has been significant.

This raises the question of whether gray whales should be re-listed as threatened under the Endangered Species Act, since their population has a negative trend and is at a level that was considered threatened even when it is increasing.

One implication of re-listing would be a change in the Recovery Factor for calculating Potential Biological Removal. Using the value for an ESA-listed species would reduce PBR to 42%. Subsistence harvest in Russia alone exceeds this number. Thus, additional threats, such as habitat loss due to disturbance from seismic surveys, would result in further jeopardy to the survival of the species.

Feeding habitat loss due to climate change has been identified as a threat to this species (Ainley and Allen 2009), so habitat loss due to disturbance would be a threat as well. Thus it is clear that a careful evaluation of the status of this species is needed before activities that disturb gray whales are allowed.

Mitigation

A fundamental assumption in noise mitigation is that all animals will move away from the noise source (horizontal avoidance). However, this is not a good assumption. Some species may exhibit vertical avoidance rather than horizontal avoidance (see Williams 1999). Other species may try to find shelter (e.g., rockfish Skalski et al. 1992, Pearson et al. 1992, and killer whales, personal observation). Local minima in the sound field may be found near shore, near the surface, and near the bottom. However, remaining in a sheltered location only provides temporary protection. An additional problem is that many species are sedentary, territorial, or have strong tendencies toward site fidelity (e.g., Eilenhert et al. 2002, Pearson et al. 1992, Skalski et al. 1992). These species are unlikely to move away from a noise source. A related problem is that many predators are used to experiencing pain during feeding, and hence tolerate pain rather than abandon their prey (e.g., many marine mammals involved in fishery-interactions [Reyes et al. 1996, Norberg and Bain 1994, Yane and Dahlem 1995, Whitehead 2003]).

MMs can be helpful. However, their ability to give full attention is limited. A common work schedule where consistent effort is required is 45 minutes on, 45 minutes off (recording rather than observing), 40 minutes on, two hours off (resting), three times a day (e.g., Forney and Barlow 1998, Dahlem and Towell 1994, Barlow and Forney 2007). Thus to have two observers on duty full time, an observation team of six would be required to cover a twelve hour day. Twelve observers would be required to cover a 24 hour period. Further, observers working shifts longer than 40 minutes cannot be expected to have the same sighting efficiency as those working in dedicated surveys, making it questionable to use sighting efficiencies from dedicated surveys to predict effectiveness of MMs, and to use dedicated survey parameters to extrapolate density estimates from MMD data.

Even with well-rested, dedicated observers, on a ship that is frequently outfitted for marine mammal surveys, a high proportion of marine mammals will be missed.
Visibility can further reduce sighting efficiency. Rain, snow, fog, and glare all impair sighting efficiency. Wind (and resulting waves) also impairs the ability to sight animals, particularly small ones (Forney and Barlow 1998). Sightings with the unaided eye become nearly impossible at night (personal observation).

As acknowledged by NMFS, the effectiveness of infra-red or night vision gear in compensating for reduced visibility is limited. A number of technologies are in fact available, including light enhancement, illumination, and thermal infrared. Light enhancement is ineffective in offshore areas, because even with enhancement dark animals do not reflect enough light to be seen (personal observation). Some devices attempt to overcome this through the use of infrared lasers to illuminate the scene. However, high humidity in the marine environment results in backscatter that obscures the view (personal observation). Thermal infrared can result in useful visual detection of marine mammals at night (Perryan et al. 1999, Bain personal observation). However, images need to be sufficiently magnified to distinguish the animal from noise and marine debris, and there also needs to be sufficient resolution to allow animals to be recognized. Existing sensors offer limited numbers of pixels (typically 0.25 - 1% the number offered by digital cameras designed to replace film), and the necessary magnification limits the field of view. As a result, the probability of pointing the device in the right direction while animals are at the surface is small (personal observation). The probability of seeing animals at night is far lower than during the day, even with the best of night vision gear. Nevertheless, thermal infrared imaging (Forney et al. 1998), and is likely to be more effective with large marine mammals like bowheads than small marine mammals like porpoises.

Passive acoustic monitoring is another technique that could be applied, although it is another technique that is likely to have limited effectiveness. Even with vocally active species like sperm (Forney and Barlow 1998) and killer whales (personal observation), all individuals in groups can be silent for hours at a time. Other species are even less likely to vocalize. Further, once noisy operations begin, species may respond by species like sperm (Forney and Barlow 1998) and killer whales (personal observation), like porpoises.

Monitoring

The literature on effects of noise on Arctic marine mammals have produced inconsistent results. This emphasizes the importance of a monitoring program both to measure actual effects and to better relate noise exposure to effects. Important information to gather include: individual identifications of individuals actually exposed to noise, measurement of actual received levels both near the noise source and distant from them, and measurement ofecal stress hormones.

Identification of individuals exposed to noise will allow comparison of population dynamics of exposed and non-exposed individuals. It would also allow identification of individuals repeatedly exposed to noise, both under this IHA and other IHAs in the region.

Limited observations to individuals near the noise source biases results, as data can be collected from exceptionally noise tolerant individuals, but not from individuals that avoid the source at a distance (Bain and Williams 2006). Estimating takes based only on noise tolerant individuals may seriously underestimate the number of individuals taken.

Noise exposure is known to cause stress reactions in captive cetaceans (Romano et al. 2004). Fecal sampling to monitor stress and reproduction has proven a valuable tool for conservation of North Atlantic right whales (Reeves et al. 2001). A trend of hormone profiles can be used to measure psychological stress. Other metabolites can be used to measure nutritional stress. Reproductive hormones can be used to determine reproductive status (Rolland et al. 2006). Combined with re-sightings of these individuals in the subsequent year, this information can be used to assess whether stress from noise exposure lead to reproductive failure.

References


According to NMFS policy guidelines, the marine mammal monitoring prescribed in the terms of either number and types of takes. Thus, the former type of monitoring is used to provide a degree of protection for animals from harm that may lead to a shutdown of an activity if a marine mammal enters a relatively small “safety” zone when mitigation thresholds have been met and appropriate responses must be instigated (e.g., monitoring the least practicable adverse impact, and (2) monitoring and reporting requirements.

Each IHA applicant’s monitoring program should be designed to accomplish one or more of the following:

a) An increase in our understanding of the likely occurrence of marine mammal species in the vicinity of the action, i.e., presence, abundance, distribution, and, or density of species.

b) An increase in our understanding of the nature, scope, or context of the likely exposure of marine mammal species to any of the potential stressors associated with the action (e.g., sound), through better understanding of one or more of the following: 1) the action itself and its environment (e.g., sound source characterization, propagation, and ambient noise levels); 2) the affected species (e.g., life history or dive patterns); 3) the likely co-occurrence of marine mammal species with the action (in whole or part) associated with specific adverse effects, and/or; 4) the likely biological or behavioral context of exposure to the stressor for the marine mammal (e.g., age class of exposed animals or known pupping, calving or feeding areas).

c) An increase in our understanding of how individual marine mammal species respond (behaviorally or physiologically) to the specific stressors associated with the action (in specific contexts, where possible, e.g., at what distance or received level).

d) An increase in our understanding of how anticipated individual responses, to individual stressors or anticipated combinations of stressors, may impact either: (1) the long-term fitness and survival of an individual; or 2) the population, species, or stock (e.g., through effects on annual rates of recruitment or survival).

e) An increase in our understanding of the effectiveness of mitigation and monitoring measures.

f) A better understanding and record of the manner in which the authorized entity complies with the incidental take authorization.

To satisfy the peer-review requirements of section 216.108(d) of the regulations pertaining to issuance of IHA(s), each review panel (hereafter the “panel”) of five scientists and one experienced Inupiat hunter, with diverse backgrounds and familiarity with marine mammal natural history and biology, research, and conservation in the Arctic regions of Alaska. A facilitator with extensive background in Arctic marine mammal science, conservation, and management issues associated with the discussions among the panelists and between the panel and industry representatives. This was the second such panel conducted in conjunction with the Arctic Open Water Meetings to consider the previous and proposed monitoring plans; four members of the panel and the facilitator from 2010 also participated in 2011. On March 9, 2011, panel members reviewed the two IHA applications from Statoil and ION Geophysical and discussed specific recommendations (meeting minutes available upon request). The panel considered how components of monitoring plans applied to all lines of investigation (identifiable in NMFS policy guidelines) were stated above, although expert panels were instructed to focus primarily on deriving a robust estimate of actual takes and enhancing understanding of the potential effects of industry's activities on marine mammals. Panel members did not discuss consensus on specific points, differing perspectives are indicated herein by reference to “some”. The specific guidance given to the panel was as follows:

- Each IHA applicant’s monitoring program should be designed to accomplish one or more of the following:
  - Document or estimate the actual level of take as a result of the action (in this case, seismic or other specified activity) through better understanding of one or more of the following: 1) the action itself and its environment (e.g., sound source characterization, propagation, and ambient noise levels); 2) the affected species (e.g., life history or dive patterns); 3) the likely co-occurrence of marine mammal species with the action (in whole or part) associated with specific adverse effects, and/or; 4) the likely biological or behavioral context of exposure to the stressor for the marine mammal (e.g., age class of exposed animals or known pupping, calving or feeding areas).
  - An increase in our understanding of how individual marine mammal species respond (behaviorally or physiologically) to the specific stressors associated with the action (in specific contexts, where possible, e.g., at what distance or received level).
  - An increase in our understanding of how anticipated individual responses, to individual stressors or anticipated combinations of stressors, may impact either: (1) the long-term fitness and survival of an individual; or 2) the population, species, or stock (e.g., through effects on annual rates of recruitment or survival).
  - An increase in our understanding of the effectiveness of mitigation and monitoring measures.
  - A better understanding and record of the manner in which the authorized entity complies with the incidental take authorization.

Peering Review Panel Report

2011 Peer Review Panel Report

Page 2

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This report documents the panel’s evaluation of Statoil’s and ION’s proposed monitoring plans for 2011 and provides recommendations for improvements that could be enacted for operations conducted within two timeframes: at or before 2011; or in the near future, possibly with intermediate steps before complete compliance. Specific recommendations are mentioned consistently throughout this report.

3. RESULTS OF 2010 REVIEW PANEL REPORT

The panel reviewed a report from staff of NMFS’ Office of Protected Resources on the implementation of the recommendations from the 2010 panel. OPR reported that while the primary purpose of the review was to provide an assessment of the monitoring plans for the year 2010, the 2010 panel report is publicly available on the OPR website. The recommendations from the 2010 panel were discussed within OPR and the NMFS Alaska Regional Office. A critical finding was that Statoil and ION need to make specific changes to their respective monitoring plans as a result of comments by the panel. The letter from OPR included requirements that new recommendations from NMFS have to be implemented by companies to implement in the 2011 monitoring plans for their (HAs) and (2) improvements in monitoring plans they should consider implementing in 2011 and beyond. OPR staff held conferences with company representatives to make sure they understood the new recommendations and requirements.

The panel noted the following recommendations to improve the monitoring of marine mammals during operations in 2010:

- All companies need to have a strategy to incorporate some of these recommendations into their monitoring plans.
- NMFS should require companies to share raw data from their monitoring plans upon request.
- OPR also requested that companies share raw data from their monitoring plans upon request.

The panel noted that the monitoring plans often lacked detailed information about the observers’ abilities to identify species.

4. GENERAL RECOMMENDATIONS AND COMMENTS

Some of the 2010 panel recommendations were not widely or widely and/or long term than a single company’s monitoring plan or activities. These recommendations encouraged NMFS and all stakeholders to take a more comprehensive view of increasing development in the Arctic. In addition, to further the single observation approach that has historically been applied. Panel members encouraged the agency to incorporate some of these more programmatic recommendations regarding consideration of the concept of acoustic “habitats” and aggregate/cumulative evaluations of multiple types of human activities within the NMMA compliance assessments being developed for Arctic exploration and production activities (see recommendation 12.11 of this report). Within this process, NMFS should recognize the importance of the acoustic habitat for basic life functions in marine mammals and other marine life and establish management processes to protect not only individual animals but the overall acoustic habitat.

Over the course of the panel, recommendations were frequently made on general recommendations and comments that had previously been raised in the 2010 panel report. Section 3.10 of the 2010 meeting is incorporated here by reference in Appendix A for a summary of the recommendations from the 2010 panel, with updates as discussed below.

4.1 Acoustic Effects of Oil and Gas Exploration - Assessment and Mitigation

As identified in the 2010 panel report, the potential environmental impacts of noises produced by exploration and production activities include both small-scale, short-term effects (i.e., acute), and large-scale, long-term influences (see Southall et al., 2007) and the physics governing underwater sound production.

NMFS should provide companies with explicit information about what acoustic aspects of their activities need to be detailed in their IHA applications and incorporated into take estimates.

The probability of behavioural impact from specific activities should be assessed based on the methodology described in the previous year’s panel recommendations. These should be highlighted in the next year’s panel recommendations. The level of potential impacts is expressed through the use of a tool called the “Acoustic Impact Reporting System” (AIRS). This tool is currently being used by NMFS and other agencies to assess the potential impacts of human activities on marine mammals, including oil and gas exploration and production activities in the Arctic.

4.2 Aerial Surveys

Panel members spent minimal time discussing aerial surveys because neither proposed 2011 monitoring plans included aerial surveys. Nevertheless, it is important to note that the use of aerial surveys is limited to specific situations and the results of these surveys need to be interpreted with caution. The use of airborne surveys is recommended for situations where ground surveys are not possible or where the results of ground surveys are inconclusive.

4.3 Marine Mammal Observers

Panel members specifically highlighted a few issues regarding marine mammal observers identified in the 2010 panel report. These issues include the importance of having observers that are independent from industry, and the need for a tool to assess the observers’ abilities to identify species. There is also a need for an independent data set of observers to identify problems from the previous monitoring efforts and to recommend improvements for future efforts.

Significant concerns remain that the observers for the oil and gas industry are not independent from industry, and the need for a tool to assess the observers’ abilities to identify species. There is also a need for an independent data set of observers to identify problems from the previous monitoring efforts and to recommend improvements for future efforts.

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observers should pass an identification test, using material that is different than what was used during training, before beginning stints as Arctic MMOs.

The 2010 panel recommended that MMOs should provide more detailed analyses of marine mammals that were not identified as specified in the monitoring forms. The 2010 panel recommended that MMOs should provide more detailed analyses of marine mammals that were not identified as specified in the monitoring forms.

4.8 DUPLICATION OF SEISMIC SURVEY EFFORT

Section 3.8 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.9 VIABLE FIELD-FAR-MONITORING

Section 3.5 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.10 BASELINE BIOLOGICAL AND ENVIRONMENTAL INFORMATION

Section 3.6 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.7 COMPREHENSIVE ECOSYSTEM ASSESSMENTS AND CUMULATIVE IMPACTS

The 2010 panel report included a section regarding the need for more robust and comprehensive means of assessing the collective or cumulative impact of many of the varied human activities that contribute noise into the Arctic environment (see Section 4.1 above). The essence of those observations was that for many species, sounds generated by human activities overlapped with the sounds used by the marine mammals, and the potential impacts from these human activities should be determined not by each activity in isolation, but rather by the cumulative effects from the suite of human activities and events. The 2010 panel suggested that, in addition to the mitigation of monitoring and monitoring of single activities, as occurs with IHA or LOA applications, NMFS should develop a framework for assessing, and requiring steps to minimize, the collective or cumulative impacts of many of the varied human activities that contribute noise into the Arctic environment.

The panel also asked each company's representatives if they had recommendations for improving the peer-review process. When monitoring plans were first peer-reviewed in the late 1990s, the process involved more of a dialog about how to modify monitoring plans and data formats are needed to increase the statistical power to assess potential effects.
Alaska Wilderness League et al., – Fourteen Environmental Organizations Comments

prepare additional materials, if necessary, based on comments received during the public meetings. This is in contrast to some suggestions made at the Open Water Meeting to schedule the panel’s meetings with industry prior to the public meetings. Stabi also suggested that it might be helpful to hold a panel session, during which each activity could be displayed and people could ask questions.

Recommendations

(17) The 2011 public Open Water Meeting was 2 days long. This was sufficient time for the companies to present a brief overview of the previous year’s activities and the upcoming season’s planned activities, for and for the companies and the regulatory agencies to receive stakeholder input.

(18) During the 2012 Open Water Meeting, additional time should be devoted to presentations and discussions of the impacts (or lack thereof) of exploration and production activities on marine mammals and the valuation of noise exposure, density, and movements of marine mammals in the Arctic that have resulted from the cumulative body of research that industry has conducted in the Beaufort and Chukchi Seas from 2006 to the present, or since 2000 for monitoring activities at Northstar production site in the Beaufort Sea.

(19) The panel meeting should accommodate more time for discussion with the company representatives.

(20) NMFS and the panel should provide key questions to the companies before meeting with the panel in future years. This will be particularly helpful if the panel has technical questions about the monitoring plans that are best answered by specific technical staff who might not have been present at the panel meeting.

(21) NMFS should provide explicit guidelines to the companies regarding what details should be included in the written monitoring plans and presented to the public during the Open Water Meeting.

(22) NMFS should consider implementing a requirement to have IHA applications submitted by November 1, thereby allowing review of plans prior to March. This would allow both NMFS and industry more time to review and adjust plans prior to the scheduled start of activities.

(23) NMFS should encourage companies to present an overview of activities planned further than one year into the future, if known.

(24) NMFS should compile and provide a summary table detailing both the authorized and actual estimated takes for the previous year, and the proposed takes for the upcoming season. NMFS should explain how these estimates relate to “small numbers” of individuals being affected by the permitted or proposed activities.

(25) NMFS should develop a specific template that the panel will use to assess specific questions about the efficacy and design of monitoring programs for upcoming and future open water seasons. The panel may help to minimize impacts on the subsistence harvest, particularly during crew transfers at villages (e.g., Wainwright) by obtaining updated and the vessel. The vessel-based monitoring program may help to minimize impacts on the subsistence users.

5.2 1ON Geophysical

5.2.1 Are the applicant’s stated objectives the most useful for understanding impacts on marine mammals and otherwise accomplishing the goals stated in the paragraph above?

See section 5.2.2, below.

5.2.2 Are the applicant’s stated objectives able to be achieved based on the methods described in the plan?

The panelists considered whether the objectives of the monitoring program were “useful” (question from section 5.2.1 above) and simultaneously discussed whether they could be achieved based on the methods described. In general, the panelists thought that the objectives were useful for addressing the impacts on marine mammals. However, one major shortcoming was there were no objectives focused on understanding how marine mammals would be impacted beyond the immediate line of sight of vessel-based marine mammal observers and the known hazard survey are relatively powerful and operate in the acoustic band of many if not most marine mammals; members of the panel particularly noted the sub-bottom profiler as a concern. To date, NMFS has not required the companies to include these types of sources in their monitoring plans; thus Stabi did not predict takes nor how they use the effective mitigation zones that incorporate these other acoustic sources during operations. While they are not explicitly required in this regard, the panel notes that the objectives for mitigation and monitoring are incomplete without considering all elements of an activity with the potential to disturb or harm marine mammals.

Nevertheless, for the stated objectives, the panel generally thought that the specified monitoring plan would be generally effective.

Objective: Provide the basis for real-time mitigation, if necessary, as required by the various permits that Stabi holds. Panel members generally agreed that this objective could be achieved within the 2011 IHA limits. Stabi could not, however, be required to do more than “reasonable steps” to ensure that takes do not exceed the 2011 IHA limits. The panel generally agreed that this objective could be largely achieved, but only within visual sighting distance of the observers on the vessels, which might not be representative of the occurrence, distribution and activities of all animals that could potentially be affected by the activity. Panel members generally agreed that the temporary exclusion zones would be effective in preventing harm and would not allow the activity to proceed in areas where it might otherwise have occurred.

Objective: Provide the basis for new real-time monitoring if necessary, as required by the various permits that Stabi holds. Panel members generally agreed that this objective could not be achieved due to the proximity of the activities (and hence the noise), the ongoing activities in the Beaufort Sea. The panel noted that it was also unlikely to be achieved due to the survey vessel’s noise level, which was low enough to prevent any identification of the vessel itself.

Objective: Provide the basis for new real-time monitoring if necessary, as required by the various permits that Stabi holds. Panel members generally agreed that this objective could not be achieved due to the proximity of the activities (and hence the noise), the ongoing activities in the Beaufort Sea. The panel noted that it was also unlikely to be achieved due to the survey vessel’s noise level, which was low enough to prevent any identification of the vessel itself.
2.3 Are there other techniques not proposed by the applicant, or modifications to the techniques proposed by the applicant, that should be considered for inclusion in the applicant’s monitoring program to better accomplish the goals stated above?

ION should deploy overwintering acoustic recorders within their survey area during their eastward transit across the Alaskan Bight to the Canadian Beaufort Sea early in the summer. The recorders would monitor sounds during the summer, the autumn, and the winter. ION should contract someone to return in 2012 to retrieve the instruments and analyze the data. These acoustic data would provide some baseline information to compare the occurrence, distribution, and behavior of marine mammals at times when ION’s activities are occurring. To accomplish this, ION should prepare a plan for an acoustic monitoring program to be an independent expert panel for review. The plan should consider the best place of the instruments relative to ION’s proposed activities, the expected distribution and gradients in marine mammal distribution, and the existing overwintering recorders. There are relatively few data on the distribution and relative abundance of marine mammals in the Beaufort Sea during ION’s planned seismic survey. Additional information is needed. Therefore, some panel members thought that ION should conduct aerial surveys in the proposed survey area in October, when there is sufficient daylight to effectively conduct a visual survey, and when belugas, seals, polar bears, and bowheads will likely still be in the area.

ION should also consider changing the survey design to minimize the likelihood of affecting the autumn subsistence whaling and hunting activities. If the western transect lines are critically important to survey, the number of individuals taken by a particular activity).

...
has not been successfully used for determining the exact locations of animals relative to safety zones, but further development of passive acoustic technology may facilitate such uses in the foreseeable future.

4.3 Industry should avoid the use of "sampling" the visual near-field area periodically and then extrapolating to the full survey period. This approach has severe shortcomings and could lead to biased results and conclusions regarding the effects of industry activities.

4.4 To help evaluate the utility of ramp-up procedures, NMFS should require observers to record, analyze, and report their observations during any ramp-up period. NMFS also should support specific studies using multiple types of monitoring (visual, acoustic, tagging) to evaluate how marine mammals respond to increasing receipted sound levels. Such information should provide useful evidence as to whether ramp-up procedures are an effective form of mitigation.

5.0 Visual far-field monitoring

5.1 Marine mammal observers should carefully document visibility during observation periods so that total estimates of take can be corrected accurately.

5.2 Aerial surveys should be used whenever possible to supplement the monitoring effort in areas not visible to observers on vessels.

5.3 Alternative methods should be developed to improve monitoring of the visual far-field. In this regard, the most promising method is passive acoustic monitoring. A critique of acoustic monitoring may also be useful under certain circumstances (i.e., when the risk of injury to animals is high), but it is itself a source of additional noise and is therefore a less desirable method of monitoring.

6.0 Baseline Biological and Environmental Information

6.1 NMFS and the Minerals Management Service (now BOEM RE) should work with the industry to develop more rigorous, longer-term research methods for collecting baseline information before activities occur.

7.0 Comprehensive Ecosystem Assessments and Cumulative Impacts

The following is a list of "basic tasks" that the industry, federal agencies, Alaska Native organizations, conservation organizations, and other interested parties could undertake to promote more comprehensive ecosystem assessments:

7.1 Emphasize multidisciplinary studies that integrate physical, chemical, and biological measurements to assess human influences throughout marine ecosystems.

7.2 Incorporate data collected using all reliable methods and from all pertinent sources, including broad ecosystem studies, more narrowly targeted research, and other activities (e.g., commercial, military) that may have ecosystem effects. These data streams should be integrated spatially and temporally to provide a more comprehensive assessment of the ecosystem.

7.3 Archive all collected data in standardized databases for sharing among scientific disciplines.

7.4 Maintain and make available detailed logs of all activities in the Beaufort and Chukchi area (e.g., oil and gas, shipping, fishing, scientific cruises, use of ice breakers).

7.5 Develop and implement policies and means for sharing data and ensuring that the research community has access to the information needed to conduct more integrated, comprehensive ecosystem assessments.

March 27, 2009

John Goff
Regional Director
Minerals Management Service
Alaska Oyster Contiguous Shelf Region
3801 Constantinople Drive, Suite 500
Anchorage, AK 99503-5823

Subject: Minerals Management Service (MMS) Draft Environmental Impact Statement (DEIS) for the Beaufort Sea and Chukchi Sea Planning Areas - Oil and Gas Lease Sales 209, 215, 217, and 221.

Dear Mr. Goff:

Thank you for soliciting comments on the DEIS for this proposed multi-sale action. The National Marine Fisheries Service (NMFS) has reviewed the subject DEIS and offers the following comments. The DEIS analyzes four Lease Sales (209, 215, 217, and 221) proposed in the Beaufort and Chukchi Seas in 2010-2012. Supplemental DEISs may be prepared for Lease Sales 217 and 221. NMFS proposes to offer the entire program area for lease in both regions (Alternative II - All Areas Open). Below, NMFS offers general specific comments for endangered species, marine mammals, commercial fisheries, and fish habitat.

General Comments

We remain particularly concerned over the individual and cumulative effects of oil and gas activities on the Western Arctic population of bowhead whales. The NMFS has responded to these concerns in its environmental studies program, researching many issues and providing decision makers with important data.

One of the most contentious and potentially harmful activities associated with leasing of the OCS is the introduction of underwater noise to the environment. As noted in the DEIS, marine mammals are sensitive to noise and prone to disturbances by human activities. The noise generated by the proposed exploration and development activities (e.g., seismic surveys, icebreakers, airplanes, helicopters, drilling operations and support vessels) has the potential to cause serious impacts to marine mammals. High levels of noise can result in temporary or permanent hearing damage. Even low levels of noise can disrupt biological processes such as nursing, resting or feeding or result in disturbance events. Long term or repeated disturbances and interactions may displace marine mammals from preferred forage areas and migratory routes with potential consequences to animal fitness and reproduction.

Marine mammal species are also a resource of enormous cultural and economic importance to coastal communities in Alaska. The proposed activities described in the DEIS have the potential to disrupt or interfere with subsistence hunting activities in communities bordering the proposed lease sale areas. Any impacts to marine mammal populations or alteration of migratory pathways could have significant consequences for subsistence harvesters across Alaska.

Although the DEIS fails to take a hard look at the impacts that oil field development in important habitat areas of the Beaufort and Chukchi Seas might have on marine mammal
populations and subsistence hunters. For example, displacement of bowhead whales or heightened sensitivity to noise may adversely impact traditional subsistence use of these whales by Alaska Natives. We believe repeated exposure of migrating bowhead whales to noise sources may be an example of syndromic impact. While whales may avoid a sound source by moving further offshore before resuming their normal course, and may make such avoidance movements around several sources (additive impact), there may be a point at which the whales remain offshore after exposure to multiple sources, even though the source is no longer present. Given the many potential noise sources associated with exploration, development, and production on the OCS, Alaska Native and scientific concerns over potential impacts and their possible causes should be addressed in the DEIS (p. 4-181) where it says, “we caution against over interpretation of these data out of context of survey effort, because these Chukchi Sea data were collected between 1979 and 1993, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales.”

P. 4-79, “very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them.” Such data gaps are clearly a hindrance to MMS’s ability to prescribe specific mitigation measures for future exploration and development plans or permits. Without detailed knowledge at what and where marine mammals are likely to be distributed, it will be very difficult to determine what level of interactions are likely to occur, or what the magnitude of potential impacts might be. As a result, it is critical that MMS and its subject matter experts, who are most familiar with the proposed action, present a thorough biological significance of exposure to various levels of both continuous and impulsive oil and gas sounds. Audiometric data, including threshold shifts and recovery for the dominant marine mammal species in each region, should be included in the potential impacts analysis of MMS’s proposed action, and the actions proposed to mitigate potential adverse effects resulting from it. Based on this knowledge, the MMS should propose and evaluate a suite of specific mitigation measures to address potential impacts, rather than defer that mitigation analysis to subsequent actions by MMS and FWS at some point in the future. The DEIS does not meet this standard.

As noted in the DEIS, projected sea ice changes are expected to present some significant adaptive challenges for marine mammal populations in the near future. For example, in 2008 the Andvord Bay bowhead whales were displaced from their traditional summer range off the coast of Alaska (p. 4-657, 4-658). This is an issue of serious concern to NMFS; consequently we would like a detailed explanation of the discrepancy in this respect in the DEIS.

The DEIS should acknowledge that the uncertain status and trend of the marine mammal populations inhabiting the proposed lease sale areas will make it difficult to detect and quantify any population level effects from the proposed actions. The lack of information on population size and trend will also make it difficult to estimate the impacts and effects of proposed activities. The distribution and habitat use patterns of marine mammals within the proposed lease sale areas are only generally known and may be subject to change in the foreseeable future, due to changing habitat conditions. Information regarding preferred migratory routes and the identification and delineation of important forage areas are necessary to evaluate potential effects of proposed activities on individuals and populations. We recommend that MMS give high priority to addressing these information needs through its Environmental Studies Program. Until such time as these information needs can be addressed through research and monitoring, we recommend MMS proceed cautiously with long term lease sales to ensure no adverse impacts to marine mammals or important habitat. The impacts to marine mammals are not readily available, the MMS must give a more thorough explanation in the DEIS of how, in light of these data, it will determine that this action would not cause significant impacts to marine mammals and the communities that hunt them.

P. 4-187 refers to sections of the DEIS that do not exist: “activities noted in Sections 4.4.1.8.1.2, 4.4.1.8.3.2.4. The DEIS should be greatly improved if such sections are consistently addressed in the DEIS and the information necessary to either support or refute the potential impacts to marine mammals and their habitat from such activities is available. The DEIS should address these concerns in the DEIS through the proposal and analysis of specific mitigation measures designed to address such potential impacts. The DEIS contains many statements to this effect, and some of these data gaps are striking given the ecological, social, and cultural importance of the marine mammals in question.

For example:

- P. 3-76, “recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are insufficient to be conclusive; studies are under way to further define use patterns.”

- P. 3-81, “we caution against over interpretation of these data out of context of survey effort, because these Chukchi Sea data were collected between 1979 and 1993, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales.”

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activities in these blocks for the remainder of the 2007-2012 5-Year Program period. Why does this reduction in impacts only last for a 5-year period? Why not for the life of the leases?

- Citations and rationale for concisely stated are largely lacking throughout the marine mammal sections, particularly for the Chukchi Sea. For example, in the 193 EIS, the MMS noted that there are difficulties in effective oil-spill response in oil-degraded ice conditions. The MMS advocates the use of nonmechanical methods of spill response, such as in situ burning, during periods when broken ice would hamper an effective mechanical response. In situ burning has the potential to rapidly remove large quantities of oil and can be employed when broken-ice conditions may preclude mechanical response. However, there is a limited window of opportunity (or time period of effectiveness) to conduct successful burn operations. The type of oil, prevailing weather and environmental conditions, and the oil's properties for the oil to emulsify defines that window. Once spilled, oil begins to form emulsions. When water content exceeds 25% most slicks are unignitable.

- We request this reason for this be further explained. For the purposes of mitigating potential impacts to subsistence practices, we also request that this alternative be included and analyzed as an alternative to the Proposed Action. A detailed analysis of the potential impacts to the proposed alternative is needed.

As written, the DEIS seems to intend that the alternatives presented are mutually exclusive. In other words, no alternative includes all three Beaufort Sea whaling and the Beaufort Sea migration into the Chukchi Sea. The spring lead system is one of the most sensitive marine systems, and the presence of bowhead whales in the area could provide critical habitat for the species. We request the DEIS provide a more detailed analysis of the potential impacts of each alternative to subsistence practices.

On p. 4-66, the DEIS notes that the proposed action (Alternative II) will help reduce potential conflicts between bowhead whale subsistence hunters and offshore oil and gas operations, and was ultimately selected as the preferred alternative. In the absence of other alternatives to consider, we recommend combining Alternative I with Alternative V, the Developing Oil-Gas Activities on the North Slope, as this alternative includes the development of oil and gas activities in the Chukchi Sea and the Beaufort Sea. We request the DEIS provide a more detailed analysis of the potential impacts of this alternative to subsistence practices.

On p. 4-24, the DEIS suggests tracking an oil spill can be accomplished through the use of FLIR. The DEIS should explicitly state that this technology is largely inadequate for tracking an oil spill, as oil tends to form emulsions, becomes dispersed, and is affected by ambient temperatures. That would not be a good idea in the arctic environment, and therefore is not really a useful tool for tracking and responding to an oil spill.

On p. 4-39, the DEIS states that oil spill response equipment dedicated to oil-industry spill response on the North Slope is located primarily in Deadhorse. This is inadequate for responding to potential oil spills in the Chukchi Sea, due to the distances involved and the complications resulting from unpredictable weather conditions across the North Slope. We request the DEIS provide a more detailed analysis of the potential impacts of this alternative to subsistence practices.

Future areas in the Beaufort Sea previously were recommended for deferral during scoping for the 2003 Beaufort MMS EIS. The same area was also recommended for deferral during scoping for this DEIS. However, this alternative (termed the Large Bowhead Whaling Deferral A in the Beaufort Sea) in the 193 EIS) was considered, but not included in this DEIS for further analysis, without explanation. We request this reason for this be further explained. For the purposes of mitigating potential impacts to subsistence practices, we also request that this alternative be included and analyzed as an alternative to the Proposed Action. A detailed analysis of the potential impacts to the proposed alternative is needed.

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Sea Lease Sale 193 deferred leasing of near shore blocks, in part, to minimize potential impacts to subsistence hunting of marine mammals near coastal communities. The DEIS provides no compelling information suggesting that the concerns of the subsistence hunting communities have been addressed, or that any evaluation of existing mitigation measures to mitigate impacts to subsistence uses has been undertaken. Indeed, much of the public record contained in the DEIS indicates that these concerns persist and that ongoing exploration activities in the region may be impacting subsistence hunting near the communities. As noted above, we recommend that MMS defer leasing in the coastal zone, particularly near subsistence communities, until adequate mitigation standards have been developed to address concerns about impacts to subsistence hunting. Further, we recommend that MMS prepare a NTL advising that MMS take no authorization may not be possible in biologically sensitive regions or in areas important for subsistence hunting of marine mammals.

Cumulative Impacts

The DEIS should present an expanded discussion of oil and gas activities within the Canadian Beaufort, particularly off the Mc-Enroe delta, as well as vessel movement into and out of Canadian waters necessary to support activities within the Alaskan OCS region. Cumulative impacts associated with activities in Canadian waters would present several concerns with respect to bowhead whales and subsistence hunting, especially as late season traffic in the eastern Beaufort Sea would be most likely to encounter and harass these whales.

Mitigation

The EIS states that “the analyses in this EIS also consider that mitigation that is proposed as part of the proposed actions is likely to reduce or eliminate all or parts of the potential adverse effects.” However, from the text of the analyses, it is not clear what this was accomplished. Rather, MMS seems to have reverted to conclusory statements that mitigation will be effective in place of explaining and analyzing how, in fact, mitigation measures will reduce or eliminate adverse effects. In order to be effective, a mitigation measure must be supported by analytical data demonstrating why it will constitute an adequate buffer against the negative impacts that may result from the authorized activity. Stakeholders need to be able to review, in advance, how specific measures will mitigate potential impacts to the environment. In order to rely on mitigation to obviate further analyses, the measure must be identified and its effectiveness analyzed. For example:

- Throughout document, “mitigation” is cited that would “avoid or minimize” adverse effects, yet the “mitigation” is rarely specified, analyzed, or described provided on how the “mitigation” would in fact mitigate potential effects.

- On p. 3-13, the DEIS says the lease blocks are within OCS production facilities within a 10-mi radius shoreward of Cross Island was considered but not incorporated into this action. The objective is to ensure that OCS development in that area did not preclude reasonable subsistence access. The DEIS states that “the measure concluded that the stipulation would provide for little protection of subsistence hunting activities” and was not included for further analysis. What was the analysis that was conducted of this measure which contradicted MMS’s previous inclusion of this stipulation as mitigation in its NEPA documents?

- Mitigation measures that avoid or minimize the footprint of multiple activities relative one another and to the bowhead whale and other endangered whale and other biologically sensitive areas, activities, movement, and subsistence hunts. A similar statement is made on p. 4-79. What are the specific mitigation measures being referred to, and what analysis has been conducted to reach the conclusion that there will be no effect to bowhead whale migration and subsistence? F-4-459, “Depending on where discovery and production activities occur, MMS proposes mitigation measures to ensure that movement into harvest areas, subsistence hunting activities, and opportunity to harvest bowhead whales are not impeded or enhanced by OCS activities. The OCS activities are not anticipated to alter the subsistence harvest or the vulnerability of bowhead whales to harvest.” A gain, what are the specific mitigation measures being referred to, and what analysis has been conducted to reach the conclusion that there will be no effect to bowhead whale migration and subsistence? F-4-459, “Depending on where discovery and production activities occur, MMS proposes mitigation measures to ensure that movement into harvest areas, subsistence hunting activities, and opportunity to harvest bowhead whales are not impeded or enhanced by OCS activities. The OCS activities are not anticipated to alter the subsistence harvest or the vulnerability of bowhead whales to harvest.”

- On p. 4-484 and p. 7-494, in 2008, NMFS, MMS, and FWS successfully worked to get the run off of this system. We feel the continued implementation and improvement of this system would greatly enhance the ability to manage the synergistic effects of multiple OCS activities that may occur simultaneously and in proximity to one another.

- P-4-500, “The potential effects from MMS-authorized activities would be moderated by the mitigation and monitoring measures (NTLs and ITLs) listed in Appendix F.” However, ITLs are not listed in Appendix F of the DEIS.

- P-4-500, “Any MMS-authorized activities would be in addition to those mandated under an IHA or LOA. No specific mitigation is identified, or analyzed in the context of the proposed action and its potential effects.

In short, mitigation measures alluded to in the DEIS for the subsistence use of marine mammals are inadequate. The result is that MMS has failed to take a hard look at the potential effects of OCS activities on subsistence hunting. The document frequently references further mitigation measures to be addressed at a later date by NMFS and USFWS through the MPA authorization process to help mitigate impacts to subsistence hunters. However, these mitigation measures are not explicitly identified in this document and, consequently, cannot be evaluated. Therefore, MMS abdicates its responsibility for analyzing the effects on subsistence practices by leaving it up to other parties to mitigate the impacts, outside of the NEPA process. In order to rely on mitigation measures to obviate further analysis of impacts to hunters, MMS needs to identify the specific measures and analyze their effectiveness at mitigating potential impacts. Only a carefully constructed and monitored mitigation plan is likely to address potential impacts to subsistence hunting, and these mitigation needs to be detailed in DEIS to evaluate its efficacy at mitigating potential effects.

Following are some recommendations to mitigate the impacts of proposed activities on marine mammals and subsistence practices. These recommendations are by no means comprehensive. In order to reduce the impacts of multiple concurrent exploration projects in biologically sensitive regions, we recommend MMS: (1) consolidate support operations to the greatest extent possible; for example, are support operations to reduce the number of boats and aircraft operating in an area, (2) fund research on suppression of high-frequency noise and other methods of noise reduction, (3) review future exploration and development plans with NMFS and subsistence hunting organizations regarding the timing and location of subsistence operations to ensure the least practicable impact to marine mammals and subsistence activities,
The DEIS begins to discuss mitigation measures in Section 2.2, however the discussion is basically a regulatory overview; no specific mitigation measures are offered. Further, specific mitigation measures by alternative do not offer any specific measures to avoid, reduce, or mitigate for adverse effects. Section 4.4.2.5.2. offers three primary mitigation measures “to avoid or minimize adverse effects to EHH”. A gain, the discussion conflicts with the previously stated minor effect determination. More importantly, the first mitigation measure notes seismic operations would not occur in Lekeday Bay Critical Habitat. While critical habitat is important to discuss, this designation has no relationship to EHH and any adverse effects. The remaining two measures are also specific to seismic operations. MMS offers a reduction of effect may occur from not operating adjacently and simultaneously, however, little if any conservation benefit could be really be measured. NMFS asks what would be the measure of effect.

The MSA defines the term oil to mean any kind of mineral oil, as well as any mixture of such oils that are not greater than five percent by volume with any mineral, synthetic, or natural substance. This definition is important to consider because Section 4.4.2.3 of the DEIS summarizes affects from oil exploration and development activities on lower trophic marine organisms. Many of these living organisms are EHH species or prey of EHH species. Specifically, this section details potential discharge wastewater potentials and describes effects to keep communities from seismic cables.

MMS offers that many unknown areas are affected by seismic cable laying operations. Limited data exists to determine how rare these areas are. It is common consensus is that these living substrates are sensitive, ecologically significant, provide critical habitat, and are not abundant. In summer 2008, Arctic seismic cable laying and retrieval operations encountered kelp habitats (MMS Staff contacted NMFS staff). Using that lease sale’s mitigation measures, these operations were to avoid or modify operations should activities contact unique, biologically significant habitats or areas deserving protection. Kelp densities these considered. Organisms were released wholly or partially back into the marine environment. However, MMS has not demonstrated that these operations were not drastically modified nor what avoidance measures used.

Foremost, conservation measures should offer to avoid sensitive habitats. MMS likely has the information to demonstrate a better knowledge of these areas and offer measures to avoid them. Seismic vesicles are some of the most state-of-the-art vessels in the marine industry. There mission is to identify seaweed substrates and beyond. MMS likely has the experience to pre-survey areas for concentrations of living substrates and avoid these areas entirely.

DEIS Figure 3.2.1-4 depicts seismic transect coverage throughout the planning areas and the overlapping of transects is several times over one another. Information is also somewhat limited, because even more data has been collected than is shown. Additionally, recent transect data are not available for public release. MMS likely understands why all levels of information are proprietary, when it is rather obvious the entire area has been covered and some usable data are not available for public release. NMFS fails to understand why all levels of information are limited, because even more data has been collected than is shown. Additionally, recent transect information to demonstrate a better knowledge of these areas and offer measures to avoid sensitive habitats. However, MMS likely has the experience to pre-survey areas for concentrations of sensitive habitats and avoid these areas entirely.

As a result, our comments are highly critical: the DEIS does not provide the level of detail needed to adequately evaluate the environmental impacts of seismic exploration and potential offshore oil and gas development.

The stakes are high to the marine and coastal environment with chances of a major spill (>1000 bbl) from the drill platforms or pipelines as a result of Chukchi Sea Lease 193, as the original FEIS noted. 2

However, the impacts of blowout spills were not analyzed originally in the Final EIS from June 2007 which said “we consider blowouts to be unlikely events.” MMS still did not consider the impacts of blowout spills in its Sept 2010 revision released after the Deepwater Horizon spill.

This new revised draft SEIS does disclose that drilling in the Chukchi Sea could result in a Very Large Oil spill – like last year’s Deepwater Horizon and that it could have significant effects on essential fish habitat for Arctic cod, saffron cod and all 5 species of Pacific salmon, polar bears, birds, bowhead, fin and humpback whales, and subsistence by coastal communities. Yet, the analysis of environmental impact – especially cumulative impact of spills – remains inadequate.

The Northern Alaska Environmental Center joined with Native Village of Point Hope and other Alaska Native communities in the legal challenge to this lease sale due to a number of concerns, especially the lack of an adequate scientific underpinning of the decision to lease millions of acres across the Chukchi Sea for the first time since 1990 and the agency’s common sense in its consideration of the daunting risks of an oil spill.

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The Arctic serves as the air conditioner to the world, affecting climate and oceans at the global scale, and that melting sea ice from the most rapid warming anywhere has introduced great uncertainty into future plans.

We note that half of the public hearing testimony given at the Fairbanks public hearing on the revised draft SEIS opposed the proposed lease sale and Chukchi Sea offshore drilling and raised concerns about the risks of disastrous spills to sensitive environment. 2

We are at this juncture to provide public review of the revised draft SEIS because of the federal government’s failures, not just once but three times to provide an adequate scientific analysis of the impacts of offshore oil and natural gas development and a failure to apply common sense to the risks of major oil spills in the Chukchi Sea that cannot be cleaned up in broken ice and extreme conditions that exist most of the year. During this time BP’s Deepwater Horizon offshore oil spill blowout took place. Even though this time BOEMRE has finally acknowledged significant impacts from a blowout or very large oil spill, the decisions still have not changed.

This revised draft SEIS is a hard-won step in light of the poor and rushed lease sale by the Bush Administration that was found to be legally deficient. The Northern Alaska Environmental Center joined with Native Village of Point Hope and other Alaska Native communities in the legal challenge to this lease sale due to a number of concerns, especially the lack of an adequate scientific underpinning of the decision to lease millions of acres across the Chukchi Sea for the first time since 1990 and the agency’s common sense in its consideration of the daunting risks of an oil spill.

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The Very Large Oil Spill trajectory analysis, like all of MMS’s prior presentations of information, still relies on the work done for the original EIS documents, and does not provide understandable, mapped information that the public can decipher. Those trajectory analyses were not carried out or presented in a way that can be understood by the public regarding how the spread of oil could unfold from drilling in different parts of the leased areas and in different seasons so that a true analysis of spatial leasing alternatives, mitigation measures could be done, and so that alternatives could be compared. Furthermore, the trajectories still were only done with an assumption for a limited period of time after the oil was spilled.

The revised draft SEIS should consider the risks from a very large oil spill caused by a tanker spill, as we pointed out in our Dec 26, 2006 letter on the draft EIS for Sale 193, as well as the increased risks of oil tanker spills in the event that both LNG and crude oil tankers are travelling from the offshore platforms. MMS acknowledged that “Arctic warming could change the feasibility of marine transportation through the Arctic,” yet excused its lack of tanker analysis by saying that “the most practical way to transport oil from the Chukchi Sea OCS would be by pipeline across NPR-A and then through the established TAPS and tanker route.” However, it still has not considered mitigation measures that would strictly prohibit tanker operations, whether for LNG or for crude oil.

We are disappointed that the revised Draft SEIS continues to provide a business as usual approach by BOEMRE to move forward with risky and gas activities in the Arctic Ocean in the absence of critical scientific information. In fact, this document appears designed to simply reassert the earlier decision to hold Sale Lease 193 rather than provide a meaningful reanalysis to inform a reconsideration of the decision.

The natural gas impact analysis is fundamentally flawed in its assumptions for the analysis in the revised draft SEIS. It does not address the number and type of exploration and production wells, alternative pipeline routes and construction and operational activities, noise levels for construction and operations, and alternatives for the infrastructure and activities including where it crosses land. Initially, in the draft SEIS (BOEMRE 2010-34, September 2010) it simply piggybacked onto the oil development analysis, while it is possible that the natural gas prospective areas may differ from the oil development areas either in timing or location, different companies could choose to develop at different locations, or more than one development platform may be needed (“This scenario assumes that any natural gas development and production would result in opening one offshore oil and gas pipeline along the same corridor as the existing oil pipelines” draft SEIS September 2010, p. 17). We have searched the maps from the earlier Sale 193 Sale documents, and cannot find any maps showing the location of the one assumed platform location, nor is this contained in the current

The USGS report demonstrates the inadequacy of BOEMRE’s current approach to analyzing natural gas without a map being included in this document itself that shows the potential production islands, pipeline routes, and shorelines.

The revised draft SEIS fails to adequately address the impacts from construction of the new natural gas pipeline from the Arctic to the U.S. mainland, which could result in the highly dynamic Chukchi Polynya where currents are complicated, moving ice is present throughout winter, and the highly productive waters support critical migrations of whales, birds, and other marine mammals and support subsistence resources. The revised draft SEIS stated on p. 94, “at a coastal landfill, the pipeline likely would be elevated on a short gravel causeway to protect it against shoreline erosion… Overall, installation of the new offshore gas pipeline would cause direct and indirect impacts similar to vessel anchoring, but would do so on a much larger scale.” Though negative impacts to marine salmon as well as Arctic and saffron cod would be expected, they would remain temporary and localized.

There is no scientific justification for this conclusion, nor any indication of any scientific analysis of currents, expected changes to water temperature and salinity, alteration of coastal currents that may affect migrations and water quality, changes to beach erosion and sedimentation, and impacts to Essential Fish Habitat. offshore causalways in the Beaufort Sea have been documented to have significant impacts to oceanographic processes including water temperature and salinity that are essential habitat features for anadromous fish (see findings of U.S. Army Corps of Engineers by Col. Kakel and by the EPA regarding the West Dock and Endicott Causways).

The revised draft SEIS states an assumption that the pipeline would be at Wainwright (p.80) so a specific analysis should be done as part of this natural gas analysis, and consideration of additional alternatives or mitigation measures (such as prohibition of gravel causeways) should be evaluated. Both the trenching of the pipeline during construction, scouring that exposed the pipeline and has recently happened in the Canadian Arctic, and the shipyard and causeway construction and long-term operation could have significant impacts on water quality, Essential Fish Habitat, and other threatened or endangered species habitats.

The revised draft SEIS fails to analyze a range of natural gas production alternatives and discounts the possibility of LNG transport via tankers without providing supporting economic or other justifications citations. The draft SEIS also fails to evaluate the impacts of different

pipeline landfill locations with respect to impacts to subsistence resources and activities, threatened and endangered species impacts, ice conditions as such as the Chukchi Polynya and how this may affect integrity of pipeline operations including leak detection, adequate burial of pipelines if trench, (for the impacts from Exxon’s recent Yellowstone River spill) shorebase, and “shorebase” and gas pipeline route (see

Fairbanksans are quite familiar with the comprehensive ecological and oceanographic baseline studies conducted in the 1970’s and early 1980’s under the auspices of the OCEAP program largely managed by NRC. Many of today’s best known Arctic scientists, professors of marine and coastal research, including emeritus, cut their teeth in that program. While MMS still conducted studied assessments after the OCEAP program was disbanded during the Reagans Administration, the best work together in the same geographically broad and ecological complex way with interdisciplinary projects as had been

are important to the species that inhabit the region and how and when they use those areas, remain unanswerable because of a lack of scientific data. “The Arctic environment is highly variable both physically and biologically, but scientific understanding of those differences is not well developed, which serves as a “major constraint to a defensible science framework for critical Arctic decision making.”

The USGS report demonstrates the inadequacy of BOEMRE’s current approach to analyzing missing information and the indefensible nature of the agency’s conclusion that no information essential to the lease sale decision is missing. In light of the USGS report, the Interior Department must fundamentally reconsider its approach. The agency cannot satisfy its stewardship obligations under the law in light of missing information, and it cannot make good decisions about whether and how to proceed with activities in the Arctic Ocean like Lease Sale 193.

We provide a few examples of the highly useful USGS report conclusions, such as that “the effects of climate change are anticipated to influence all components of the Arctic ecosystem, and the Arctic OCS energy activities may exacerbate those changes, unless careful analysis of risks and tradeoffs is conducted.” (p. 217). This is not reflected in the Chukchi Sea leasing analysis or decision.

The USGS also noted that “although portions of the Chukchi and Beaufort Seas are expected to be ice-free for a greater period of time each year, the pack ice is predicted to be more dynamic at certain times, increasing the risk of accidents and making oil-spill response more difficult during these times.” (p. 237-238). Some imagine the ice-free summer Arctic Ocean flat calm like a bathtub, not the increasingly unpredictable place it is today and is expected to be in the future. On the day of the Fairbanks hearing, an elder from Barrow sent an e-mail that climate change impacts were very evident that day, as the sea ice had made travel by residents very difficult because it was slammed high along the coast. The revised draft SEIS provides a bit more generalized information about sea ice melt, but does not evaluate how sea ice conditions have changed throughout the different stages of the lease sale analysis, including within the Chukchi Polynya, over the biologically important Hannah Shoal, and how such changes could affect both biological impacts and risks to exploratory and production platforms.

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9 http://billingsgazette.com/special-section/news/oil-spill/

10 FEIS, v. II. Response to Comment 4: 011-003.

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The report is a culmination of a year-long study by USGS designed specifically to analyze data gaps and research needs for the Arctic Ocean in connection with oil and gas activities in the region.

It confirms that critical questions, particularly about which areas of the Chukchi Sea

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U.S. Army Corps of Engineers by Col. Kakel and by the EPA regarding the West Dock and Endicott Causways.

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Offshore Energy Plan at 2 (May 27, 2010). He directed the USGS to conduct an evaluation of scientific needs in the region “[to] better understand the resilience of Arctic coastal and marine ecosystems to potential OCS resource extraction activities.”

10 USGS Report at 151.

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carried out during OCSEAP. We support the conclusions laid out by the recent USGS review and in light of the phenomenal environmental changes that have taken place since the OCSEAP program that USGS raised, a new, comprehensive program needs to be established and is legally necessary. This time it should take into account traditional ecological knowledge from a well-supported tribal consultative effort that involved studies guided by affected tribal entities (not corporations).

Ironically, each year in the Alaska Region’s Annual Study Plan, the agency identifies why dozens on ecological, oceanographic, and other studies must be done in order to support NEPA analyses, and the federal government spends millions of dollars on these studies. We note that the MMS’s hastily designed COMIDA studies plan was highly focused on drilling locations and the studies were even started prior to the leasing decision or prior to post-lease seismic surveys, nor did it address the comprehensive information needed to provide adequate pre-lease and post-lease information that OCSLA requires.

But it is inconceivable that none of the information that scientists have collected since the flawed FEIS (2007) in the past five years under the Annual Studies plan was published were found to be relevant to the environmental impact analyses for the revised draft SEIS. While it was not collected as part of the necessary comprehensive baseline framework as USGS data gaps report as suggested is necessary, it is blatant disregard for the scientific endeavors that have been carried out and for which results have been published, as well as a basic waste of the taxpayers’ funds to have ignored the more recent results even to evaluate their sufficiency in meeting the baseline science information requirements.

In conclusion, this revised draft SEIS still did not address a single data gap among hundreds it noted about the marine and coastal ecosystem. The Interior Department should recognize that there is missing information about the Chukchi Sea that is essential to the lease sale decision, as we stated in our November 30 comments.

The interagency USGS report now further compels that conclusion and so the Interior Department should rescind the Revised Draft SEIS, obtain missing information that is essential, and prepare a new supplement that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193. Short of extending the remark period, the agency should explore alternatives that allow it to maintain the status quo on Lease Sale 193 leases while it obtains essential missing information, for example, by deciding to continue the suspension of some or all of the leases pending further research and analysis to inform future decisions about whether, where, and how to implement the leases.

Finally, there is still not proven technology to clean up oil spilled amid the Arctic’s broken sea ice and extreme weather and where emergency response equipment is hundreds of miles away and the Coast Guard is 1,000 miles away. It is not responsible to move forward with risky plans to drill in these bountiful waters until proven response capabilities are in place to clean up an oil spill. As the Deepwater Horizon spill demonstrated, rushing ahead without adequate information can have tragic and irreversible consequences.

Before the Interior Department considers any drilling in the Arctic Ocean, such as Shell Oil’s plans to drill 10 wells in the Beaufort and Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling. Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot make informed decisions about leasing drilling in the Arctic’s Chukchi and Beaufort Seas and should not approve drilling plans.

Thank you for this opportunity to comment.

Sincerely,

Pamela A. Miller
Arctic Program Director

Attachments:

Scenarios and Benefits from Development in the Chukchi Sea, James Craig, MMS, 2007


*http://alaska.blm.gov/ocseap/101.pdf*
July 11, 2011

Dr. James Kendall
Regional Director
BOEMRE Alaska OCS Region
3801 Centerpoint Dr.
Anchorage AK 99503-5820

Re: Chukchi Sea Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement, OCEAN CONSERVATION

Dear Dr. Kendall:

Thank you for considering these comments on the revised draft supplemental environmental impact statement for Chukchi Sea Lease Sale 193 (Revised Draft Supplemental Environmental Impact Statement). See 76 Fed. Reg. 30566 (May 27, 2011). In addition to this letter, you have received individual comments from more than 20,000 Oceana members and supporters. As each of these comments and our previous letters make clear, there is substantial missing scientific information about the Chukchi Sea that is essential to the lease sale decision. This science was not demonstrated with sufficient confidence to respond effectively to a spill in a Arctic conditions. The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has the opportunity to move forward by implementing comprehensive research and monitoring, which should include the identification of important ecological areas. Rather than taking this opportunity in the Revised Draft Supplemental, BOEMRE has continued to ignore missing information and to justify a decision made without good science or planning. BOEMRE must rescind the Revised Draft Supplement, obtain essential missing information, and prepare a new environmental impact statement (EIS) that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193.

Missing scientific information is at the heart of the ongoing controversy about decisions to allow offshore oil and gas activities in the Chukchi Sea. The Revised Draft Supplement is now BOEMRE’s second effort to satisfy a court order invalidating the EIS prepared for Lease Sale 193.1 Lease Sale 193 was held pursuant to the original 2007-12 Five Year Leasing Program, which was invalid because the environmental sensitivity of shore areas had not been properly evaluated or considered.2 In addition, courts, communities, scientists, the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling, and most recently, the U.S. Geological Survey (USGS) have all recognized the urgent need to gather missing scientific information to help guide decisions about industrial activities in the Arctic. In particular, the USGS concluded that “[t]here is a continuing need for the collection, integration, and sharing of multi-scale data sets to advance our understanding of the Arctic as a complex, interdependent system.

BOEMRE has continued to ignore missing information and to justify a decision made without good science or planning. BOEMRE must rescind the Revised Draft Supplement, obtain essential missing information, and prepare a new environmental impact statement (EIS) that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193.

1 See Native Vill. of Point Hope v. Salazar, 730 F.Supp. 2d 1009 (D. Alaska 2010).


Comments on Revised Draft Supplemental EIS for Lease Sale 193

Oceana

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Sea ice generally lingers longer in summer in this area than in others in the region.6


7 Benthic feeding marine mammals, such as walrus and gray whales, have been known to use the area for feeding.7


8 Recent studies indicate that water currents slow in the region, which may account for the longer lingering sea ice, and which may lead to heightened deposition of detritus and enhancement of filter feeder habitat and growth.8


As an IEA, protection measures should be implemented for Hanna Shoal to prevent it from being degraded. These management measures should be tailored to maintain Hanna Shoal’s important contribution to ecosystem health and must consider not only activities within the greater Hanna Shoal area, but also activities outside of the area that may affect its importance and health. For example, if walrus are travelling to and from large beach haulouts near Point Lay to Hanna Shoal, which appears to be the case, measures should be put in place to ensure that travel is not affected.

We are just learning that Hanna Shoal is an IEA. Unfortunately our spatial and temporal understanding of the region is currently insufficient to identify the other IEAs in the lease sale area and the protections needed. This information is necessary to complete the Lease Sale 193 EIS and to guide decisions about whether industrial activities can be conducted in a way that does not harm ecosystem health, and if so, under what conditions.

As a first step, BOEMRE must rescind the Revised Draft Supplement, obtain essential missing information, and prepare a new EIS. We look forward to continuing to work with you on this important issue.

Sincerely,

Susan Murray
Senior Director, Pacific

1 See Native Vill. of Point Hope v. Salazar, 730 F.Supp.2d 1009 (D. Alaska 2010).


4 See also Native Vill. of Point Hope v. Salazar, No. 1:08-cv-0004-RRB (D. Alaska Aug. 5, 2010) (amended order granting in part and denying in part summary judgment).


6 National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling, and, most recently, (Audubon-Alaska in cooperation with Oceana) 2-11 (2010) (hereinafter “Arctic Synthesis.”)


9 As a second step, BOEMRE must undertake a new EIS for this lease sale and must take the following into account: (1) BOEMRE’s new VLOS Program, which was invalidated because the environmental sensitivity of offshore areas had not been properly evaluated or considered; (2) a collaborative science planning process would bring great value to the decisions required to proceed with development of oil and has and other strategic assets in the Arctic in a changing climate environment; and (3) collaborative science planning process would include guidance and input from local communities, and it is all the more important to ensure that this occurs given the recent termination of Alaska’s Arctic Ocean Management Program.

10 States with Arctic coastlines.


of the REMAP process Secretary Salazar must decide whether to “reaffirm, modify, or cancel the Department’s previous decision on Sale 193.” Given the shortcomings of the revised draft SEIS and the significant threats to the environment revealed by the VLOS analysis, we urge Secretary Salazar not to affirm the previous decision. If the Secretary chooses to affirm the previous decision, he should modify that decision to better protect the key areas that are especially important for wildlife or for subsistence purposes, including the six-mile offshore corridor and Hanna Shoal. In addition, the Secretary should suspend oil and gas activities8 on any remaining Chukchi leases until:

- BOEMRE evaluates the findings from the June 23, 2011 U.S. Geological Survey (USGS) report and produces a clear, coherent strategy for gathering information necessary to determining whether, where, when and how oil and gas activities can occur;8
- A comprehensive, integrated research and monitoring plan is in place that will provide the information necessary to make informed decisions regarding oil and gas activities in the Chukchi Sea;8
- BOEMRE develops and implements a plan to protect areas that are important for their ecological and subsistence values; and
- There is demonstrated capacity to carry and effectively respond to a blowout in the specific arctic conditions where activities are planned.

### II. BOEMRE’s New VLOS Analysis is Unclear and Fails to Provide Meaningful Information about the Risks of a Blowout Scenario

The major change in the revised draft SEIS from the original draft SEIS is the inclusion of a new VLOS analysis. By including this analysis, BOEMRE acknowledges for the first time that a VLOS is a reasonably foreseeable possibility. Unfortunately, the VLOS analysis in the revised draft SEIS is unclear and fails to provide the level of information necessary to inform decisions about whether, when, and how to lease. Moreover, the VLOS analysis does not consider adequately the significant limitations of oil spill response in the Chukchi Sea.

A According to BOEMRE, the trajectory analysis at the heart of the VLOS analysis is designed to provide an estimation of where very large oil spills might travel on the ocean’s surface and what land segments and ecological, social, and economic resources might be contacted.9 BOEMRE’s model, however, appears to omit oil spills in the Chukchi Sea, and stops upon contacting the shoreline. This approach ignores the very real likelihood of oil spreading along the coastline. Moreover, the narratives, figures, and tables presented in the revised draft SEIS and in Appendix B fail to describe meaningfully the potential impacts to specific areas of the ocean and coast. As a result, the analysis does not provide the level of information necessary to support decisions about whether, when, where, and under what conditions oil and gas drilling activities might occur.

The revised draft SEIS also fails to address adequately the difficulty of responding to a VLOS off the shores of the Chukchi Sea under environmental conditions.

- BOEMRE’s new VLOS analysis remains inadequate.
- The Alaska Federal District Court’s remand order instructed BOEMRE to revise its analysis of missing information pursuant to NEPA regulations at 40 C.F.R. § 1502.22. Instead of taking seriously its obligation to make a decision informed by science and gathering missing scientific information, BOEMRE opted to undertake a paper exercise to “reassess the scientific validity” of the information in the SEIS regarding missing information and concluding that none of the missing information is essential to a reasoned choice among alternatives. That conclusion is not valid, and is not consistent with the Department of Interior’s commitment to science-based decision-making.

As our previous comments explain, much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, when, and under what conditions to offer oil and gas leases in the Chukchi Sea. Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread across the Chukchi Sea, and this lack of information has been widely acknowledged.9 BOEMRE tries to brush aside the need for this missing information by saying that all alternatives considered in the EIS will result in significant impacts to the environment and thus the information is not necessary to a choice among the alternatives. However, the agency hasn’t just made a sweeping statement that harm will occur. It must provide sufficient information about the types and extents so that decisions can be made as to the relative extent of the harms between the alternatives and so that the agency can take measures to limit that harm.

- BOEMRE must incorporate the findings of the recently released USGS report.

Secretary Salazar has recognized that “sound scientific information” is needed “to develop energy resources in the right places and the right ways.” As a result, in April 2010, he tasked the USGS with completing “a special review of information that is known about the Beaufort and Chukchi Seas.” Specifically, the Secretary asked USGS to:

- examine the effects of exploration activities on marine mammals; determine what research is needed for an effective and reliable oil spill response in ice-covered regions;
- determine the impacts of oil spills on marine birds and other marine birds and other resources of interest; and
- review how future changes in climate conditions may either mitigate or compound the impacts from Arctic energy development.

In June 2010, the Secretary released the USGS report, “An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska.” The USGS report, in combination with the National Research Council’s report in 2003 on “Cumulative Environmental Effects of Alaskan North Slope Oil and Gas Activities,”10 represent the best and most comprehensive evaluations of information available— as well as information needed but not known— in support of decisions about oil and gas activities in the Arctic.

Much of the USGS report can be boiled down to the following statements:

- Our analysis of the many different literature sources—scientific reports, policy documents, workshop findings, web sites—and discussions with a diverse range of stakeholders has resulted in a conclusion that in recent years there has been a concerted effort to obtain more data and information on and conduct more research in the Arctic, so there is a great deal of information existing about the Arctic. Yet, in many ways, relatively little is known about the Arctic in large part because many of the studies are targeted in focus and independently conducted with limited synthesis, within studies on the same topic. There is a critical need for large-scale synoptic efforts that synthesize the many different studies on the full range of topics by the numerous researchers and organizations examining the Arctic. It is hopelessly out of date to address the identified science gaps in the previous chapters, specifically, and here in general.11 (emphasis added)

Even a cursory reading of the USGS report indicates that it is directly relevant and highly applicable to the decisions on Sale 193. BOEMRE should review the newly released USGS report closely and incorporate the report’s findings into the final SEIS. In addition, BOEMRE should incorporate the findings of the USGS report into future decisions about this lease sale, as well as environmental analyses, permit applications, and other processes associated with future Chukchi lease sales.8

- Despite the significant shortcomings in the VLOS analysis, it clearly acknowledges that a VLOS could have catastrophic impacts on most species, habitat and coastal communities. Specifically, BOEMRE concludes that a VLOS “could cause significant adverse environmental impacts to most of the examined environmental resources in the Chukchi region,” that “species and vulnerable animal populations could suffer lasting, population-level impacts under certain circumstances,” and that “long-term reductions in local and/or regional species might be observed.”

Given the acknowledgment of potentially severe environmental impacts, BOEMRE and Secretary Salazar should consider this new information carefully—especically in light of the significant limitations on the ability to respond to a VLOS in Arctic conditions—and reexamine the previous Lease Sale 193 decision. In addition, BOEMRE should prepare a site-specific environmental impact analysis that includes potential blowout trajectories and models for any proposed exploration drilling.

### III. BOEMRE’s Revised Draft SEIS Fails to Address Significant Shortcomings with Respect to Missing Information

We acknowledge that government agencies, academic institutions, and industry have conducted and continue to conduct research in the Chukchi Sea. These studies are important and contribute to our baseline knowledge and understanding of the Chukchi Sea ecosystem. However, the existence of a large body of individual studies does not mean that the research is sufficient to raise the level of understanding of the Chukchi Sea to the point that decisions about whether, when, where, and how oil and gas activities should take place are adequately informed. Despite the research that has been conducted in the Chukchi Sea, the BOEMRE’s NEPA analysis is still riddled with admissions of missing and incomplete information.

Unfortunately, the analysis of missing information set forth in BOEMRE’s revised draft SEIS is not significantly different from the analysis in the original draft SEIS, and the revised draft SEIS remains inadequate. We refer BOEMRE to our November 2010 comment letters and incorporate by reference all the comments contained in those letters. The following comments supplement our original comment letters with respect to BOEMRE’s missing information analysis, address

8 Revised Draft SEIS at 262.
11 See, e.g., Revised Draft SEIS at 3. See 30 C.F.R. § 250.368 (authorizing BOEMRE to suspend operations on OCS leases); see also statute at 119.
12 See, e.g., Revised Draft SEIS, at 4.
of information and should develop a clear, coherent strategy for gathering necessary information and conducting appropriate analyses to address key management decisions regarding activity in the Arctic Outer Continental Shelf (OCS).

The Pew Environment Group, Ocean Conservancy, and others are working with a group of scientists to review the new USGS report and identify priority actions with regard to research, monitoring, and synthesis, to advance our understanding of Arctic marine ecology with respect to OCS activity. This effort will be relevant to Lease Sale 193 and other decisions in the Chukchi and Beaufort Seas. We will share the results of this review with BOEMRE when it is completed later this summer.

C. BOEMRE should develop and implement an integrated, holistic science plan.

To adequately address the issue of missing information, BOEMRE must develop and implement an integrated, holistic science plan for the Arctic Ocean. Existing scientific studies in the Chukchi Sea have been undertaken in an uncoordinated basis without an overarching purpose for the information or a clearly identified goal to advance knowledge of Chukchi Sea ecosystems and provide information directly relevant to decisions regarding oil and gas activities. Specifically, many of the current scientific pathways may not be the most efficient or relevant to the key scientifically important species of interest to industry. They provide information about physical and biological aspects for a small area within a larger ecosystem for a limited time. To be useful to leasing decisions, however, longer-term studies must be undertaken to provide an understanding of the variability of species over time.

Similarly, BOEMRE’s current approach to science— as demonstrated in the agency’s Environmental Studies Program Annual Study Plan—is not adequate. Narrow studies are undertaken by contractors responding to a request for proposal with no coordinated analysis and synthesis of that information. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea ecosystems. This need for synthesis and purpose was highlighted in the recent USGS report.

To address these problems, BOEMRE—in conjunction with local, state, and federal partners—must develop and implement comprehensive, integrated research and monitoring plan for the U.S. Arctic. Such a plan should be designed to improve our understanding of Arctic marine ecosystem structure and functioning and to avoid adverse impacts on the Arctic ecosystem and subsistence way of life. It should: (1) define existing information and research needs through a comprehensive gap analysis (the USGS review was a first step in this process), (2) gain a more comprehensive catalog of species, populations and habitats (including seasonal migrations) in a marine life assessment; (3) track the physical factors that influence and determine biological productivity, habitat preference and the occurrence of species; (4) facilitate an assessment of environmental monitoring programs; (5) secure a better understanding of ecosystem interactions and relationships through the analysis of links and the effects of human activity; and (6) integrate scientific data to identify processes and habitats that are sensitive and vulnerable to disturbance.


Hanna Shoal—sand bars off Alaska's north coast—gives us the opportunity to protect an important and relatively intact area.

Hanna Shoal’s physical factors contribute toward the persistence of sea ice, which is an important habitat for marine mammals like walrus. During a time of rapid change, Hanna Shoal appears to be an important sea ice area over the long term. This shallow area diverts warm water masses flowing northward from the Bering Sea, holding colder water long into the summer. It provides refuge for walrus, polar bears, and other species. The area is of interest to industry. It should: (1) define existing information and research needs through a comprehensive gap analysis; (2) gain a more comprehensive catalog of species, populations and habitats; (3) track the physical factors that influence and determine biological productivity; and (4) facilitate an assessment of environmental monitoring programs. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea ecosystems. This need for synthesis and purpose was highlighted in the recent USGS report.

(2) Hanna Shoal

Hanna Shoal’s physical factors contribute toward the persistence of sea ice, which is an important habitat for marine mammals like walrus. During a time of rapid change, Hanna Shoal appears to be an important sea ice area over the long term. This shallow area diverts warm water masses flowing northward from the Bering Sea, holding colder water long into the summer season. As a result, sea ice persists longer into the season. As a result, sea ice persists longer into the season as well. A pack ice feature near Hanna Shoal called Post Office Point was historically a meeting point known for its reliable ice all summer long. The area was given its name because whalers would meet at this designated location to exchange mail and information at sea. Recent weather changes have changed the structure of this persistent ice pole, and the September September sea ice extent has peaked so far only once in the last decade. In comparison, Hanna Shoal and Post Office Point were ice-covered seven out of ten years in the 1980s and four out of ten years in the 1990s. Nonetheless, Post Office Point and Hanna Shoal continues to be an area of persistent ice flows which are very important for ice-associated wildlife. Although the pack ice is expected to further recede with climate change, the shorter shipping season is likely to continue to divert warm water, and Hanna Shoal is never again provide a significant ice flows will be affected in the future compared to other areas in the region, and to become a last stronghold for some species. As a result, Hanna Shoal should be a priority to protect from the impacts of oil and gas operations—should be excluded from the Chukchi Sea lease sale.

V. Conclusion

At the conclusion of the remark process, the revised draft SEIS indicates that Secretary Salazar will choose to “reaffirm, modify, or cancel the Department’s previous decision on Sale 193.” Within the short time frame of the revised draft SEIS and the significant threats revealed by the VOS, we urge Secretary Salazar not to affirm the previous decision. If the Secretary chooses to affirm the previous decision, he should affirm a modified alternative that better protects the key areas that are especially important for wildlife or for subsistence purposes. Specifically, he should exclude from the lease sale the six-mile offshore corridor and Hanna Shoal. In addition, the Secretary should suspend operations on remaining Chukchi leases until:

• BOEMRE develops and implements a plan to protect areas that are important for their ecological and subsistence values; and
• There is demonstrated capacity to contain and effectively respond to a blowout in the specific arctic conditions where activities are planned.

Of course, the persistent pole of ice, and the minimum September sea ice extent has far surpassed only once in the last decade. In comparison, Hanna Shoal and Post Office Point were ice-covered seven out of ten years in the 1980s and four out of ten years in the 1990s. Nonetheless, Post Office Point and Hanna Shoal continues to be an area of persistent ice flows which are very important for ice-associated wildlife. Although the pack ice is expected to further recede with climate change, the shorter shipping season is likely to continue to divert warm water, and Hanna Shoal is never again provide a significant ice flows will be affected in the future compared to other areas in the region, and to become a last stronghold for some species. As a result, Hanna Shoal should be a priority to protect from the impacts of oil and gas operations—should be excluded from the Chukchi Sea lease sale.
Thank you for considering our comments. We look forward to working with BOEMRE to ensure that the Chukchi Sea ecosystems are understood and protected.

Sincerely,

Marilyn Heiman
Director, U.S. Arctic Program
Pew Environment Group

Andrew Hartsig
Director, Arctic Program
Ocean Conservancy

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NEPA compliance and with respect to ensuring that decisions are based on sound science as detailed in the September 29, 2010, Secretarial Order No. 3305. In addition, the Department’s September 1, 2010 Outer Continental Shelf (OCS) Safety Oversight Board report provided recommendations to strengthen permitting and environmental stewardship. The report highlighted concerns with BOEMRE’s failure to fulfill its dual mandate to lease offshore lands, yet also to protect the environment and cultural resources. The Alaska Region must ensure these recommendations and reforms are implemented in all new decisions, including its draft SEIS for the Chukchi Sea. To date, the Alaska Regional office of BOEMRE has failed to do so.

NEPA and OCSLA Require Missing or Incomplete Information be Included in the SEIS

BOEMRE was ordered to supplement the FEIS it prepared for Lease Sale 193 by reassessing the extent and relevance to decision making of missing information about the environmental impacts of offshore oil and gas activities in the Chukchi Sea. In preparing the draft SEIS, BOEMRE must comply with NEPA’s obligation to take a “hard look” at environmental impacts, just as it must in preparing an initial FEIS. The draft SEIS fails to do so.

The draft SEIS purports to respond to the court’s order to meet the requirements of NEPA regulation 40 CFR 1502.22 by determining whether missing information in the FEIS is relevant to assessing potentially significant effects of oil and gas development in the Chukchi Sea, and whether the missing information is essential to a reasoned choice among the FEIS’ alternatives.

The purpose of that regulation is to require agencies to gather all information necessary to make a decision, but allow it to move forward in cases where information might not be relevant to the decision to be made or if the cost of obtaining the information is exorbitant. BOEMRE has not taken seriously its obligation to make a decision informed by science, and to gather whatever missing scientific information is needed, but has instead undertaken a paper exercise, simply cataloging the hundreds of statements in the FEIS regarding missing information and then concluding that the addition of any of this information is not necessary in the decision-making process.

BOEMRE’s primary rationale for its assertion that the information is not essential at the lease sale stage is that the decision is not a consequential commitment of the area to oil and gas activities and information can be obtained at later stages of the Outer Continental Shelf Lands Act (OCSLA) process, when the agency is evaluating exploration or production plans. This

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2 Once incomplete or unavailable information regarding a foreseeable significant adverse impact is disclosed in an EIS, NEPA regulation 40 C.F.R. 1502.22 requires that, “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.” Thus, the focus of the regulation is on obtaining that information and including it in the EIS.
BOEMRE also asserts that it can defer gathering missing information at the lease sale stage because tiering of NEPA analyses is allowed within OCSLA. However, BOEMRE’s approach is a misapplication of “tiering” within NEPA. Tiering is a means to allow an agency to avoid repetitive analysis in subsequent, more site-specific phases of a project. Thus, if a complete EIS is prepared at the first stage in which potential significant effects are identified, subsequent decisions can often be accompanied by a shorter EA/FSOI or an EIS that incorporates and follows from the analysis in the prior EIS. The key is that tiering allows for subsequent NEPA analysis to build on a thorough EIS prepared at an earlier stage. By assuming that it can defer gathering information until a later stage, BOEMRE is in essence committing itself to undertaking an EIS later, turning tiering on its head. In light of the fact that BOEMRE’s decisions regarding approvals for oil and gas activities in the area are made in such a way as to prevent a status quo approach that satisfies no one. In August 16, 2010 report and recommendations to BOEMRE regarding NEPA implementation, the Council on Environmental Quality (CEQ) clarified the purpose and implementation of tiering. The practical reality is that in order to fully comply with NEPA within the structure of OCSLA, the agency must prepare a full assessment of potential impacts and the site-specific details and impacts can then easily be addressed within the compressed approval time period for an exploration plan.

It bears mentioning that the task of gathering the vast amount of incomplete and missing information necessary to conduct a thorough analysis of the environmental impacts of oil and gas activity within Lease Sale 193 is consistent with BOEMRE’s decision to offer leases in an area approximately the size of Colorado. It would be daunting in the least circumstances to gather and analyze the necessary information for this area of a huge scope. Nonetheless, BOEMRE cannot use its decision to offer leases for such a large lease sale area to then treat the lease sale decision as a programmatic rather than site specific decision or as an excuse to not fully analyze the environmental impacts of oil and gas activity within that area on the grounds that it is too big with too many unknowns.

Information Identified as Missing or Incomplete in the FEIS and draft SEIS is Essential to Making Decisions Regarding the Lease Sale

BOEMRE also concludes that missing information is not relevant or essential to a choice among alternatives because the impacts under all of its alternatives are essentially the same. This rationale does nothing to support its position but instead suggests that its range of alternatives is inadequate, further compounding the flaws in the FEIS. Much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, where, and under what conditions to offer oil and gas activities in the Chukchi Sea. BOEMRE’s ability to undertake an environmental review at that stage beyond the brief environmental assessment (EA) that, as a matter of practice, it prepares at the exploration stage is constrained. OCSLA authorizes the Secretary to suspend or cancel a lease or permit only if oil and gas activities threaten to cause serious harm or damage to life, property, the environment, national security or defense. At the exploration plan stage, the decision is whether to approve a plan that outlines the exact location, timing and equipment to be used to explore for productive deposits of oil and gas. The decision at the development and production stage is similar. In other words, while OCSLA establishes stages for development of oil and gas resources in the outer continental shelf, the decision about whether to allow that activity to go forward occurs at the lease sale stage; the decision at later stages is simply refinements of the lease decision and BOEMRE cannot change the decision about whether to authorize oil and gas activity absent unusual circumstances. Thus, BOEMRE must have complete information about the environmental effects at the lease sale stage, in order to determine whether to authorize oil and gas activities. This thorough understanding of the existing environment and the environmental consequences of development within that environment is essential not only to determining whether to authorize oil and gas activities but also to identify any mitigation measures to minimize potential environmental impacts.

Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the draft SEIS.

BOEMRE Failed to Include in the FEIS and draft SEIS Available Analyses and Studies

A different type of missing information is data about the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the Deepwater Horizon Gulf of Mexico oil spill is that BOEMRE must conduct meaningful environmental reviews, including a full analysis of impacts, before offshore oil and gas activities occur (Nuka 2010). For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information on the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice throughout the year. Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the draft SEIS.

BOEMRE completed this draft SEIS without obtaining and incorporating information from relevant Department of Interior Arctic Ocean science initiatives. Those efforts, though not currently complete, would contribute to a more thorough and analysis of environmental impacts in the draft SEIS. Specifically, BOEMRE failed to take advantage of or even acknowledge the ongoing analyses by the U.S. Geological Survey (USGS) to identify information gaps in the Arctic Ocean as related to decisions about OCS activity that was ordered by the Secretary of Interior on March 31, 2010. That analysis will be completed in April 2011. The draft SEIS also appears to have been developed in isolation from an assessment BOEMRE is undertaking specifically to address missing information about the Chukchi Sea (MBC 2007). This Chukchi Ocean Monitoring and Decision Aid (COMIDA) effort by BOEMRE is described as “characterize the Chukchi Sea ecosystem in order to detect and distinguish future changes resulting from oil industry activities, natural variability, and other anthropogenic effects... prior to oil and gas exploration activities” (MBC 2007). The COMIDA effort is supposed to look at data needs and provide monitoring recommendations from an ecosystem perspective, and to obtain baseline data before oil and gas activity, including exploration begins in the Chukchi Sea. Within COMIDA has a promise of providing sufficient information to assist the agency in making informed decisions, the agency is not using the information gained from this research effort to inform its decisions regarding oil, where, how and oil and gas activities might occur in the Chukchi Sea.

Murrelet, Kittlitz’s murre, Iceland and Razorbill population, Kittlitz’s murre, Russian Bear, Pacific walrus, Pacific walrus, Pacific walrus

BOEMRE could have, and should have included additional information in the draft SEIS that has become available in the two years since the FEIS was completed. Attachment 1 is a list of references that include relevant and essential information that should be incorporated into a revised draft SEIS.

One example pertains to the bowhead whale – an important marine mammal for the Inupiat along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the endangered Species Act. The FEIS is acknowledged “data are needed on bowhead whale full migration through the Chukchi Sea before the whales move south into the Bering Sea.” And that “recent data on distribution, abundance, or habitat use (by bowhead) in the Chukchi Sea Planning Area are not available.” In the draft SEIS (appendix A) BOEMRE

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Table 1: Present by categories the types of essential missing basic data about the Chukchi Sea ecosystem.

<table>
<thead>
<tr>
<th>Type of Essential Need (data in knowledge)</th>
<th>Explanation</th>
<th>Example of Essential Need or gap in knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spatial scale</strong></td>
<td>Very broad-scale information covering the Beaufort and Chukchi seas is available for many species. Similarly, fine scale survey data in disjunct development areas also exist. Mid-scale data with full spatial coverage is needed to evaluate the effectiveness of landscape-scale management decisions.</td>
<td></td>
</tr>
<tr>
<td><strong>Temporal coverage</strong></td>
<td>Adequate data to detect temporal change over annual or decadal time periods for the Beaufort and Chukchi seas.</td>
<td></td>
</tr>
<tr>
<td><strong>Seasonal coverage</strong></td>
<td>Most surveys occur in July and August when sea ice, and snow are in optimal condition; direct observation is difficult to impossible at other times of the year. Most species are lacking adequate seasonal distribution data.</td>
<td></td>
</tr>
<tr>
<td><strong>Benthic biomass</strong></td>
<td>Available for much of the Chukchi Sea, and this lack of information has been widely acknowledged.</td>
<td></td>
</tr>
</tbody>
</table>
responded that: “While there will always be some lag between environmental change and available data that reflects that change. BOEMRE (formerly MMS) has conducted in commissioned extensive study based on the studies of the Chukchi Sea, and a general understanding of the biogeography, distribution, abundance, and habitat use is known.” The important and very pertinent research to which the agency refers was finalized in July of this year, and made publicly available on their website during the fall of 2010 (Quakenbush et al., 2010). The draft SEIS goes on to say “Existing information is sufficient to support sound scientific judgments and reasoned, managerial decisions, especially during the earlier stages of OCSLA review, which are necessarily more programmatic in nature. Furthermore, the missing information pertains to potential impacts equally applicable to each action alternative, meaning that additional information on this subject is not useful to decision making at this stage. Overall, this incomplete information is not essential to a reasoned choice among alternatives.” However, this is not necessary the case, as Quakenbush et al. (2010) identified important corridors for migration and important feeding areas that should be excluded from the lease sale at least considered essential information.

The alternatives considered by BOEMRE in the draft SEIS all have the same impacts, with the exception of no action indicating that the range of alternatives is too narrow. Ecologically sensitive areas must be identified and protected. A sea within an ecosystem are not equal in biological and ecological terms; some areas are more important than others to the ecosystem or human populations. Identification of important ecological areas based on essential habitats and functions in the Arctic ecosystem along with traditional cultural activities, can be an important step toward ensuring ecosystem functionality. The ecologically and culturally sensitive areas in the Artic Ocean should be removed from the leasing process.

The draft SEIS also fails to include all of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska. For example, Attachment 2 documents peer reviewed literature produced by the Environmental Studies Program since 1990 that was not considered, but relevant to the EIS and subsequent draft SEIS. The Alaska A specular Final Study Plan Final FY 2011 notes that since the conception of the Environmental Studies Program in 1997 more than $350 million has funded studies in Alaska across 15 planning areas (BOEMRE, 2010). Since much time and effort was put into these studies, it is for BOEMRE responsibility to consider the results and implications of these study results, particularly as they may contribute to some of the essential unknown information about species and habitats as well as the effects of oil and gas exploration and development on these species and habitats.

Traditional Knowledge Can Be Used to Fill Gaps in Information

Some of the information that was identified in the FEIS and draft SEIS as missing or incomplete could be satisfied in part by incorporating local and traditional knowledge. Local and traditional knowledge, a different but equally valid knowledge system will help expand our understanding of the Arctic and can supplement and enhance existing knowledge. Indigenous peoples who have lived in the Arctic Ocean for millennia have developed a wealth of knowledge about

BOEMRE has used the same flawed segregated approach that it uses in its research to its assessment of missing information in the draft SEIS. The agency has reached the conclusion that none of the missing information is essential to decision making by addressing each statement regarding missing information in isolation without looking at the entire set of research needs for particular species or other environmental parameters. However, a more holistic approach, which likely lead to a different conclusion. It is possible to conclude that each piece of missing information might not be relevant to the decision to be made, but taken together, all of the missing information for a particular species certainly is important. This type of piecemeal approach to scientific research is pervasive in all of BOEMRE research study programs and ensures that scientific research produces little useable information to advance knowledge about the Arctic Ocean.

What is needed instead is a comprehensive, integrated research and monitoring plan for the U.S. Arctic to improve our understanding of the Arctic marine ecosystem structure and function and to avoid adverse impacts on the Arctic environment and subsistence way of life. Such a plan should (1) define existing information and research needs such as a gap analysis (this is currently undertaken by the OGIS) (2) gain a more comprehensive catalog of species, populations and habitats (including seasonal migrations) in a marine life assessment (3) track the physical factors that influence and determine biological productivity, habitat preference and migration pathways in an integrated, comprehensive environmental monitoring program (4) secure a better understanding of ecosystem interactions and trophic linkages and the effects of human activity and (5) integrate scientific data to identify processes and habitats that are sensitive and vulnerable to disruption. Such work is critical to the development of a comprehensive, collaborative program of research, monitoring, data collection, mapping, and documentation of local and traditional knowledge. In the sciences the program could provide the framework for all development activity in the Arctic, and approval of oil and gas development activity would be consistent with the plan’s ecological science, monitoring, and assessments.

BOEMRE Must Prepare a Revised SEIS

BOEMRE’s draft SEIS fail to adequately address the district court’s order and fail to satisfy NEPA’s requirements. The draft SEIS also fails to incorporate the offshore oil and gas program reforms initiated by Department of Interior in the face of the worst environmental disaster in our nation’s history. BOEMRE should prepare a revised draft SEIS only after it has gathered missing information and drawn on the work of other agencies.

Sincerely,

Marilyn Heiman
Director, U.S. Arctic Program
PEW Environment Group

Eleanor Haffines
Manager, U.S. Arctic Program
PEW Environment Group
Appendix 2

Ocean Conservancy and PEW Environment Group Comments

C.F.R. 1502.22, and it failed to analyze the potential impacts of natural gas development. Accordingly, the Court remanded the decision to the agency with direction to redo its environmental analysis in these respects. In the draft SEIS, BOEMRE falls far short of satisfying the Court’s order to meet the requirements of NEPA.

With respect to the Section 1502.22 missing information analysis, BOEMRE acknowledges it cannot make basic assessments of the lease sale’s impacts in light of data gaps, but it concludes in the draft SEIS that with one piece of information identified as missing in the original EIS is essential to the lease sale decision. The conclusion is not supported or credible, demonstrates a desire to proceed quickly rather than deliberately, does not comply with the law, does not reflect a thoughtful assessment of the nature of the information that should be available at the critical lease sale stage of the process, and is a significant step in the wrong direction. With respect to analyzing natural gas development, the draft SEIS contains little more than a justification of the lease sale stage of the process, and is a significant step in the wrong direction. With respect to analyzing natural gas development, the draft SEIS contains little more than a justification of the analyses contained in the original EIS. BOEMRE’s conclusion that natural gas development would have only minimal additive impacts suffers from significant flaws.

BOEMRE should take actions in the Arctic Ocean that are consistent with the Administration’s commitment to conduct a science-based decision-making process. It should ensure that the information required for informed decision-making is available, the systemic failures in regulatory oversight made evident by the Deepwater Horizon accident are addressed, and new decisions, including the decision whether to cancel, amend, or affirm Chukchi Sea Lease Sale 193, are made taking into account what we have learned. Accordingly, it must not finalize the draft SEIS in its current written form, but should undertake a meaningful reanalysis of Lease Sale 193 that is consistent with NEPA, and the Administration’s commitment to sound science in decision-making.

MISSING INFORMATION ANALYSIS

It is undisputed that there are significant gaps in the basic information about the Arctic Ocean and that, absent this information, it is not possible, in many instances, to understand the scope of potential impacts from oil and gas activities on the region’s wildlife and people. The need for more information has been acknowledged repeatedly by the Administration. In President Obama’s National Ocean Policy process, the National Marine Fishery Service’s closure of the Arctic Ocean to commercial fishing, and in Secretary Salazar’s initiation of a scientific gap analysis by the United States Geological Survey. The current draft SEIS clashes badly with the Administration’s commitment to sound science in decision-making.

In the original Chukchi Sea Lease Sale 193 EIS, BOEMRE identified literally hundreds of instances in which it lacked information about the Chukchi Sea, ranging from basic science about the presence and behavior of species in the region to information about the effects of oil and gas activities on wildlife. However, it failed to analyze which of the missing information was relevant to reasonably foreseeable adverse impacts and essential to a reasoned choice among alternatives and to obtain that information absent a finding that the costs of obtaining the information are exorbitant. In Native Village of Point Hope, the Alaska Federal District Court ruled that this failure constituted a violation of 40 C.F.R. § 1502.22. The Court remanded the EIS to the agency and directed it to conduct this analysis as required by NEPA.

Section 1502.22 sets out an “ordered process” for an agency preparing an EIS in the face of missing information. Save Our Ecosystems v. Clark, 747 F.2d 1240, 1244 (9th Cir. 1984). When there is incomplete information relevant to reasonably foreseeable significant adverse impacts that is essential to a reasoned choice among alternatives, an agency must obtain and include the missing information in the EIS if the overall costs of obtaining it are not exorbitant. 40 C.F.R. § 1502.22. The regulation further NEPA’s purpose of ensuring that agencies make “fully informed and well considered decisions.” 40 U.S.C. § 4332(f)(6). BOEMRE’s conclusion that the missing information “are exorbitant” in the draft SEIS is not supported or credible, demonstrates a desire to proceed quickly rather than deliberately, does not comply with the law, does not reflect a thoughtful assessment of the nature of the information that should be available at the critical lease sale stage of the process, and is a significant step in the wrong direction. With respect to analyzing natural gas development, the draft SEIS contains little more than a justification of the analyses contained in the original EIS. BOEMRE’s conclusion that natural gas development would have only minimal additive impacts suffers from significant flaws.

Section 1502.22 requires the Court to order BOEMRE to undertake a meaningful reanalysis of Lease Sale 193 that is consistent with NEPA, and the Administration’s commitment to sound science in decision-making. The draft SEIS purports to respond to the Court’s order to satisfy the requirements of Section 1502.22. However, BOEMRE’s determination that none of the missing information is essential to a reasoned choice among alternatives is arbitrary and improper. Rather than engage in a good faith effort to analyze the missing information and identify which of it is essential to a reasoned choice among alternatives, the agency appears instead to have spent its energy developing justifications for avoiding its obligation to obtain essential information. Appendix A of the draft SEIS contains a 140-page exposition of the instances in the original EIS in which the agency said “we don’t know” about the Chukchi Sea and the effects of oil and gas activities there. For each instance of missing information, BOEMRE offers an arbitrary justification—usually one of the same five recurring excuses discussed below—for why it does not need to obtain the particular information before leasing in the Chukchi Sea. This approach is inconsistent with Section 1502.22 and the agency’s obligation to reconsider the lease sale in light of a new analysis of missing information.

A. Because the decision to sell leases is a critical decision in the offshore development process, information relevant to the resources in the area and to the effects of oil and gas activity on those resources is essential to making that decision. Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, information about the biological function of different parts of the planning area and the importance of those parts to the regional ecosystem is essential to this choice. See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv., 148 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2001) (information is essential if without the data the agency cannot know if its conclusions regarding impacts are reliable). Similarly, understanding the effects of industrial oil and gas activities on different components of the ecosystem is essential to deciding where, if anywhere, those activities should be permitted and how they should be constrained.

A lease sale is a meaningful decision about the commitment of an area to oil and gas activity. It is the second of the four distinct statutory stages under the Outer Continental Shelf Lands Act...
In addition to missing basic information about the ecosystem, including the species and relationships, we also lack a basic understanding of the physical and biological processes associated with oil exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the Gulf spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur. See, e.g., Nuka Research and Planning Group, LLC, Pearl Consulting LLC. 2010. Oil spill prevention and response in the U.S. Arctic Ocean: Unexamined risks, unacceptable consequences. Commissioned by the Pew Environment Group, U.S. Arctic Program, November 2010. Philadelphia, PA; USA. available at http://oceans.pewtrusts.org/pdf/oilspillresponsecaseofstudya.pdf. Arctic Monitoring and Planning Service, Alaska OCS Region (MBC, 2007). Table 1 depicts by category some of the types of missing basic data about the Chukchi Sea ecosystem.

<table>
<thead>
<tr>
<th>Type of Gap</th>
<th>Explanation</th>
<th>Examples of Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>Some resources have fundamentally missed or have been so scarce in the Arctic that they cannot provide any information.</td>
<td>Information on sea ice, marine mammals, and birds—where in other regions are typically the most well-studied segment of the ecosystem. Information on the Arctic Ocean's physical environment is also limited.</td>
</tr>
<tr>
<td>Assurance</td>
<td>Many species or species groups have little or no information on population size, vital stats about species, or general health.</td>
<td>Little is known about the Arctic's ecological role played by species and thus which species are crucial for ecosystem health.</td>
</tr>
</tbody>
</table>
| Spatial coverage | Many resources studied in depth (i.e., lack complete coverage across the Beaufort and Chukchi shelf where U.S. EEL). | Limited information on various Arctic species;
Arctic marine ecosystems are poorly known to human observers; direct observation is difficult at other times of the year. Focus on species with limited spatial information.

- The physical, chemical, and biological processes that help control the composition of the fast ice.
- The processes that control the transport of surface processes and the impact of the fast ice.
- The processes that control the composition of the fast ice, energy flow, and spatial variability that are not well understood.

- Satellite telemetry has shown that the movements of bowhead whales, beluga whales, walruses, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously appreciated. Without knowing where walruses will be, infrastructure and activity cannot be positioned to avoid incidental take and other impacts. See, e.g., USGS 2010. Wildlife tracking and telemetry data acquired from walruses instrumented on the Alaska Chukchi Sea in September 2009. Radio tagging field report. USGS Alaska Science Center, Walrus research project, available at http://pubs.usgs.gov/fs/2008/3031/.

- How have distributions of marine birds changed since the pelagic surveys conducted in the mid-1970s to mid-1980s in the Outer Continental Shelf Environmental Assessment Program (OCSAEP)? For birds at sea, these data are now at least 25 years out of data and much has changed since. Previous data point to the importance of areas overlapping the lease sale area in the Chukchi Sea. Furthermore, because of a lack of baseline information, there is very little knowledge about long-term trends and variation due to climate change (CGP, 2010). In the Proceedings of the Northern Oil and Gas Research Forum held in Anchorage in October 2008, the forum explored the importance of long-term studies compared to observations made at a single point in time and their usefulness. See, e.g., http://akp.boem.gov/reports/2008/pr/2008_1028_proceedings.pdf. In the draft SEIS, BOEMRE concedes that much of the information identified as missing in the 2007 Chukchi Sea Lease Sale 193 SEIS was relevant to potentially significant effects of the lease sale. See BOEMRE, Chukchi Sea Planning Area, Oil and Gas Leasing, Chukchi Sea, Alaska, Draft SEIS, OCS EIS/EA BOEMRE 2010-034 (Draft SEIS) at App. A. (Sept. 2010), however, it concludes that much of the information was essential to reasonableness among alternatives, and thus the agency was not obligated to obtain the information. Id. at 10-11. That conclusion is unwarranted.

- Missing information is pervasive and goes to fundamental questions at issue in the lease sale decision.

The missing information that forms the basis for the Court's remand includes the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—bears, marine mammals, and birds—which in other regions are typically the most well-studied segment of the ecosystem. The missing information includes the abundance, distribution, and life history characteristics for many of these species. The state of information for these more charismatic species in the ecosystem is further evidence of the lack of information about the rest of the ecosystem, including the coastal species, birds, and other species that are important prey for the more conspicuous species. The information that does exist is outdated and too sporadic to provide an appropriate baseline for decision making. This lack of basic information about the ecosystem makes it difficult, if not impossible, to determine whether there will be significant impacts to animals and the ecosystem. Additionally, there are substantial data gaps about the effects of oil and gas activities, like industrial noise, on marine mammals and fish. These gaps further limit the agency's ability to meaningfully analyze the impacts of the lease sale or choose among alternatives.

- Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and whose habitat needs overlap both time and space. These types of gaps are widespread across the Arctic Sea, and this lack of information has been widely acknowledged. See, e.g., NRDA - Coastal Response Research Center. 2010. Natural Resources Damage Assessment
What are the distributions and life histories of species that are critical in marine food webs and how will loss of sea ice influence these species? Many marine birds and mammals rely on species like Arctic cod, yet there is a lack of even basic knowledge about these species. Other of these species, such as Arctic fox, are also very important for subsistence purposes. According to the environmental assessment on the recent Arctic Fishery Management Plan, sampling of fish and shellfish species is extremely limited, with only a small area of the Beaufort Sea off Barrow sampled adequately within the last 18 years. Some areas have never been sampled to determine even basic abundance estimates.

How do the effects of climate change interact and are the effects cumulative?

How will the distribution of species of concern (including ESA candidate or listed species) shift due to climate change? Species currently in the Chukchi may shift their ranges and key habitat areas. Species from the Bering Sea and farther south may move northwards, possibly requiring new areas or types of protection in the Chukchi Sea. The ability to reasonably predict such shifts is necessary to evaluate the life-cycle impacts of offshore development and infrastructure.

How can quantitative risk and impact assessments be conducted? There is insufficient information about the distribution and productivity of plankton, benthic organisms, fishes, seabirds, the response of marine mammals to the amount of habitat likely to be lost by sea ice loss, and other basic environmental parameters to support quantitative evaluation of potential and actual impacts from offshore activity, including oil spills. Without such information, risk and damage assessment models are limited. Observation and recovery from an oil spill or other accident cannot be determined. Lack of adequate baseline of information was the primary impediment to assessing ecological damages caused by the Exxon Valdez oil spill.

What trajectories would spilled oil follow? The general atmospheric and circulation patterns of the Chukchi Sea have been mapped, but patterns and variability at the scale of an oil spill are not well known and are difficult to predict based on current understanding. In addition while general circulation patterns are known, there is relatively little understanding of the currents at the ocean's surface where the majority of oil collects in a spill. Without that knowledge, the placement of response equipment and the ability to respond promptly are hindered, reducing the ability to contain and recover spilled oil. Furthermore, there is insufficient information or monitoring capacity to project fine scale trajectories of spilled oil in real time to be projected in real time during a spill event, making it difficult or impossible to respond quickly and protect critical wildlife habitats (such as Kaktovik, Lagoon, or Ledyard Bay).

How can negative social and cultural impacts be avoided? Industrial development can disrupt traditional practices, interfere with cultural values, or lead to social dissolve. Proper planning can help minimize such problems, but requires detailed understanding of local cultures and societies as well as the involvement of cultural and community leaders in the decision-making. The processes for such involvement have not yet been devised and tested for offshore-oil and gas in U.S. Arctic waters. See Wriem, K., 2007. Inclusive health and proposed A lack of oil development: Results of the first integrated health impact assessment/environmental impact statement for proposed oil development on Alaska's north coast.

The original EIS for Lease Sale 193 acknowledged that information about marine and coastal birds is outdated or completely lacking for the Chukchi Sea. Draft SEIS, App A at 4 of 143 (noting that several species historically have been important for birds, as well as the entire lease sale area "lack site-specific data on habitat use patterns, routes, and timing to assess impacts."); id. (noting that for many species, "the most recent data is between 15 and 30 years old,") making accuracy analysis difficult). Yet, "several species or species-groups have a high probability of experiencing substantial negative impacts" and "the risk that several regional bird populations could experience significant adverse impacts is high" in the event of an oil spill. Id.

BOEMRE proposed one of the alternatives, Alternative III, at least in part to reduce impacts to marine and coastal birds. See FEIS at E-8. Given the reason for the alternative, information about areas that are important for marine and coastal bird species and information about how and when those birds use these areas, is essential to making a choice between this and other potentially less-protective alternatives.

In the face of missing information, BOEMRE was left in the original EIS to speculate about the different effects among alternatives. For example, the original EIS states that in Alternatives III and IV, "[t]he increased distance between offshore development and coastal bird habitats would conversely decrease the percentage of spilled oil on contact, increase weathering of spilled oil prior to contact, and increase available spill response time." FEIS at IV-269, 273 (emphasis added). id. at II-42, 45 ("The increased distance between offshore development and coastal bird habitats would also conversely decrease the percentage of spilled oil contacting bird habitat...”). Id. (emphasis added). The alternative analysis was based on this sort of conjunctural differentiation among alternatives. Conjunctural language is used to describe different effects from oil spills on fish, fish habitat, bird, whale, other wildlife, coastal birds, and terrestrial mammals. FEIS at IV-268-69 (Alternative III), at IV-272-73 (Alternative IV); see also id. at II-41, 42 ("Increased distances in noise and oil spills to bird habitats from the shelf considered compared to Alternative I."). And Alternative III/I V are difficult to quantify, but qualitatively can be described."); id. at II-42, 45 ("Any spill that would occur would conversely take longer to reach and enter the spring-migratory route."). Id. ("The increased distance between offshore development and coastal habitats would...diminish the percentage of spilled oil on contact with marine mammals...”). Id. at II-44 ("The increased distance between offshore development and coastal habitats would...diminish the percentage of spilled oil...on fish habitats... "). Id. at II-41 (noting that "[t]he theories (Alternative III) provide more protection for coastal and marine fish habitats."). Because better information would enable BOEMRE to perform an actual, rather than conjunctural, analysis of the differences among potential alternatives, it is essential to a reasoned choice among alternatives.

3. Missing information is essential to determining an adequate range of alternatives.

Missing information is essential to the choice among alternatives, because it is essential to the agency's definition of an adequate range of alternatives. NEPA requires that an EIS contain a detailed statement of the alternatives "to the proposed action." 42 U.S.C. § 4321(c)(1). The discussion of alternatives "is the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. That discussion should "provide[] a clear basis for choice among options by the decisionmaker and the public.” See City of Amberg v. U.S. Dist. Ct., 803 F.3d 1016, 1020 (9th Cir. 2015). ("The touchstone for our inquiry is whether an EIS's selection and discussion of alternatives to the proposed action is meaningful.") The purpose of an EIS is to provide meaningful choices—namely information sufficient to identify “areas with sensitive fish and wildlife values... .” 42 U.S.C. § 4321(c)(1). The rationale for the NEPA analysis is that an EIS provides "comprehensive, coordinated, and integrated study plans to obtain essential missing information with which to analyze effects and make sound management decisions.

Because BOEMRE has not obtained any new information for this draft SEIS, it has left these and other questions unanswered, as they were in the original EIS. In light of the important decisions being made at the lease sale stage, as described above, the answer to these questions and others like them, are essential to the agency's choices at this stage.

During the comment period, BOEMRE should obtain missing information to answer these and other important questions about the Chukchi Sea and the impacts of oil and gas development there. As discussed below and in the attachments, the most effective way to do this would be to engage in a comprehensive gap analysis, taking into account the ongoing Chukchi Sea Oil Spill Survey effort, potentially supplemented by information from other federal agencies with expertise in the Arctic, such as the National Oceanic and Atmospheric Administration, and then to undertake a comprehensive, coordinated, and integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.
and wildlife, subsistence, and cultural resources” and to provide at least one action alternative that “ensures[] development can occur without significant impacts to critical resources”—is clearly essential to a choice among alternatives.

In the draft SEIS, BOEM RE concludes that the effects under all the action alternatives presented in the original EIS are basically the same. Draft SEIS at 11 (noting the “comminoration of potential impacts and their severity among all action alternatives, which substantially reduced the utility of incomplete information to the decision-maker”). See also FEIS at S-9 (noting that “[t]he EIS analysis concludes that for the most part, the resource consequences of alternative III and IV, while they would provide a measure of protection to the resources within the deferral area, the effects to the resources in the Chukchi Sea area undeniably are the same as the effects under an alternative I”). This conclusion, if true, which it is not, suggests only that the range of alternatives in the original EIS was inadequate. It highlights, rather than excuses, the essential nature of missing information in the decision making process.

For example, BOEM RE stated in the original EIS that information about beluga whales was both important for the lease sale decision and missing from the analysis. It stated that “[i]f you understand the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and is an important source of information.” FEIS at S-83. But “[i]f late-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified . . . .” Id. Rather than acknowledge as it acknowledged in 2007 that it was important to planning lease sales, BOEM RE in the draft SEIS attempts to excuse itself from that work with general beloitian language. See Draft SEIS, App. A at 99 of 143 (stating that “[w]hile additional information on the distribution and timing of movements of belugas would be useful, this information is not essential to a reasoned choice among alternatives in this case because “[m]uch information is already known on the general habits of the many species of birds [sic] that use the Chukchi Sea” and “this level of available information is sufficient to support sound scientific judgments and reasoned managerial decisions regarding formulation and selection of lease alternatives” and “[t]he protections that this species receive under the MMPA will serve to preclude or reduce impacts under all action alternatives”). These generalizations are not credible alternative, or what is missing information the agency itself has admitted is important for the decision-maker. As described in the next section, BOEM RE’s rationales do not justify the agency’s course.

C. BOEM RE’s reasons for not to obtain any missing information are arbitrary.

BOEM RE advances five recurring excuses for not to obtain a single piece of information during the remand period. A key BOEM RE excuse for this extraordinary decision, that is both explicit and implicit in several rationales, is its determination that information is lacking to support the lease sale decision, because that decision is not a consequential commitment of areas to oil and gas activities. Thus, information can be obtained at later stages of the OCSLA process, and if information were obtained after the decision was made, it would not undermine the decision. See, for example, attachment A documents those references from peer reviewed literature produced under the 2010 Exploration Drilling Program, Chukchi Sea OCS, Alaska, Environmental Assessment at 6-7 (2010 December); MMS, Shell Gulf of Mexico, Inc., 2010 Exploration Drilling Program, Chukchi Sea OCS, A. Isaake, Environmental Assessment at 6-7 (2010 December); MMS, Shell Gulf of Mexico, Inc., 2010 Exploration Drilling Program, Chukchi Sea OCS, A. Isaake, Environmental Assessment at 6-7 (2010 December). But see also RE’s attempts to explain that lack of ability to gather information is always either pushed into the future or deemed unnecessary in light of past NEPA documents.

More fundamentally, BOEM RE’s excuses fail to recognize the importance of the decision being made at the lease sale stage. As discussed above, at the lease sale stage BOEM RE makes the decision about whether to permit oil and gas activities in an area, and the existence of leases, once issued, considerably constrains the agency’s discretion to alter course. BOEM RE can, of course, delay lease sale decisions and develop plans, and it can suspend and cancel leases after they are issued. But these actions may only be taken in compliance with the substantive and procedural constraints of OCSLA and its regulations. It is precisely at the lease sale stage—where the agency finds itself now—when it has full discretion to determine if, when, where, and how oil and gas activities may occur in a planning area, that information about the biological resources of an area and the effects of oil and gas activities on those resources is essential.

BOEM RE also misapropriated its obligation under NEPA in preparing the draft SEIS. The job of the SEIS is to inform the decision-maker and the public about the effects of the decision to offer oil and gas leases in the Chukchi Sea. To satisfy this obligation, BOEM RE must “prepare a ‘detailed statement’ covering the impact of particular actions on the environment, the environmental costs which might be avoided, and alternative measures which might alter the cost-benefit equation . . . to aid in the agencies’ own decision making process and to advise other interested agencies and the public of the environmental consequences of planned federal action.”

Calvert Cliffs’ Coordinating Comm., Inc. v. U. S. Atomic Energy Comm’n, 449 F.2d 1109, 1114 (D.C. Cir. 1971). “[T]he purpose of an [EIS] is to . . . produce an informed estimate of the environmental costs which might be avoided, and alternative measures which might alter the cost-benefit equation . . . to aid in the agencies’ own decision making process and to advise other interested agencies and the public of the environmental consequences of planned federal action.” Calvert Cliffs’ Coordinating Comm., Inc. v. U. S. Atomic Energy Comm’n, 449 F.2d 1109, 1114 (D.C. Cir. 1971). “[T]he purpose of an EIS is to provide reasonable estimates of significant environmental consequences.” Kern v. U.S. Bureau of Land Mgmt., 284 F.3d 1062, 1072 (9th Cir. 2002) (quotation and citation omitted), and give the decision-maker a “clear idea how to visualize the environmental harms” of the proposed action. Mass. v. U.S. Navy, 716 F.2d 946, 949 (1st Cir. 1983).

Similarly, BOEM RE states that, although large quantities of data are missing about the Chukchi Sea, there is enough information available now for informed decision making and draft drilling plans, in that information is “essentially the same as the potential impacts and their severity among all action alternatives, which substantially reduced the utility of incomplete information to the decision-maker.” Draft SEIS at 11. The original EIS acknowledges that that “substantially reduced the utility of incomplete information to the decision-maker.” Draft SEIS at 11. As an initial matter, and as discussed above, the statement is not true—the original EIS presented an adequate range of potential effects, the mitigation measures must “be discussed in sufficient detail to ensure that the actual impact of proposed projects,” Earth Island Institute v. U.S. Dep’t of Interior, 442 F.3d 1147, 1172 (9th Cir. 2006), in an EIS “to obviate the need for [ speculation by insuring that available data is gathered and analyzed prior to the lease sale decision].” Found for An Advanced Wild Sheep: U. S. Dept. of Agric., 681 F.2d 1272, 1379 (9th Cir. 1982).

Relatively, BOEM RE states that it need not obtain additional information because other environmental laws and regulations would preclude significant adverse effects on particular resources. A gain, BOEM RE misapropriated its obligations under NEPA. An agency cannot rely on the imposition of future mitigation measures to avoid analyzing the impacts of an activity in an EIS. See S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep’t of Interior, 588 F.3d 718, 728 (9th Cir. 2009) (holding EIS violated NEPA because it failed to analyze a project’s oil spill impacts in reliance on separate Clean Air Act permitting process); see also Neighbors of Cuddy Mountain v. U.S. Forest Serv., 1277 F.3d 1372, 1381 (9th Cir. 1998) (holding EIS discussion of mitigation inadequate in part because it was “not clear whether any mitigation measures would be adopted”); Nat’l Parks & Conservation Ass’n v. Babbitt, 241 F.3d 722, 734-35 (9th Cir. 2001).

Furthermore, where information is lacking to avoid “hazards potential, the mitigation methods must be ‘determined in sufficient detail to ensure that environmental consequences have been fairly evaluated.’” Neighbors of Cuddy Mountain, 137 F.3d at 1380-81 (EIS violated NEPA, where it failed to discuss “how effective the mitigation measures would be”); Nat’l Parks & Conservation Ass’n v. Babbitt, 241 F.3d 735 (“the impact of the proposed mitigation measures must be made part of the EIS”). Neither the original EIS nor the draft SEIS discusses the future mitigation BOEM RE claims excuses analysis in any meaningful detail.

BOEM RE also states that it need not obtain further information about adverse impacts because it has determined that a significant impact would not result from the decision. FEIS at S-33. BOEM RE means to imply that any effects that would not result from the decision would not be significant. For example, the original EIS said in the context of species populations of fish: “Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extinction) could occur, but would likely go unobserved or undetected.” FEIS at II-34. The draft SEIS responds to this statement as follows: “[i]t is well understood that the environmental impact associated with large oil spills could be quite severe. Rare species could be affected by such an event wherever [sic] they may occur throughout the lease sale area . . . the decision-maker already has sufficient information regarding the relative probability and large and various impacts of large oil spills to allow a reasonable choice among lease sale alternatives.” Draft SEIS, App. A at 2 of 134. With about what would happen in the event of an oil spill, including, for example, what species of fish might be extinguished, it is not possible for BOEM RE to create a detailed picture of the potential environmental harms that could result from the lease sale and to provide the decision-maker and public with a clear picture of the potential impacts.

Finally, BOEM RE states that there is a “commmonality” of effects among all action alternatives which “substantially reduced the utility of incomplete information to the decision-maker.” Draft SEIS at 11. As an initial matter, and as discussed above, the statement is not true—the original EIS acknowledged that significant adverse effects would occur under certain circumstances, such as an oil spill. Draft SEIS at V-32. Yet, in the draft SEIS, BOEM RE attempts to obtain information that would not be significant to marine mammals from oil and gas activities under the lease sale. FEIS at V-32. Yet, in the draft SEIS, BOEM RE attempts to obtain information that would not be significant to marine mammals from oil and gas activities in the Chukchi Sea and without the lease sale decision, because that decision is not a consequential commitment of areas to oil and gas activities.
E. BOEMRE should reassess its approach, obtain essential missing information, and reconsider the lease sale decision in light of the new information.

BOEMRE should not finalize the SEIS as currently written. It should take a new approach and undertake a meaningful assessment of whether missing information is essential to a reasoned choice among alternatives, obtain the information that is, assess whether the new information merits different alternatives, and fully reconsider the Chukchi Sea lease sale in light of that new information.

The most effective way to respond to the Court’s order and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This information will allow managers to move from qualitative assessments (i.e., educated guesses) to making quantitative assessments of potential impacts. Information will allow decision makers to weigh the costs and benefits of industrial activities and determine whether there are alternatives that could allow for development while protecting the ecosystem and subsistence way of life. Obtaining information now would also ensure that, if leases were sold, there would not be an information gap later in the process, when the agency is called upon to analyze and approve exploration and development plans on those leases. We urge BOEMRE, as attachment C, a draft research plan, to set forth one possible approach to obtaining missing information that would be true to the Administration’s commitment to science-based decision making.

Once it has obtained missing information and completed a meaningful reanalysis of the potential effects of Lease 193, BOEMRE should, as it recognizes, Draft SEIS at 4 (“When the EIS process is complete, the court is remanded to the Secretary of the Department’s previous lease 193 decision”), make anew its decision whether to cancel, modify, or amend the decision to hold Lease 193. To meet the intent of the remand, BOEMRE should study whether and how it “rationalize and bureaucratic momentum,” BOEMRE and the Department of Interior must not lend weight to the existence of outstanding leases in the Chukchi Sea—the prior decision to hold the lease sale as a “court order” for not-bettered evidence regarding Lease 193. Northern Chukchi Tribe v. MMS, 851 F.2d 1152, 1157 (9th Cir. 1988).

II. ANALYSIS OF NATURAL GAS DEVELOPMENT

The draft SEIS’s analysis of the effects of natural gas development also fails short in a number of respects. It fails to adequately take into account chemical change, its scenario is unjustifiably limited, its dismissal of liquefied natural gas (LNG) tankering is unjustified, it fails to adequately analyze the impacts of pipelines, it fails to adequately note the potential for activities to displace subsistence users.

A. The Draft SEIS fails to adequately take into account climate change.

The draft SEIS, like the original Lease 193 EIS, fails to adequately assess the lease sale’s impacts in the context of Arctic climate change. It is essential that the final SEIS analyze the effects of gas development and production in light of Arctic climate change because the draft SEIS states that “the timeframe for all activities . . . could span 50 years,” and assumes that gas-related activities will occur during the latter portion of that period. Draft SEIS at 65. Although there is no timeline for the Arctic at the time natural gas will be developed according to BOEMRE’s scenario, it will be a different place than the Arctic of 2010.

The Arctic is undergoing rapid change. It is warming faster than any other place in the world. Among the most profound changes have been the loss of sea ice, the melting of permafrost, and coastal erosion. As temperatures continue to rise and precipitation patterns change, species distributions will shift, and many species will experience increased stress and decreased chances of reproduction and survival. The listing of the polar bear as an endangered species embodies that loss exemplifies the changing Arctic environment. Polar bears are spending more time on land and less time on ice where they hunt for seals. As a result, scientific prediction that two-thirds of the world’s polar bear population could disappear by the middle of the century. The future looks similarly grim for walrus. Walrus are benthic feeders that use the ice as a platform from which to feed. As sea ice thinning and retreat become much more difficult to access, leading to malnutrition and increased energy expenditures in searching for food.

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The draft SEIS arbitrarily assumes that no additional seismic or exploration drilling will occur in the natural gas development scenario.

In the draft SEIS, BOEMRE assumes that gas development and production would not entail any additional seismic surveying or exploration drilling. Draft SEIS at 65. The scenario forms the basis of the agency’s analysis in the EIS. Thus, an arbitrary scenario affects the entire analysis of effects through the draft SEIS. This draft SEIS fails to analyze the effects of gas development and production in a manner that ensures that effects will be essentially different than the effects of projected oil development and production in the original EIS. Draft SEIS at 65. BOEMRE’s limited gas scenario is arbitrary. BOEMRE assumes that gas development will result in no additional exploration activities because gas development will remain much less financially attractive than oil development. Draft SEIS at 65. However, even if gas development remains less attractive than oil development, this does not justify BOEMRE’s assumption that gas activities would not involve additional seismic activities or drilling. Indeed, this assumption is contrary to the agency’s past statements on the attractiveness and probability of gas development. In the 2008 Multi-Sale Draft EIS, BOEMRE stated that an operational gas pipeline would “encourage new exploration, development, and production of natural gas throughout northern Alaska, including the Arctic OCS,” MMS, Beaufort Sea and Chukchi Sea Planning Area, Oil and Gas Lease Sales 209, 212, 217, and 221, Draft EIS, App. E at 4 (November 2008). BOEMRE’s decision is based on the administrative record for Lease 193 BOEMRE recognized that some companies were even more interested in gas than in the Chukchi Sea and the agency noted that billions of dollars in money is tied up in the development of natural gas projects. Email from James Craig, BOEMRE, to John Goll, Re: Chukchi PNS at 1 (March 19, 2007). A BOEMRE evaluation of Chukchi Sea lease sale scenarios plainly stated that “including gas development in the scenario would greatly increase potential environmental impacts because the number of wells and platforms will be greater.” Email from James Craig, BOEMRE, to Range Wal, Re: My response to Shell’s request to change the Chukchi scenario at 3 (Dec. 13, 2005).

A pipeline stretching from the Chukchi Sea to the main transport hub near Prudhoe Bay may also provide an incentive to gas companies to perform additional exploration. The Chukchi Sea could contain considerable reserves of gas. BOEMRE’s draft SEIS states that the offshore area including undegassed resources in the Chukchi Sea range from 103.3-205.9 Tcf, while such resources in the Beaufort Sea range from 0.6-72.2 Tcf. While gas may presently be less valuable than oil, the potential of a pipeline or LNG tankers could make any Chukchi gas field commercially viable. This could cause companies to develop more gas, as well as oil found in the ground with the gas. It is arbitrary for BOEMRE to ignore this incentive and the possibility that a gas pipeline could transform the value of developing a gas and oil field from marginally unprofitable to lucrative.

Moreover, it is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future. The International Energy Agency projects that global demand for natural gas will increase 44 percent between 2008 and 2035, and that this increase in demand...
In particular, the draft SEIS does not sufficiently analyze the potential effect of a gas pipeline over land could have on caribou. The agency provides only two sentences on this topic, concluding that an elevated pipeline will not prevent caribou movements and stating that “[p]ipelines without adjacent roads and vehicle traffic are less likely to affect caribou movements.” Draft SEIS at 89. BOEMRE should provide a more detailed analysis of the potential for caribou activities to disturb caribou, including a review of the potential for a natural gas pipeline to delay caribou migrations and the effect that would have on caribou herds and individuals. A large pipeline stretching across the NPR-A could have important adverse impacts. For example, the Bureau of Land Management (BLM) has considered the effects of smaller pipelines—one stretching across only part of the NPR-A—in its EIS analyzing effects of different management strategies for the NPR-A, BLM, Polar Reserve, Alaska, Final Integrated Activity Plan/Environmental Impact Statement (November 2002). BLM, Alaska, Polar Reserve, Alaska, Final Integrated Activity Plan/Environmental Impact Statement (April 2008), available at http://www.blm.gov/ak/st/en/prog/planning/pnr/pngr_final.html?dr=1. The BLM notes that oil and gas pipelines, and especially roads, can displace caribou and reduce caribou density for miles. NE NPR-A, BLM at 161. Further, it states that pipelines could cause “extensive disruption of caribou movements” during the insect-ridden season.” Id. at 162. This is contrary to BOEMRE’s statement in the draft SEIS that caribou are tolerant of development and its conclusion that caribou are capable of adapting to land-based activities. Draft SEIS at 90. The BLM has also identified particular problems with pipelines themselves. It states that snow drifts under a pipeline can block or interrupt caribou movements. NW NPR-A, BLM at IV-193. It also indicated that parallel sets of pipelines can lengthen crossing delays, NE NPR-A, BLM at 4-171. In some cases, caribou “may be delayed in crossing a pipeline and road for several minutes or hours in period of heavy traffic.” Id. at IV-193. The energetic costs associated with such delays are unknown.” NW NPR-A, BLM at IV-193.

Moreover, the final SEIS should provide a more comprehensive review of relevant research on the effects of oil and gas development on caribou. For example, in the draft SEIS, BOEMRE cites a study from 2000 indicating that onshore development and production have not resulted in population-level effects. Draft SEIS at 90. However, a later report from the National Research Council found that:

[as a result of conflicts with industrial activity during calving and an interaction of disturbance with the stress of summer insect harassment, reproductive success of Central Alaska caribou female caribou in contact with oil development from 1988 through 2003 was lower for undisturbed females, contributing to an overall reduction in herd productivity.]

Vessels transporting the LNG to market through the Bering Sea could negatively affect the critically endangered North Pacific right whale, one of the most endangered whales in the world. It is essential that BOEMRE consider the possibility that boat strikes could result in mortality to right whales because the loss of any North Pacific right whale would be a significant effect.

Additionally, LNG tankering could greatly increase Arctic emissions of black carbon and contribute to Arctic warming. BOEMRE should analyze these effects.

Thus, given the feasibility of LNG tankering, MMM’s own promotion of the technology during the process leading to the original Lease Sale 193, industry interest in it, and the potentially significant impacts, tankering, BOEMRE must include an analysis of the effects of LNG tankering in the final SEIS.

D. BOEMRE has not sufficiently analyzed the effects of the construction and operation of pipelines resulting from natural gas development.

The effects of a gas pipeline spanning from offshore in the Chukchi Sea to near Prudhoe Bay have never been analyzed. Neither the original Lease Sale 193 EIS nor the draft SEIS adequately analyzes the potential effects of a hundred-mile long pipeline traversing diverse habitat for caribou and other species in across the National Petroleum Reserve—Alaska (NPR-A). As an initial matter, the original Lease Sale 193 EIS’s analysis of an oil pipeline does not provide the necessary analysis of the effects of a gas pipeline. Even if the gas pipeline travels the same corridor as the oil pipeline discussed in the original EIS, the later time frame BOEMRE has identified for gas development will result in the construction of the gas pipeline at a later date. Also, a second pipeline and additional compression facilities and maintenance activities will result in other effects, both individually and cumulatively with oil-related activities. The final SEIS for Lease Sale 193 must consider the effects that a gas pipeline and its associated facilities and activities could have, in conjunction with oil production and development activities, on the Arctic environment. However, the draft SEIS provides no more than a cursory and inadequate analysis of the effects of the construction and operation of a gas pipeline. Instead of providing a detailed analysis of the potential effects, BOEMRE states that “there could be negative consequences from construction of the gas pipeline, but relying on later analyses and permitting to identify and prevent impacts.” BOEMRE’s Notice of Intent to Prepare the EIS for Lease Sale 193, Shell recommended that in addition to the construction of a gas pipeline, “LNG tanking should also be analyzed.” Shell E&P Company, Comments on Notice of Intent to Prepare an EIS on Proposed Chukchi Sea Lease Sale 193 at 2 (December 9, 2005).

An analysis of LNG tanking is essential because these activities could have substantial effects on the environment. The infrastructure and activities associated with LNG transport could affect large areas of the land and ocean. For example—caribou, and especially offshore whales—relying on later analyses and permitting to identify and prevent impacts. This does not satisfy NEPA. BOEMRE must take a hard look at the environmental effects of the lease sale before moving forward. Information about the biological resources of an area and the effects of oil and gas activities are essential at the lease sale stage because it is at this stage that the agency has discretion to determine if, when, where, and how oil and gas activities may occur in a pipeline. Thus, only now can BOEMRE analyze the potential harms of potential LNG tankering from the lease sale and how the action as a whole could affect the Arctic environment and have that analysis inform the agency’s decision making. At later stages, the agency will already be invested in particular courses of action, and its discretion may be more constrained.
encounters. BOEMRE recognizes that human-bear interactions can result in harassment of the bear, but fails to sufficiently consider the cost of such disturbances to the bear. \textit{Id.} at 83-84. Of particular concern is the potential for these interactions to endanger the life of a human or a bear. For instance, a human-bear encounter may lead to injuries or deaths to workers or an urgent need to protect a worker that results in the killing of a bear. The final SEIS should provide a comprehensive analysis of these and other relevant potential effects to polar bear, and should consider such impacts in light of the changing Arctic climate and environment.

The final SEIS should also provide additional analyses of effects to walrus. BOEMRE acknowledges that “the potential for serious adverse impacts to individual or groups of walruses does exist.” Draft SEIS at 88, and has noted that the population of a Alaskan pacific walrus is likely in decline. FEIS at II-74; however, the draft SEIS provides only a very brief analysis of potential impacts to walruses. Draft SEIS at 88. As with the EIS’s analysis for other species, it assumes that later permitting processes and mitigation measures will prevent harm. \textit{Id.} However, even the short analysis BOEMRE has provided shows this to be arbitrary. The agency states that aircraft overflights can result in mortality from the惊恐和 the separation of calf-pairs, but argues that “BOEMRE’s minimum altitude requirements would preclude adverse impacts to walrus, to the extent that human safety considerations permit flying at this altitude.” \textit{Id.} Thus, BOEMRE’s own analysis shows that human safety considerations may result in aircraft flying at an altitude that can startle walrus and cause walrus mortality.

In fact, low-floating clouds in the Arctic prevent compliance with minimum altitude requirements with some frequency. However, BOEMRE essentially ignores this potential harm and refuses to analyze whether resulting injuries or mortalities could result in population-level effects. BOEMRE also states that vessels can cause walrus to abandon haulouts, but does not address further the potential for vessels to disturb walrus. BOEMRE should provide an analysis of the potential for vessel disturbances to harm walrus. The draft SEIS does not consider any other potential disturbances to walrus. However, as discussed supra, gas production and development will require the construction of offshore pipelines and likely will result in additional exploration and development activity. BOEMRE must remedy these deficiencies by providing a complete analysis of potential effects to walruses in the final SEIS that includes a discussion of all relevant impacts.

BOEMRE also has not sufficiently analyzed the effects of gas development and production on birds. Gas development and production will require an enormous number of gas and crude oil offshore pipelines, Draft SEIS at 86, and “could entail relatively large-scale activity.” \textit{Id.} at 87. BOEMRE attempts to avoid substantive analysis by stating that later analyses and permitting processes will prevent impacts to birds. The agency should analyze the effects that disturbance could have on specific species of birds, including threatened and endangered species, and should not simply rely on conclusory statements of no significant impact, as it has done in the draft SEIS. Also, the draft SEIS fails to consider how increased predation due to predator attraction to natural gas operations will affect bird species, even though it also acknowledges that development infrastructure can increase concentrations of arctic foxes, which prey on birds and bird eggs. Draft SEIS at 86-87, 91. The final SEIS should analyze potential effects of increased predation.

\textbf{CONCLUSION}

BOEMRE should not finalize the draft SEIS in its current form. With respect to missing information, BOEMRE should reassess whether there is essential missing information, taking into consideration the ongoing United States Geological Survey analysis of Arctic data gaps. It should obtain information that is essential to a lease sale decision, most effectively by engaging in a comprehensive and integrated research program. It should then prepare a revised draft SEIS that analyzes the lease Sale 193 in light of this new information. With respect to its analysis of natural gas development, BOEMRE should revise its assumptions and improve its analysis as described above. Once it has prepared an adequate and informative draft SEIS, it should make the document available for public comment. Thereafter, the agency should consider anew in light of this new information whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

Respectfully,

Cindy Shogan
Executive Director
\textit{Alaska Wildlife League}
Sierra Weaver
Staff Attorney
\textit{Defenders of Wildlife}
Table of Attachments

A Peer Reviewed Publications for MMS Funded Projects (1990-Present) missing from the SEIS and FEIS for Chukchi 193

B List of recent studies that should be considered in the SEIS

C A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning (DRAFT)

Attachment A


Ocean Conservancy and PEW Environment Group Comments


Ocean Conservancy and PEW Environment Group Comments


Ocean Conservancy and PEW Environment Group Comments


Ocean Conservancy and PEW Environment Group Comments


List of recent studies that should be considered in the SEIS

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Relevant to addressing essential unknowns about bowhead whales:


Relevant to addressing essential unknowns about walruses:


### Relevant to addressing essential unknowns about fish and invertebrates:


### Relevant to addressing essential unknowns for lower trophic level species and communities:


### Relevant to addressing essential unknowns for all ecosystem components:

Relevant to addressing essential unknowns from industry-based surveys:


7 This appendix is Attachment 2 to this document.
information about the rest of the ecosystem, including the clams, worms, sea stars and other species that are important for the more conspicuous species.

The lack of baseline science has also been highlighted by several other prominent local and federal agencies as well as international organizations. On the Draft Program 2010-15 Five-Year Leasing Program, NOAA recommended using a precautionary approach to oil and gas activities for the Arctic and Beaufort seas that prevents the oil spill risk assessment information is available to support sustainable management. The Arctic Climate Impact Assessment, an international project of the Arctic Council and the International Arctic Science Committee, highlighted basic surveys and monitoring as well as ecosystem-based research as some of the most important research actions needed for Arctic marine waters. Further, the North Slope Borough has called for better baseline science to guide decision making, and Senator Begich has introduced legislation that would fund an additional Arctic research and coordination. Moreover, when basic information about the marine ecosystem exists, much of it is old, spotty, and sparse. For example, the Environmental Assessment for the Arctic Fishery Management Plan suggested that “data were scarce for estimating the abundance and biomass of fishes in the Arctic Ocean.” The review of potential data sources indicated that for fish species about every 15-20 years, but typically different regions. Even if those surveys were the past 60 years were combined together (which would be inappropriate due to different sampling methodologies and other reasons), there are still major areas of the U.S. Arctic shelf that have never been surveyed. These areas include those where commercial fisheries could reasonably be expected to develop and those within lease sale areas.

Additionally, the vast majority of existing surveys were conducted in the summer. We need a year-round understanding of the Arctic Ocean ecosystems. One stunning example of this is the walrus, the spectred Eider. In the summer their population would be widely dispersed, but in the winter, the entire world’s population gathers together in the area of the northern Bering Sea. If studies on this bird were only conducted in the summer, it would result in erroneous conclusions about the impacts of activities on this species, especially if activities occurred at or near their winter gathering area.

In addition, the Lease Sale 193 (Chukchi) and 2003 Multi-Unit (Beaufort 186, 195, 202) environmental impact statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Much of the environmental data input to the model is old, current and wind information dates from 1979-1996. More sophisticated models are available and better information would allow for more accurate predictions of the winds from the model.

While significant resources have been dedicated to studying particular Arctic animal and potential impacts to those animals from offshore oil and gas activities, we still lack critical baseline information about the ecosystem. The only studies designed to provide the comprehensive information and understanding of the health, biodiversity, and functioning of Arctic ecosystems are the Arctic marine science programs and the potential impacts of industrial activities were conducted prior to the requirement of the Environmental Assessment Program (CEASAP). The information gained under that program did not initially cover the Chukchi Sea lease sale area and is so outdated as to be of very little use in making decisions now for the Beaufort Sea.

An Interdisciplinary, Integrated Research and Monitoring Program for the U.S. Arctic Ocean At this point, it is inconceivable that there are substantial gaps about Arctic marine ecosystems, a laundry list of studies that have been conducted, ongoing processes at BOEMRE in response to court orders to supplement the Lease Sale 193 EIS to better account for missing science and to revise the environmental sensitivity analysis and 2007-12 Five-Year Leasing Program Plan. A commitment by the new administration to bring science to decision making. President Obama and his administration must establish a path forward that harmonizes this situation and provides the basic information required to protect the resources of the Arctic, including the sustentation of life. The most efficient way to accomplish these goals is through another OCSEAP-type program limited to the Beaufort and Chukchi seas.

To provide the basic information required to protect the resources of the Arctic, including the sustentation of life, and to guide decisions on oil and gas and other industrial activities, a new comprehensive research and monitoring program should:

1. Integrate existing information to give a more holistic picture of what is known and conduct an analysis of the gaps in information to determine the most pressing research and monitoring needs;
2. Gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migration paths;
3. Track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways;
4. Secure a better understanding of trophic linkages, physical and biological processes affecting nearshore ecosystems and other facets of ecosystem structure and function, and effects of anthropogenic perturbations;
5. Study potential ecological and sociological impacts; and
6. Integrate these scientific data with existing knowledge about Arctic marine ecosystems as well as processes and habitats that are sensitive and vulnerable to perturbation, and furnish a basis for marine spatial planning.

This program could easily be conducted in three simple phases over the next 5-7 years:

- 2010-2011: gap analysis and planning (2011-2012); and research and monitoring (2013-2015, with monitoring continuing into the future); and integrating new and older information to provide the basic understanding needed to make effective decisions (2016-2017). Each of these phases must be informed by local and traditional knowledge, including planning and peer-review.

Phase 1: Gap Analysis and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information and gaps in knowledge. Based on that information, a research program can be devised, with public input, to fill the gaps.

Phase 2: Research and Monitoring

Once the information gaps are identified and a research plan devised, the research and monitoring must be executed. As the known gaps in knowledge outlined above, scientific research and monitoring should include:

- 2012-2016: research new and existing data from other programs and to develop a comprehensive research and monitoring plan that will guide the research and monitoring efforts.

President Obama and Secretary Salazar have directed the USGS to assess “resources, risks, and environmental sensitivities” of the U.S. Arctic marine mammals. The USGS Arctic Ocean research and monitoring program is an important step in this direction, and should be carried out by a non-governmental organization (NGO) as well as called for in Senator Begich’s Arctic Ocean Research and Science Policy Review Act of 2009. President Obama and Secretary Salazar have directed the USGS to assess “resources, risks, and environmental sensitivities” of the U.S. Arctic marine mammals. The USGS Arctic Ocean research and monitoring program is an important step in this direction, and should be carried out by a non-governmental organization (NGO) as well as called for in Senator Begich’s Arctic Ocean Research and Science Policy Review Act of 2009. President Obama and Secretary Salazar have directed the USGS to assess “resources, risks, and environmental sensitivities” of the U.S. Arctic marine mammals. The USGS Arctic Ocean research and monitoring program is an important step in this direction, and should be carried out by a non-governmental organization (NGO) as well as called for in Senator Begich’s Arctic Ocean Research and Science Policy Review Act of 2009.
I. Marine life assessment to provide a year-round picture of the species in each marine habitat and their population trends.

2. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biological interactions, such as productivity and community richness and diversity.

3. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses.

4. Studies designed to identify patterns of substance use and changes in well-being as well as potential impacts from industrial activities.

5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate sciences to social impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to better elucidate the processes that underlie the way in which the ecosystem functions. As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCS EAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

Integration into the larger context of the ecosystem.

The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web to invertebrates, fish, birds, and marine mammals.

This example shows that research can be—and, in fact, is—being conducted in the Arctic Ocean. ConocoPhillips’s and Shell’s research, however, is confined to areas around two of their drilling prospects during the open water season. This creates a concern that this research may be biased to the region adjacent to that part of the Chukchi Sea and to the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

II. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses.

A. As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCS EAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

B. Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities. They were only able to do this by studying multiple aspects of the ecosystem simultaneously, including climate indices, sea ice concentration, water temperature, sedimentation, and seaweed biomass. In addition to providing better information, this type of integrated research and monitoring is more cost effective because more information is elucidated than would be from individual studies.

ConocoPhillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing. Their work indicates that the Chukchi Sea is not a homogeneous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea affects sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web to invertebrates, fish, birds, and marine mammals.

Furthermore, work that is integrated from multiple disciplines and perspectives, and is based on high-quality data, could provide a more comprehensive and accurate assessment of the potential impacts of oil and gas activities in the Arctic. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities. This created a concern that this research may be biased to the region adjacent to that part of the Chukchi Sea and to the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

III. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biological interactions, such as productivity and community richness and diversity.

A. Environmental monitoring should be interdisciplinary, spanning from climate sciences to social impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to better elucidate the processes that underlie the way in which the ecosystem functions.

B. As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCS EAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

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D. ConocoPhillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing. Their work indicates that the Chukchi Sea is not a homogeneous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea affects sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web to invertebrates, fish, birds, and marine mammals.

E. This example shows that research can be—and, in fact, is—being conducted in the Arctic Ocean. ConocoPhillips’s and Shell’s research, however, is confined to areas around two of their drilling prospects during the open water season. This creates a concern that this research may be biased to the region adjacent to that part of the Chukchi Sea and to the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

F. Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities. This created a concern that this research may be biased to the region adjacent to that part of the Chukchi Sea and to the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

G. As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCS EAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

H. Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities. This created a concern that this research may be biased to the region adjacent to that part of the Chukchi Sea and to the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in such an approach is to develop and implement a comprehensive research and monitoring program like OCS EAP. We simply do not know enough now to make good decisions about stewardship for the oceans and clean energy. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate; and if so, when, where and how such activities could be conducted.
A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean

V.

A. Establish a network of fixed monitoring stations to track physical forcings and local biological responses. This station network should be patterned along the lines of the National Science Foundation's Long Term Ecological Research Network (LTER) and NOAA's Oceanographic Baseline surveys to the Arctic Ocean, with sampling stations located at both the Chukchi and Beaufort seas. These stations will measure physical factors in the ocean including temperature and salinity, acoustic, alkalinity and nutrients as functions of seawater depth, along with current profiles at strategically chosen locations; atmospheric factors including surface temperature, wind speed and direction, insolation, gas composition, and particulate density and composition; and biological factors such as primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.

B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, and to identify gaps in the existing body of ecological knowledge. Emphasis should be on understanding both the current state of the system and how it may change in response to human perturbation.

C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, including research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

D. Establish a systematic process for incorporating LTK for early detection of unanticipated ecological impacts, and for review by LTK experts for accuracy and completeness.

E. Monitor detection of invasive species, including species displaced by warming seawater temperatures, as well as species introduced by human activities.

F. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals, and some fish). These assessments will provide crucial baseline data for evaluating impacts of industrial development and ecosystem change.

G. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, including research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

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I. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, including research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

J. Establish a systematic process for incorporating LTK for early detection of unanticipated ecological impacts, and for review by LTK experts for accuracy and completeness.

K. Monitor detection of invasive species, including species displaced by warming seawater temperatures, as well as species introduced by human activities.

L. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals, and some fish). These assessments will provide crucial baseline data for evaluating impacts of industrial development and ecosystem change.
(EIS) for the Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) (May 2007). This contains statements in the EIS acknowledging missing information about the Chukchi Sea environment and the potential effects of the lease sale 193 on wildlife and subsistence. This declaration was compiled by an Earthjustice staff member under my direct supervision and reviewed by me.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 29th day of January, 2009.

Erik Grafe
to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“A adjustment by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northeastern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are generally limited; most of the surveys/studies have been performed in coastal waters landward of the tangent of 200-m isobath, with scant surveys having sampled deeper waters. . . .” (Robust population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare). . . . Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities; growth, reproduction, or survival rates within regional or local habitats; or productivity rates by habitat; essentially are unknown for fishes inhabiting waters seaward of the nearshore, brackish-water estuaries.” EIS at III-34 (internal citations omitted).

2. Neritic-Demersal Assemblage

“Life history data for many of the demersal species using neritic substrates is lacking (e.g., white-spotted greenling, twospotted sculpin, spinyhock sculpin, veteyan poacher); consequently, assessing the species resilience to perturbations is not feasible until additional information becomes available.” EIS at III-35.

3. Neritic-Pelagic Assemblage

“No species of this assemblage are assessed as being of low resilience, because life-history data are lacking.” EIS at III-35.

4. The Cryopelagic Assemblage

“Arctic cod and Pacific sand lance are assumed to be of medium resilience to exploitation; polar cod and toothed cod are data deficient such that an assessment of resilience is not feasible with available information.” EIS at III-36.

III. MARINE AND COASTAL BIRDS

A. Impacts Generally

1. Noise impacts on marine and coastal birds
2. Oil impacts on marine and coastal birds

B. Impacts to Threatened Spectacled and Steller’s Eiders

C. Impacts to Kittlitz’s Murrelets

D. Impacts on Waterfowl

E. Impacts on Shorebirds

LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

“Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that ice cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level.” EIS at III-32.

“Despite these previous works, several data deficiencies remain. Information of current distribution and abundance (e.g., fish per square-kilometer) estimates, age structure, population trends, or habitat use areas are not available for fish populations in the northeastern Chukchi Sea. Many fish studies reporting distribution and/or abundance are 20-30 years old. Other studies are still older. For example, the only survey of demersal fishes in the region is more than 20 years old. Fish assemblages and populations in other marine ecosystems of Alaska (e.g., Gulf of Alaska, Bering Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years. It is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action.” EIS at III-32.

“A number of important data gaps is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-33.

“Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and areas reflect a pattern of temporally and spatially irregular and disjoint sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is known that the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Bering seas are considered to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-40.

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II. MARINE MAMMALS

A. Whales

1. Bowhead Whale

“There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean.” EIS at III-45.

“We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined.” EIS IV-102 (similarly at IV-103).

“The amount of feeding (by the BCB Seas bowhead stock) in the Bering Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002).” EIS at III-49.

“The MMS funded large scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by M et al. (2000). Late-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified (Suydam, 2005).” EIS at III-76.

“Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-125.

2. Fin Whale

“The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock.” EIS at III-46. See also id. at III-56 (similar).

“The possible influences of disease or predation on bowhead whales in the North Pacific is not understood.” EIS at III-57.

“The possible influences of disease or predation and of overutilization on [fin whales] are listed by NMFS as ‘Unknown.’ EIS at V-28.

3. Humpback Whale

“Avaliability in the distribution of humpback whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-125.

4. Gray Whale

“[E]xisting information is insufficient to understand the dynamics of gray whales and offshore Chukchi Sea habitat relationships, quality and quantity dynamics and distribution of prey resources, or the capability of habitat to support (carrying capacity) long- and short-term whale use.” EIS, Vol. II, p. 209.

“[T]he relationship between the expanding gray whale population to amphipod community dynamics is unknown but is of considerable interest.” EIS at V-35.

5. Beluga Whale

“Understanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures. Late-summer distribution and fall migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2003).” EIS at V-163. See also id. at III-77 (second sentence same).

“Based on recent telemetry studies on eastern Chukchi belugas, it is likely that members of both bowhead and beluga stocks in the eastern North Pacific and at times during the fall migration although the significance of this is unknown (Suydam, Lowry, and Frost, 2003).” EIS at III-76.

6. Harbor Porpoise

“The harbor porpoise inhabits shallow, coastal areas in temperate, subarctic, and arctic waters of the Northern Hemisphere (Read, 1999). In the North Pacific, harbor porpoises range from Point Barrow, Alaska to Point Conception, California (1984). In Alaska, three separate stocks have been recommended, although there is insufficient biological data to support the designation at this time.” EIS at III-78.
B. Other Marine Mammals

1. Seals

"Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Be/Chukaq/Chukchi Sea species known to be in decline. A scarce population estimate for ice seals are not available and are not easily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec. III. A. 4. Sea Ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec. III. A. 3. Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006)." EIS at III-73.

...Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

...Migration routes [of spectacled eiders] in the spring are not well known..." BE at 25.

"Recruitment rate of spectacled eiders is unknown (USFWS 1999)." BE at 25.

...No reliable estimate for the size of the Alaskan ribbon seal stock is available (Angliss and Outlaw, 2005)." EIS at III-71.

...No reliable estimate for the size of the Alaskan ribbon seal stock is available (Angliss and Outlaw, 2005)." EIS at III-72.

2. Threatened Spectacled Eiders

"In general, population demography for this species and in particular breeding information (i.e., timing of pair formation and duration of pair bonds, timing of mating, male and female dispersal rates, sex-specific estimates for natal, breeding, and multi-site fidelity, breeding propensity, nonbreeding component, ducking/brocking and first-year survival, etc.) is poorly understood due to a lack of long-term monitoring/monitoring programs and/or low/relatively/recapture/recovery rates." BE at 23.

...Few data are available on the overall longevity of spectacled eiders, but if similar to other eiders, they would likely be long-lived." BE at 23.

...Recruitment rate of spectacled eiders is unknown (USFWS 1999)." BE at 25.

...Migration routes [of spectacled eiders] in the spring are not well known..." BE at 25.

...The summer range of non-breeding [spectacled] eiders is not known..." BE at 26.

...Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

...The world population of spectacled eiders has declined substantially during the past 30 years, and may be continuing to decline (USFWS 1999, 2002b). Long-lived species like spectacled eiders typically do not have highly variable populations and unknown mortality factors may be undermining their ability to maintain a stable population. The causes of decline could be varied and are largely unknown..." BE at 28.

1. From M ineral M anagement Service, Biologica l Evaluation of Spectacled Eider (Somateria fischeri), Steller’s Eider (Polysticta stelleri), and Kittlitz’s Murrelet (Brachyramphus brevirostris) for Chukchi Sea Lease Sale 193 (September 2006), incorporated by reference into the Lease Sale 193 EIS at III-61, IV-125, V-30.

...There is cause for concern. Sea ice is changing in thickness, persistence, and..." BE at 25.

...Migration routes [of spectacled eiders] in the spring are not well known..." BE at 25.

...The summer range of non-breeding [spectacled] eiders is not known..." BE at 26.

...Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

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study, marine littoral waters extended seaward 2 miles from shore. Steller’s eiders were listed as present from June 1 through October 4 and uncommon, but possibly breeding in the area. It is not known if Steller’s eiders still nest in this area.” BE at 20-21.

4. Kittlitz’s Murrelets

“The Kittlitz’s murrelet (Brachyramphus mavericki) is one of the rarest and least understood seabirds in North America. There is limited life history information on the Kittlitz’s murrelet (i.e., age at first breeding, nest success, hatching success, fledging success, first-year survival, survival to breeding age, proportion of breeding females, proportion of non-breeder, periodic non-breeding, etc.) and mechanisms of population regulation. The limited information available for this species and research on the closely related marbled murrelet suggests a A-selected life history strategy.” BE at 33.

“The longevity of the Kittlitz’s murrelet is unknown . . ..” BE at 33.

“Age to maturity in Kittlitz’s murrelets is unknown . . ..” BE at 33.

“Little is known about the reproductive strategy of Kittlitz’s murrelet because nesting sites are difficult to find (Day et al. 1999).” BE at 33.

“A annual breeding effort is poorly understood, but is considered highly variable.” BE at 33.

“Spring migration for Kittlitz’s murrelets in the Chukchi Sea is unknown . . ..” BE at 34.

“Little is known about Kittlitz’s murrelet recruitment . . ..” BE at 34.

“Annual adult survival has not been estimated . . ..” BE at 34.

“Though there is some evidence for long-term population decline for Brachyramphus murrelets (van Vliet and M. A. Liider 1994, Ralph et al. 1995, K. U. et al. 2003), Day et al. (1999) argued that evidence for major population declines for the Kittlitz’s murrelet was equivocal. In large part, their conclusion stems from the fact that historical population estimates are lacking (but see Isleib and Kessel 1973, A. gier et al. 1998, Kendall and A. gier 1998).” BE at 34.

“Fall migration in the Chukchi Sea population of Kittlitz’s murrelet is unknown . . ..” BE at 35.

“Past breeding distribution of Kittlitz’s murrelet is poorly understood, but is likely farther offshore than pre-breeding season.” BE at 35.

“Winter distribution of Kittlitz’s murrelet is poorly understood, but is probably pelagic.” BE at 35.

5. Cliff-Nesting Seabirds

a. Murres

Noting “limited data.” EIS III-62.

b. Puffins

“The current status of horned puffins in the Chukchi Sea is unknown.” EIS III-62.

“The current status of the tufted puffin in the Chukchi Sea is also unknown.” EIS III-62.

c. Black-Legged Kittiwake

“The current status of the black-legged kittiwake (Alca tridactyla) in the Chukchi Sea is unknown.” EIS at III-63.

“The portion of (Chukchi) population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown.” EIS at III-63. See also at IV-142 (similar).

“Current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown.” EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

“The current status of the northern fulmar (Fulmarus glacialis) is unknown.” EIS at III-63.

b. Shags

“The current status of the American shag (Phalacrocorax atriceps) in the Bering Sea is unknown.” EIS at III-63.

7. High Arctic-Associated Seabirds

a. Black Guillemot

“The current status of the black guillemot (Cepphus grylle) in the Chukchi Sea is unknown.” EIS at III-63.

b. Ivory Gull

“The current status of the ivory gull (Pagophila eburnea) in the Chukchi Sea is unknown. Divoky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea.” EIS at III-64.

c. Arctic Tern

“The current status of the Arctic tern (Sterna paradisaea) in the Chukchi Sea is unknown.” EIS at III-64.

8. Tundra-Breeding Migrants

a. Jaegers

“The current status of [all three species of] jaegers in the Chukchi Sea is unknown.” EIS at III-64.

b. Glacous Gull

“The current status of the glaucous gull (Larus hyperboreus) in the Chukchi Sea is unknown.” EIS at III-64.

9. Waterfowl

a. Yellow-Billed Loons

“Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is little known about the coastal areas bordering the Chukchi Sea.” EIS at III-65.

“The[yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown.” EIS at IV-140.

b. Common Eider

“During spring migration, the common eider (Somateria mollissima) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore.” EIS at III-66.

c. Pacific Brant

“The current status of the Pacific brant along the Chukchi Sea is unknown.” EIS at III-68.

d. Greater White-Fronted Geese

“The current status of greater white-fronted geese along the Chukchi Sea coast is unknown.” EIS at III-68.

e. Lesser Snow Goose

“Ritchie et al. (2006) reported that the number of snow geese nesting on the Kupikpik River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kupikpik River delta colony.” EIS at III-68.

10. Shorebirds

a. Buff-breasted Sandpiper (species of concern)

Noting “limited data.” EIS III-70.

b. Bar-Tailed Godwit (species of concern)

“The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood.” EIS at III-69.
"The North American population of bar-tailed godwits (Limosa lapponica baueri) breeds in western and northern Alaska. Postbreeding bar-tailed godwits move to staging grounds along the Bering Sea Coast and then apparently fly nonstop 11,000 km to New Zealand. Recent counts conducted at both breeding and nonbreeding sites provide evidence of a serious and rapid population decline (McCaffrey et al., 2006), but the cause of the decline is unknown." EIS at III-69.

D. Effects on Arctic Cod

1. General effects of seismic on fish

"A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur." EIS at II-33. See also id. at IV-51–52 (similar) and IV-74 (similar).

2. General effects of oil spills on fish

"Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extinction) could occur, but would likely go unnoticed or undetected." EIS at III-34. See also id. at IV-52 and IV-74 (similar).

"While small spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill response. Overall, it is unclear whether, over the long term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected." EIS at IV-72.

B. Effects on Marine Pelagic Species

"Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made." EIS at IV-61.

C. Effects on Capelin

"Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAH's) retained in the substrate, as PAH's in weathered oil can be biologically available for long periods and very toxic to sensitive lifestages, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of such a behavioral response." EIS at II-34.

II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

"Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur." EIS at II-37.

"Because of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas (regarding A(II:III), EIS at II-42. See also id. at IV-368 (same) and EIS at II-45 (same, re: A:I).

"Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to predict with certainty what potential impacts from such development would have on threatened and endangered marine mammals." EIS at II-111.

"Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations." EIS at IV-152.

"In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (IWC, 2006)." EIS at IV-162–63.

"[W]ithout historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals." EIS at IV-156.

"Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammal populations in the project area as a result of the Proposed Action." EIS at IV-145.

"Careful mitigation can help reduce the effects of future industrial developments and their accumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an
adverse impact on nonendangered and threatened marine mammals in the Proposed A ction area, increasing vessel traffic in the Northwest Passage, defined as the marine route between the Pacific and Arctic oceans through the Arctic Ocean across the top of North America, which includes the Proposed Action area, increases the risks of oil and fuel spills and vessel strikes of marine mammals.” EIS at IV-135–46.

“Because very little is known about the distributions, population sizes or habitat use of marine mammals in the Chukchi Sea, it is difficult to determine if significant impacts will or will not occur to marine mammals as a result of the proposed action.” EIS at IV-32.

2. Effects of Seismic and Other Noise on Marine Mammals

“This is because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area.” EIS at IV-37. See also EIS IV-135–146 (similar).

“Despite the increasing concern and attention noted above, there is still uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially on the long-term, cumulative consequences of increasing noise in the world’s oceans from multiple sources (e.g., 2003, 2005). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral “take equivalents.” These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2005) are qualitatively incorporated in MMS analyses.” EIS at IV-86.

“Long-term impacts of OCS seismic survey noise on the hearing abilities of individual marine mammals are unknown. . . .” EIS IV-89.

“A likelihood is that airgun operations during most seismic surveys would cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS IV-147.

3. Effects of Oil Spills on Marine Mammals

“There are few post-spill studies with sufficient details to reach firm conclusions about the effects, especially the long-term effects, of an oil spill on free-ranging populations of marine mammals.” EIS at IV-115.

“Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 100 Hz. . . .” EIS at IV-88.

Rapid long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. K tten (1998) stated that age-related hearing loss in humans is related to the accumulation of permanent threshold shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown.” EIS at IV-88.

“There are no data on which to determine the kinds or intensities of sound that could cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS IV-147.

“Little data are available about how, over the long term, most marine mammal species (especially large baleen species) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source.” EIS at IV-88.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to be used for intraspecific communication. However, because real knowledge of sound sensitivity is lacking, we believe it prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in intraspecific communication.” EIS at IV-89.

“It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise.” EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

“There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . oil spills on cetacean calves.” EIS at IV-82.

“There are no data available to MMS that definitively link even a large oil spill [associated with seismic surveys] with a significant population level effect on species of large cetacean.” EIS at IV-103.

“Data are not available that would permit evaluation of the potential for long-term sublethal effects [from oil spills] on large cetaceans.” EIS at IV-115.

“[T]he potential for there to be long-term sublethal [for example, reduced body condition, poorer health, or longer dependency periods], or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects.” EIS at IV-115.

b. Effects from seismic noise on whales in general

“There are few instances where data are sufficient to evaluate the total energy exposure of a marine mammal from a given source. At present, we do not have the data necessary to make such a determination or understand how it might change our analysis.” EIS at IV-86.

“While there is some general information available, evaluation of the impacts of noise on marine mammals, specifically on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1996).” EIS IV-87.

“There are very few, if any, data available about potential effects of . . . noise . . . on cetacean calves.” EIS at IV-82.

“[I]t is acknowledged . . . scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales.” EIS at IV-82.

“There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; what will occur during surveys; how much noise will be produced purposely by the firing of airguns; what the exact shape of the energy distribution will be; how much noise will be produced by other sources; what the exact shape of the energy distribution will be; what the exact shape of the energy distribution will be; and especially on the long-term, cumulative consequences of increasing noise in the world’s oceans from multiple sources (e.g., 2003, 2005). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral “take equivalents.” These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2005) are qualitatively incorporated in MMS analyses.” EIS at IV-86.

“Long-term impacts of OCS seismic survey noise on the hearing abilities of individual marine mammals are unknown. . . .” EIS IV-89.

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“Little data are available about how, over the long term, most marine mammal species (especially large baleen species) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source.” EIS at IV-88.

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“There are very few, if any, data available about potential effects of . . . noise . . . on cetacean calves.” EIS at IV-82.

“Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency.” EIS IV-87.

“While there is some general information available, evaluation of the impacts of noise on marine mammals, specifically on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1996).” EIS IV-87.

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repeated exposure to loud noise, on baleen whales. There is uncertainty regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of either noise or oil spills on cetaceans. Lastly, and importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales. Thus, it is difficult to predict exposure in some parts of the area where the action could occur and to understand fully the potential effects of any exposure.” EIS at IV-82.

a. Effects of seismic and other noise on bowhead whale

“Uncertainty exists about the potential effects of seismic surveys on bowhead whales (especially on calf survival and growth and female reproduction) in the Chukchi Sea due to a lack of current data about their use of the Proposed Action area during periods when seismic surveys could be occurring. What is known, however, is that the observed response of bowhead whales to seismic noise surveys varies among studies. Some of the variability appears to be context specific (i.e. feeding versus migrating whales) and also may be related to the whales’ reproductive status and/or sex.” EIS at IV-35. See also id. at IV-194 (similar).

“Bowhead responses to drilling noise at different distances depending on the types of platform from which the drilling is occurring. Data indicate that many whales can be expected to avoid an active drillship at 10-20 km or possibly more.” EIS at IV-36. See also id. at IV-194 (similar).

“The long-term response of bowheads to production facilities located at the southern end of the migration corridor is unknown.” EIS at IV-36.

“The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities in other than gravel islands located at the southern end of the migration corridor is unknown.” EIS at IV-194 (internal references omitted).

“Uncertainty arises from the lack of data. . . . is inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior.” EIS at V-25.

“Recent monitoring studies indicated that most fall migrating whales avoid an area with a radius of about 20-30 km around a seismic vessel operating in nearshore waters; however, there are no data that indicate that such avoidance is long-lasting after cessation of the activity.” EIS at V-25.

b. Effects of oil spill on bowhead whale

There is uncertainty about the effects on bowheads (or any large cetaceans) from the event of a large oil spill.” EIS at IV-36.

“The potential effects to bowheads of exposure to polynuclear aromatic compounds, PACs) through their food are unknown. Because of their extreme longevity, bowheads are vulnerable to incremental long-term accumulation of pollutants.” EIS at IV-103. See also id. at IV-119 (same).

“In the Biological Opinion for Federal oil and gas leasing and exploration by the MMS within the Alaska Beaufort Sea and its effects on the endangered bowhead whale, the NMFS (2001:52) stated that “it is difficult to accurately estimate bowhead whale (or large cetacean) because of a lack of data on the metabolism of this species and because of inconclusive results of examinations of baleen whales found dead after major oil releases.” EIS at IV-103.

“There is great uncertainty about the potential effects of ingestion of spilled oil on bowheads, especially on baleen whales. Decreased assimilation could be particularly important in very young animals, those that seasonally feed, and those that need to put on high levels of fat to survive their environment.” EIS at IV-118.

“It is not known if bowheads would leave a feeding area where prey was abundant following a spill.” EIS at IV-118.

“The factors associated with the presence of large aggregations of bowhead whales are not yet clear. It is not known if they would leave the area heavily contaminated with crude oil.” EIS at IV-121.

“Primarily because of the uniqueness of the bowhead and its apparently obligate use of spring lead and polynya as its migratory path between wintering and summering grounds, MMS is uncertain of the potential severity of impact should a large oil spill occur within such a system, especially if spring migration were underway and hundreds of females were calving in or near those leads.” EIS at IV-121.
C. Other Marine Mammals

1. Seals

"It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey." EIS at IV-147.

In the context of seals: "Although it is unlikely that airgun operations during most seismic surveys would cause permanent threshold shift in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS at IV-147.

"Little information is known about oil spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest." EIS at IV-217 (internal references omitted).

2. Walrus

a. Effects of seismic

There is "no data available to evaluate the potential response of walruses to seismic operations." EIS at IV-148.

"Quantitative research on the sensitivity of walruses to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walruses." EIS IV-148.

"Although the hearing sensitivity of walruses is poorly known, source levels are thought to be high enough to cause temporary hearing loss in other species of pinnipeds." EIS at IV-148.

"Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walruses to seismic operations." EIS IV-148.

b. Cumulative effects

"[T]here is "no data available to evaluate the potential response of walruses to [offshore activities]." EIS at IV-148.

"With the limited background information available regarding large oil spills in the offshore Arctic environment, the outcome of a large oil spill is uncertain." EIS at IV-165.

3. Polar Bears

a. Effects from oil spills

"With the limited background information available regarding large oil spills in the offshore Arctic environment, the outcome of a large oil spill is uncertain." EIS at IV-165.

b. Cumulative effects

"Quantitative data are lacking that specifically addresses the potential cumulative impacts of development on polar bears and the effects of disturbance related to human activities on polar bear habitat use, as well as recruitment and survival (Perham, 2005). There also is a high degree of uncertainty regarding the spatial scope of potential industry activities on the Alaskan OCS." EIS at V-38. See also id. at V-52 (same).

4. Humpback, Fin, and Other Baleen Whales

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

"Given the greater potential for anthropogenic noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"No studies are available specific to the effects of seismic survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on gray and minke whale behavior as a result of seismic activity." EIS at IV-151.

"Long-term impacts of OCS seismic survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking." EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

"[I]t is difficult to predict the impact of a large spill on either humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-122.

"There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age." EIS at IV-361.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

"There are no records of humpback whales killed or injured in the fisheries in which fishers self report [subsistence] activity are unknown, but whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected." EIS at IV-20.

"There are insufficient data available to make reliable predictions of the effects of Arctic climate change on baleen whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale population and or injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, large traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 20 seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, vessel traffic, construction, geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

3. Beluga Whale

"A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown." EIS at IV-161.

"Given the greater potential for anthropogenic noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey." EIS at IV-147.
III. MARINE AND COASTAL BIRDS

A. Impacts Generally

“Several areas historically documented to be important to marine and coastal birds in Sale 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high.” EIS at IV-137.

“The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown.” EIS at IV-132.

“Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas are K aaseqikuk Lagoon, Learyd Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease sale area, little recent site-specific data are available on habitat use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed.” EIS at IV-145.

1. Noise impacts on marine and coastal birds

“Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown.” EIS at IV-127.

“Few studies have assessed the effects of seismic surveys on marine birds and waterfowl.” EIS at IV-127.

2. Oil impacts on marine and coastal birds

“There are several areas historically documented to be important to marine and coastal birds in the proposed lease sale area. These areas, as well as the entire proposed lease sale area, lack site-specific data on habitat use patterns, routes and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult.” EIS at IV-126.

Exhibit 38 of 40

D. Impacts on Waterfowl

1. Impacts on Yellow-Billed Loons

“Yellow-billed loons in the Chukchi Sea are at particular risk from environmental perturbations such as disturbance, habitat alteration, and oil spills due to their low numbers and low reproductive rate. The species is little studied and basic biological information [such as] the seasonal distribution of immature and non-breeding yellow-billed loons is unknown. A detailed research could improve our understanding of the vulnerabilities of the yellow-billed and other loons using nearshore areas of the Chukchi Sea and western Beaufort Sea.” EIS at IV-140-41.

2. Impacts on Common Eiders

“The number of [common eiders] that could be affected [by oil spill] at sea during spring or fall migration is unknown.” EIS at IV-142.

E. Impacts on Shorebirds

“Dunlins are another prominent species in K aaeqiluk Lagoon and Peard Bay in late summer and fall. As with other species of shorebirds and waterfowl, a spill during periods of peak abundance could impact large numbers of dunlins. Less is known about the numbers, timing, and patterns of habitat use of [K aaeqiluk Lagoon and Peard Bay] by bar-tailed godwits, but, given their recent population declines, effects of an oil spill could be particularly important.” EIS at IV-144.

Exhibit 39 of 40

“IT is unknown if exposed adult [birds] could become permanently sterilized (due to exposure to oil).” EIS at IV-133.

B. Impacts to Threatened Sooty and Steller’s Eiders

“The behavioral response of eiders to aircraft overflights is unknown; some sooty eiders nest and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences.” EIS at IV-138 (emphasis added).

“Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate...” EIS at IV-144.

Learyd Bay Critical Habitat Area: “The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but it can be important during molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in those areas during the prolonged molting period ultimately may influence the survival of the spectacled eiders (Petersen et al. 1999).” EIS at IV-147.

“The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for eiders within the Critical Habitat Area are also largely unknown.” EIS at IV-144.

C. Impacts to K Ili’tizz’s Murrelets

“Clearly, there is cause for concern regarding the long-term survival of the [K Ili’tizz’s Murrelet] and the potential negative impacts of offshore oil and gas development; however, management decisions are difficult given the lack of available information.” EIS at IV-137.

“Though impacts of oil spills on [K Ili’tizz’s Murrelet] have been documented (van Vliet and McLaughlin 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999).” EIS at IV-137.

4 See note 1.

5 See note 1.
July 11, 2011

Dr. James Kendall, Regional Director  
BOEMRE Alaska OCS Region  
3803 Centerpoint Dr Ste 500  
Anchorage AK 99503-5820

RE: REVISED DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT  
(OCS/EIS/BOEMRE 2010-034)

Dear Dr. Kendall:

Thank you for the opportunity to provide comments on the Revised Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (Revised Draft SEIS) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act. TWS submitted comments on the Draft SEIS on November 30, 2010 and those comments are incorporated by reference.

The Wilderness Society (TWS) contributed to and supports the comments submitted by Alaska Wilderness League, et al. on this Revised Draft SEIS, however we are submitting these comments to highlight additional items we would like BOEMRE to address. As for my background, I have over 25 years of engineering experience in the private, governmental, and non-profit sectors, and I am a licensed professional engineer in Alaska. I have presented invited testimony to Congress on numerous occasions on oil and gas issues, served as a technical advisor on the Department of the Interior’s report to the President delivered on May 27, 2010 containing recommendations for BOEMRE following the Deepwater Horizon spill, and I am the sole Alaskan member of BOEMRE’s Ocean Energy Safety Advisory Committee.

TWS has approximately 225,000 members nationwide and over 750 members in Alaska who share an interest in how the Arctic Ocean is managed because of its inherent value and because decisions involving the Arctic Ocean could affect federal lands in northern Alaska. TWS has a strong concern for the sound management and the well-being of the largest public land management unit in the U.S., the National Petroleum Reserve - Alaska, with a good portion of its coastline located adjacent to the Chukchi Sea.

The USGS Report and its Relevance to the Revised Draft SEIS

During a meeting on June 1, 2011 which included Eric Myers from Alaska Audubon, you, and me we discussed the applicability of the United States Geological Survey’s (USGS)’ science gap and sufficiency report that was to be released later in June. I recall you said that if the report was issued prior to the end of the public comment period, its contents and analysis would be considered in the Revised Draft SEIS. Since USGS issued the report on June 23, 2011, TWS requests that BOEMRE respond to the detailed findings in this report, including whether the individual gaps identified some of which can be remedied relatively easily like some types of oceanographic data and some of which require a long-term plan to address need to be filled prior to Lease Sale 193 decision-making. While TWS recognizes there will always be scientific gaps, the key question for BOEMRE and the Secretary of the Interior regarding Lease Sale 193 is do we know “what we need to know to develop our Arctic energy resources in the right places in the right way?” TWS contends that, at this point, there are biological, ecological, weather, oceanographic, and climate change data and considerations that have not been sufficiently investigated and analyzed in order to make “responsible decisions” on oil and gas exploration and development in the Beaufort and Chukchi Seas.

The Revised Draft SEIS’ Very Large Oil Spill Analysis

While TWS agrees that coastal-area deferrals would minimize many of the impacts from a VLOS, not all adverse impacts are correlated with the SEIS alternatives. For example, in offshore areas which cetaceans frequent during particular times of the year, a VLOS may have very significant feeding implications depending on the location, size, timing, and duration of such a spill. This type of spill scenario has not been sufficiently analyzed in the Revised Draft SEIS given the limitations of looking at only the SEIS Lease Sale alternatives.

Last, according to the Revised Draft SEIS, there has been 1 well control incident per 201 exploration wells drilled (p. 123). As a result of these and other data, BOEMRE characterizes a VLOS in the Revised Draft SEIS as a “low probability, high impact” event. In her testimony to Congress, Dr. Nancy Leveson from MIT - an expert in system safety engineering - advises against such a characterization:

“Belief that process accidents are low probability: Referring to accidents as “low probability, high consequence” events is rampant and unique to this industry [and within BOEMRE]. The implication is that accidents are low probability no matter how the system is designed or operated. Labeling is used to prove that accidents are rare. While process accidents may be low frequency, they are not necessarily low probability... This mislabeling leads to the belief that nothing can be done about such events nor does...”

The implication is that accidents are low probability no matter how the system is designed or operated. Labeling is used to prove that accidents are rare. While process accidents may be low frequency, they are not necessarily low probability... This mislabeling leads to the belief that nothing can be done about such events nor does

3 Ibid.

2 Quote by Secretary of the Interior Salazar in the news release announcing release of the USGS report, USGS Arctic Study Evaluated Science and a Knowledge Gaps for OCS Energy Development: Offers recommendations to better inform responsible oil and gas decisions for Beaufort and Chukchi Seas, June 23, 2011.

The USGS Report’s science gap and sufficiency report and its relevance to BOEMRE’s decision-making is insufficient.

The USGS Report’s science gap and sufficiency report and its relevance to BOEMRE’s decision-making is insufficient.

Respectfully submitted,

Lois N. Epstein, P.E.
Engineer and Arctic Program Director
The Wilderness Society
Submitter Information

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General Comment

Sale 193 is critical to Alaska’s future economy and the nation’s long-term energy security.

Offshore energy development is important to the mining industry. AMA supports lease sales that offer additional potential for the production of strategically and economically important quantities of oil and gas. These energy resources are needed by the energy intensive Alaska minerals industry.

Diversification of the nation’s energy supplies is critical to national security. AMA supports efforts by the United States to diversify the nation’s energy and encourage an energy policy that advocates domestic development of both renewable and low-emissions energy resources. Development of Alaska’s OCS hydrogen resources will support this goal by helping to diversify domestic sources of oil and gas away from the Gulf Coast Region (ECR) and help reduce the Nation’s energy imports. International events and extreme weather conditions will continue to affect hydrocarbon production and availability. However, diversification of our energy sources will help alleviate future energy shortages.

The United States must responsibly move forward with domestic offshore energy exploration and development to meet our future energy needs. OCS Lease Sale 193 is a step in the right direction. We also encourage BOEMRE to include revenue sharing with states and local communities in its leasing plan. These areas are directly affected by oil and gas development and should share in the revenues generated.
PUBLIC SUBMISSION

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Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc. Alaska Outer Continental Shelf, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0043
Comment from Doug Ward, Alaska Ship & Drydock, Inc.

Submitter Information

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E-mail: dward@alaskaship.com
Phone: 907 228-5303
Organization: Alaska Ship & Drydock, Inc.

General Comment

July 9, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Yesterday’s disappointing announcement that the economy generated only 19,000 new jobs in June driving unemployment to 9.2% is disappointing. Accompanied by news that the unemployment rate would be even higher (over 16%), if over a quarter million Americans had not stopped their search for work is alarming and competitive, A K. 99503-5880

I urge BOEMRE to consider the positive economic influence that 40 years of oil and gas activity in the North Atlantic has had in creating the in St. John’s, Newfoundland, and Labrador Ocean Technology Cluster - an Industry le

I have reviewed the Revised Draft SEIS for the Lease Sale 193 Chukchi Sea and believe that it provides sufficient information and analysis to support an informed decision affirming Lease Sale 193 Chukchi Sea. By reference, I endorse and incorporate comments by the Resource Development Council, found at http://www.alrdc.org, urging confirmation of this Lease Sale 193. I also incorporate information provided in the reports titled Economic Analysis of Future Offshore Oil and Gas Development: Beaufort Sea, Chukchi Sea, and North Alaskan Basin, M arch 2009, and Potential National-Level Benefits of an Alaska OCS Development, February 2011, prepared by Northern Economics and Institute of Social and Economic Research, University of Alaska Anchorage that project positive employment and economic returns that could be generated over the next 50 years mitigating the alarming and chronic unemployment and discouragement that exists most recently in the nation and for over 15 years in Southeast Alaska.

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Today it may cost over $1,000 to refuel a long-haul, over-the-road truck. Our industry is overwhelmingly comprised of small businesses that operate in extremely competitive business environments, with narrow profit margins readily impacted by high fuel prices.1 The future of these trucking companies is at risk when the price of fuel spikes. In addition, soaring and volatile fuel prices are a serious threat to the broader economy, adversely impacting both the cost of goods and our ability to move them affordably throughout the country.

The trucking industry has developed a sustainability plan and continues to pursue new technologies and operating procedures to reduce fuel consumption.2 Even with the most aggressive fuel conservation program, the trucking industry will continue to demand additional diesel fuel to deliver an increasing volume of freight. The trucking industry is a very diverse industry and while some segments of the industry may be able to operate on alternative fuels, large segments of the trucking industry will continue depend upon a plentiful supply of diesel fuel for the foreseeable future.

That is why it is critical to the trucking industry that we have an abundant supply of affordable petroleum-based diesel fuel. We understand that the recent run-up in fuel prices is due to several factors, some of which are beyond the government’s ability to control. Regulatory obstacles to increased production, however, can and should be corrected. Current regulatory policy has put our country on a path of declining domestic supply and has resulted in an unnecessary increase in the current price of oil. While some of the price increase may be the result of excessive speculation, this speculation is fueled by a perception that the supply of available crude oil will decline as a result of numerous factors, including the reduction in the U.S. ability to produce crude oil. The United States is the third largest oil producer in the world, but production of oil from Alaska (and the Gulf of Mexico) is declining and new sources of production have been placed off limits. Without a concerted effort to drill more wells, domestic oil production will continue to decline and the price we pay for diesel fuel will increase.

Lease Sale 193 has undergone a series of extensive environmental reviews that began more than 4 years ago. The draft SEIS demonstrates that oil and gas development in the Chukchi Sea can be done safely. As such, we urge BOEMRE to finalize the environmental impact statement and move forward with Lease Sale 193 so that

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1 Roughly 90% of all inter-state motor carriers operate 20 or fewer trucks.
2 A copy of ATA’s sustainability plan may be viewed through the following link: http://www.truckinforamerica.org

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July 11, 2011
Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193
Dear Mr. Kendall:

On behalf of Anchorage Women’s Club, we would like to express our strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. We are part of a state-wide organization of over 600 women and we appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $50 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and expansion and increasing our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, BOEMRE is required to request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Regards,
Judy Badge
AWRC President
Anchorage, AK
The American Petroleum Institute ("API") and the Alaska Oil and Gas Association ("AOGA") appreciate this opportunity to submit comments on the Revised Draft Supplemental Environmental Impact Statement ("SEIS"), Outer Continental Shelf ("OCS") Oil and Gas Lease Sale 193, Chukchi Sea, Alaska. API is a national trade association that represents over 470 nonprofit trade association whose members account for the majority of oil and gas exploration, development, production, transportation, refining, and marketing activities in Alaska.

We endorse the comments on the Revised Draft SEIS being submitted by Shell Gulf of Mexico Inc. ("SGOMI") and encourage the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") to consider and incorporate the suggestions contained therein. We offer the following additional comments.

The purpose of the SEIS is for BOEMRE to provide new National Environmental Policy Act ("NEPA") analysis as directed by the U.S. District Court for Alaska in a July 2010 order. The order instructed BOEMRE to address three specific concerns: (1) the environmental impact of natural gas development; (2) whether missing information identified in the previous EIS is essential or relevant under 40 CFR 1502.22; and (3) whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. BOEMRE completed this analysis and released a Draft SEIS in October 2010. Following a public comment period, BOEMRE announced in March 2011 that it would also analyze a Very Large Oil Spill ("VLOS") from a hypothetical exploration well blowout. API and AOGA believe that the detailed analysis provided in the Revised Draft SEIS, along with other supporting environmental documents and additional assessments being conducted by BOEMRE, provide a thorough analysis upon which to make decisions related to Lease Sale 193, new or revised exploration and development plans in the Chukchi Sea Planning Area, and future permit applications, without delay. We also support BOEMRE’s continued practice of issuing Environmental Impact Statements ("EIS") and Environmental Assessments ("EA") under NEPA. The Revised Draft SEIS, issued on May 27, addresses both the deficiencies identified by the court and a hypothetical VLOS scenario and recommends that Lease Sale 193 be affirmed as held. API and AOGA urge the Secretary to accept the conclusions of the SEIS and expeditiously affirm the sale so that the suspension of operations imposed on the leases may be removed.

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We endorse the comments on the Revised Draft SEIS being submitted by Shell Gulf of Mexico Inc. ("SGOMI") and encourage the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") to consider and incorporate the suggestions contained therein. We offer the following additional comments.

The purpose of the SEIS is for BOEMRE to provide new National Environmental Policy Act ("NEPA") analysis as directed by the U.S. District Court for Alaska in a July 2010 order. The order instructed BOEMRE to address three specific concerns: (1) the environmental impact of natural gas development; (2) whether missing information identified in the previous EIS is essential or relevant under 40 CFR 1502.22; and (3) whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. BOEMRE completed this analysis and released a Draft SEIS in October 2010. Following a public comment period, BOEMRE announced in March 2011 that it would also analyze a Very Large Oil Spill ("VLOS") from a hypothetical exploration well blowout. API and AOGA believe that the detailed analysis provided in the Revised Draft SEIS, along with other supporting environmental documents and additional assessments being conducted by BOEMRE, provide a thorough analysis upon which to make decisions related to Lease Sale 193, new or revised exploration and development plans in the Chukchi Sea Planning Area, and future permit applications, without delay. We also support BOEMRE’s continued practice of issuing Environmental Impact Statements ("EIS") and Environmental Assessments ("EA") under NEPA. The Revised Draft SEIS, issued on May 27, addresses both the deficiencies identified by the court and a hypothetical VLOS scenario and recommends that Lease Sale 193 be affirmed as held. API and AOGA urge the Secretary to accept the conclusions of the SEIS and expeditiously affirm the sale so that the suspension of operations imposed on the leases may be removed.

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capacity and now approximately 11 percent of our nation’s oil production. Over the same period, while production from existing fields has diminished, efforts to find and develop potentially promising new crude oil resources in Alaska’s Arctic Outer Continental Shelf have been stymied by regulatory delays and litigation.

Decreasing oil throughout presents significant challenges for the operators of TAPS. Notable among these is the fact that the temperature of the oil flowing through the line decreases as flow or throughput rates decline. With lower flow rates it takes longer for the crude oil to move from the current production areas on the North Slope to the Valdez Marine Terminal where the tanks are loaded. This allows more time for the oil to cool.

During peak production in 1989, it took approximately four and a half days for Alaska North Slope crude oil production to travel the pipeline’s 800 mile length to reach Valdez. Today, each barrel takes about 15 days to move through the pipeline. Were the throughput rate to diminish to 300,000 barrels per day, it would take just over a month for a barrel of oil to move the entire length of TAPS. In the not too distant future, these trends to continue, crude oil temperatures in the line could become cold enough to accelerate wax deposition and even possible ice formation in the pipeline. These situations present operational challenges because they make conditions favorable to corrosion more likely, and greatly increase the cost and complexity of maintenance and repairs along the pipeline.

As noted, TAPS is among the most important components of our nation’s energy transportation infrastructure. While its maintenance and operational record has been exemplary, if production from existing Alaska North Slope fields that now moves through TAPS continues to decline, and administrative and litigation-driven barriers prevent the discovery and development of new crude oil resources such as those in the Chukchi Sea, the continued operation of one of America’s energy supply lifelines could be prematurely placed at risk decades before the end of its useful design life. A cessation of the crude oil resource potential both onshore and offshore Alaska is thus important not only for the additional supplies of domestically produced energy that discovery and development of those resources would bring, but the continued viability of TAPS which depends upon increasing safe and environmentally responsible production.

Importance of the Chukchi Sea

The oil and gas industry accounts for more than 41,000 jobs in Alaska, which is 9.4 percent of all employment in the state and 11.2 percent of all wages at $2.2 billion. Employment and payroll include direct impacts of 4,497 jobs and $643.8 million in payroll for the primary companies. Indirect and induced impacts include $3 billion in industry spending in Alaska on goods, services, and support services; generating another 8,000 support industry jobs and $768.2 million in payroll. Alaska’s 29,000 additional jobs, with $987 million in payroll, are created throughout the rest of the state by support industry spending on payroll and purchasing, and by primary company employee spending.

In conclusion, API and AOGA strongly urge the Secretary to affirm the Chukchi Sea Lease Sale 193, as recommended by the SEIS. The leases issued under Sale 193 were sold only after the adverse Federal judicial decision later, not a single exploratory well has been drilled and production activities are at least a decade away.

The oil and gas industry has proven itself to be an important partner not only in the development of the Arctic, but in the advancement of knowledge and conservation of habitat, wildlife, and subsistence resources in the region.

In conclusion, API and AOGA strongly urge the Secretary to affirm Chukchi Sea Lease Sale 193, as recommended by the SEIS. The leases issued under Sale 193 were sold only after extensive environmental review, public process, and BOEMRE approval occurs. Failure to affirm Lease Sale 193 would allow the moratorium on exploration and development of Alaska’s OCS to continue harming the Alaska and U.S. economies and the nation’s energy security without a corresponding benefit to the environment.

If you have any questions on these comments, please do not hesitate to contact Kate Williams with AOGA at 907.272.1481 or Richard Ranger with API at 202.682.8057.

Sincerely,

KATE WILLIAMS
Regulatory Affairs Representative

RICHARD L. RANGER
Senior Policy Advisor

Regional Director
July 11, 2011

An analysis by the University of Alaska Anchorage showed the oil industry supports as many as 110,000 jobs in Alaska (one-third of the state’s workforce), including funding for three-quarters of state government jobs. The report does not merely count the number of jobs that exist in each industry and its support sector. It estimates how many of Alaska’s 357,000 jobs rely on cash flow created by a specific sector. The Anchorage Economic Development Corporation has reasoned that the total spillover from oil and gas activity, state revenues and employment accounts for approximately 40 percent of Alaska’s economy.

According to a recent study by Northern Economics and the University of Alaska, an annual average of $4.7 billion new jobs would be created and sustained through the year 2037 from the Alaska OCS, with 68.6 billion during production and 91.5 billion at peak employment. A total of $145 billion in new payroll would be paid to employees through the year 2057, including $63 billion to employees in Alaska and $82 billion to employees in the rest of the U.S. In addition, a total of $193 billion in government revenue would be generated through the year 2057, with $167 billion to the Federal government, $15 billion to the State of Alaska, $4 billion to local Alaska governments, and $6.5 billion to other state governments. In short, action to expedite completion of the SEIS and to affirm the lease sale will provide considerable benefit to the nation’s economic and employment situations, and will be of profound importance to the economic health and well-being of the State of Alaska.

Concluding Remarks

Lease Sale 193 is one of the most successful oil and gas lease sales in U.S. history, generating $2.7 billion in revenues for the federal government for 487 leases. However, over four years later, not a single exploratory well has been drilled and production activities are at least a decade away.

The oil and gas industry has proven itself to be an important partner not only in the development of the Arctic, but in the advancement of knowledge and conservation of habitat, wildlife, and subsistence resources in the region.
Dear Mr. Kendall:

On behalf of the Association of Equipment Manufacturers (AEM), I would like to express our support of oil and gas exploration in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS).

AEM is the U.S.-based international trade group serving the off-road equipment manufacturing industry. AEM members number over 850 companies that manufacture equipment products and serve businesses worldwide in the agriculture, construction, forestry, mining and utility fields.

The importance of oil and gas development on Alaska’s OCS cannot be overstated. This largely untapped area holds 27 billion barrels of oil and 132 trillion cubic feet of natural gas. By comparison, total production from the North Slope is 16 billion barrels of oil.

Access to additional domestic resources is critical for rebuilding the tourism, agriculture, and manufacturing base of our economy.

Florida, the fourth largest state, uses 27 million gallons of gasoline and diesel per day and generates more than half of its electricity from clean burning natural gas.

Sincerely,

Barney T. Bishop III
President & Chief Executive Officer

CC: Members of the Florida Congressional Delegation
The Bennett Consulting Group
At the Nexus of Business and Government
101 Constitution Ave. NW
Suite 125
Washington, DC 20001
202-263-8486

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea

C/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage, AK 99501-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of The Bennett Consulting Group, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Sea would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $30 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overestimated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy— not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Sincerely,

[Signature]

Managing Partner, The Bennett Consulting Group

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.
General Comment

I am writing to ask BOEM to reaffirm the leases sold in sale 193. The development of offshore oil in the Chukchi Sea is critical to the continued health of the Alaskan economy, as well as the infrastructure required to support continued oil and gas exploration and production. The product of the continued production is sorely needed in America today, and will provide employment to Alaskans and others in the US in downstream petrochemical businesses.

To continue to deny access to the area is a definite moratorium on energy production in the US, while giving lip-service to Americans in need of oil and gas. The producers have met every requirement that the Federal government has asked, and continued delays are petty harassment. The shareholders of the companies interested in working the leases need some return on their investment dollar, before they decide to quit Alaska. Loss of energy development here would mean economic disaster. On the other hand, substantial economic returns to the state and federal governments will be realized when production begins.

Thank you,
Brian Benson
Dear Regional Director,

ConocoPhillips Company (COP) appreciates the opportunity to provide comments on the Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193.

COP, including its subsidiaries and affiliates, is one of the largest owners of state and federal leases in Alaska, a major buyer in the three largest oilfields on the Alaska North Slope, operator of both Kuparuk and Alpine oil fields and an operator in the Alaska Cook Inlet. Our company has decades of safe and environmentally responsible operating experience in Arctic conditions. We also bring decades of experience in preparing our permit applications and operational plans for activities in the Arctic.

COP sees great potential in the Chukchi Sea, as demonstrated by our investment of $594MM on OCS Outer Continental Shelf (OCS) leases in 2008. As a successful bidder, we immediately began planning for an exploration program on leases near the previously drilled Holodric #1 location. During the summer of 2008, we conducted site clearance and shallow water surveys. We also initiated a voluntary multi-million dollar scientific data collection program in the Chukchi Sea, collaborating with other offshore operators, universities, research institutions and local stakeholders on a research program collecting biological, oceanographic and air quality data in the lease area. This program has contributed to the existing scientific knowledge base of the Arctic OCS, and has been well received by North Slope communities and several environmental groups. These studies are being done to support our plans to drill an exploration well in the Chukchi Sea, which could be coiled into a single well.

ConocoPhillips
July 11, 2011

Michael J. Faust
Manager, Corporate Responsibility
ConocoPhillips Company
P.O. Box 9590
Anchorage, Alaska 99509

Re: Comments on Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193

Dear Regional Director:

COP appreciates the opportunity to provide comments on the Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193. COP, including its subsidiaries and affiliates, is one of the largest owners of state and federal leases in Alaska, a major buyer in the three largest oilfields on the Alaska North Slope, operator of both Kuparuk and Alpine oil fields and an operator in the Alaska Cook Inlet. Our company has decades of safe and environmentally responsible operating experience in Arctic conditions. We also bring decades of experience in preparing our permit applications and operational plans for activities in the Arctic.

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ConocoPhillips
July 11, 2011

Michael J. Faust
Manager, Corporate Responsibility
ConocoPhillips Company
P.O. Box 9590
Anchorage, Alaska 99509
Section II.D (page 22). In the previous DSEIS, the agency stated that the impacts to fish resources were not expected to be significant, but in the Revised DSEIS, the agency states that the impacts are localized and minor. For clarity and consistency, the Revised DSEIS should include an explanation of why the text was changed and the intent of the changed wording.

Section II.D3 (pages 31-34). In the Threatened and Endangered Marine Mammals section, the statement is made that danger to the deferral area would remove industrial activity from the spring-migration route of the bowhead whales. Increasing the deferral zone will not necessarily add protection to the migration pathways but will likely move development and infrastructure further offshore and distant from onshore resources. This increase in distance may increase risk and adverse impacts due to an increased use of marine vessels and aircraft. In this section, the agency should consider a more in-depth discussion of the balancing of risks and impacts, such as the following: the low probability of oil spill, the likelihood of appropriate response mechanisms, and the certainty of increased emissions and risks to human life and marine mammals associated with increased air and marine traffic necessary for more distant development and infrastructure. The current deferral area, along with the current mitigation measures in the Safe 193 FEIS, provide ample protection to marine mammals and subsistence activities. Given the potential adverse impacts associated with moving facilities further offshore, it is not clear that Alternative III presents decreased environmental impacts, as the Revised DSEIS suggests.

Section III.B.4 (pages 51-52). In the Cetaceans section, BOEMRE describes bowhead whale movements during the spring migration and then states that a sample of tagged bowhead whales "traveled through some portion of the Lease Site 193 Area." For clarity, the description should better define the difference between the spring migration and the fall migration of the bowhead whale through the Chukchi Sea. It should also explain that subsistence activity for the bowhead whale does not occur more than 20 miles from the coast based on historical accounts. The majority of the bowhead harvest occurs during the spring migration when the whales follow ice leads to the north, parallel to the coast line.

Section IV, D — The Very Large Oil Spill (VLOS) (pages 121-136). The VLOS scenario evaluates an extremely unlikely, if not impossible, spill event, which the text acknowledges. The VLOS scenario description correctly states that it is a hypothetical event and the discharge numbers associated with it do not reflect any particular well, and that each operator will submit a worst-case discharge analysis based on the individual characteristics of their exploration well. The agency should be well served to explain how low the probability is that a VLOS could ever occur. BOEMRE should also be extremely clear that the Revised DSEIS, with respect to the VLOS, does not account for the beneficial impacts of cleanup, recovery and intervention efforts. These factors could have significant reduction on the estimated spill volume or spill duration. This distinction is important since oil spill contingency and response planning is required before any approval would be accorded for OCS exploration or development to move forward. BOEMRE provides an adequate explanation in the Revised DSEIS of how it derived each of the reservoir parameters, but does not describe or explain the basis for the turbidity/hydrocarbon correlation selected to be used in the calculation. If there is no well hydraulics correlation incorporated into the model, the flow is most certainly overstated and that fact should be clarified. The agency would be well served to also explore other well control intervention technologies that could be employed and might be more applicable and likely to be used in such a catastrophic situation in lieu of a relief well.

There have been a total of 30 wells drilled in the Beaufort Sea and 5 wells drilled in the Chukchi OCS over the past 30 years. OCS exploration and development are not new to the Arctic. The development of more advanced drilling technologies, along with the incorporation of effective mitigation measures, allows industry to conduct Arctic exploration and development operations in a manner that results in a smaller footprint with less environmental impacts. Technology advancements in seismic surveys allow the industry to better focus on subsurface targets and reduce the surface impacts even more. Finally, and importantly, there has never been an oil spill caused by a blowout from an oilfield exploration and production drilling in state or federal waters off Alaska or the Canadian Arctic.

In summary, COP supports the Revised DSEIS and requests that the comments above be incorporated into the administrative record and considered to strengthen the analysis and discussion. COP also requests that the BOEMRE move swiftly to finalize the EIS and affirm the 193 Lease Sale.

If you have questions about these comments, please call me at (907) 255-1470 or Bruce St. Pierre at (907) 265-6417.

Sincerely,

R. Lumen, ConocoPhillips Company
G. Haddad, ConocoPhillips Company
D. Brown, ConocoPhillips Company
B. Pierre, ConocoPhillips Company

Consumer Energy Alliance Comment

July 11, 2011

James Kemmler, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
501 Centerpointe Drive, Suite 500
Anchorage, AK 99508-2003

RE: Comments on Revised Draft SEIS for Lease Sale 193

Dear Mr. Kemmler:

On behalf of Consumer Energy Alliance (CEA), I appreciate the opportunity to submit the following comments to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) in support of the planned oil and gas development of Lease Sale 393 in the Chukchi Sea and the finalization of the environmental review process for this lease sale.

CEA is a non-profit, non-partisan organization committed to working with elected leaders, affected stakeholders and consumers to help promote a policies and energy policy and make our states energy policies, as well as a nationwide network of almost 100,000 consumer-advocates.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) thoroughly addresses the concerns raised during the last comment period on the SEIS and rightly concludes that the probability of a very large oil spill in the region remains very low. While I appreciate the efforts the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the federal government have taken to ensure development in Lease Sale 393 can proceed safely, I urge the BOEMRE to finalize this review process and permit development to move forward.

As the Revised Draft SEIS clearly argues, the likelihood of a very large oil spill occurring in the vicinity of the proposed drill site in the Chukchi Sea is extremely low due to the region’s physical characteristics, the presence of ice in the area, and the unique location of the proposed permit site. While I appreciate the efforts the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the federal government have taken to ensure development in Lease Sale 393 can proceed safely, I urge the BOEMRE to finalize this review process and permit development to move forward.

As the Revised Draft SEIS clearly argues, the likelihood of a very large oil spill occurring in the Chukchi Sea is extremely low due to the region’s physical characteristics, the presence of ice in the area, and the unique location of the proposed permit site. While I appreciate the efforts the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the federal government have taken to ensure development in Lease Sale 393 can proceed safely, I urge the BOEMRE to finalize this review process and permit development to move forward.

In summary, I believe the BOEMRE to finalize this review process and permit development to move forward.

Very sincerely,

David Fritsch
President

Consumer Energy Alliance
PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0052
Comment from Robert Cox, Crowley Petroleum Distribution

Submitter Information
Name: Robert Cox
Address: 4620 Silver Spring Circle
ANCHORAGE, AK, 99507
Email: bobcoxhome@gmail.com
Organization: Crowley Petroleum Distribution

General Comment
Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. Rescinding the leases will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment. Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities. Sale 193 is critical to Alaska's future economy and the nation's long-term energy security. The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country. The goal of Lease Sale 193 was to produce oil from the Alaskan OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaskan oil pipeline, which is now operating at one-third of its 1988 peak flow.

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0035
Comment from Steve Denton, Denton Civil and Mineral

Submitter Information
Name: Steve Denton
Address: PO Box 149
HEALY, AK, 99743
Email: dcandm@mtnonline.net
Organization: Denton Civil and Mineral

General Comment
I encourage the BOEM to expeditiously affirm OCS lease sale number 193. The resources of the Chukchi Sea have been estimated at 29 billion barrels of oil and 209 tcf of gas. If 25% of that is recoverable, it could supply 5% of the nation's oil demand about the excess capacity in the Alaska pipeline for 20 years and 10% of the nation's gas demand for 22 years. A bent a true fatal flaw in the proposed development, it is unreasonable that development of this resource would not proceed. The positive impact in jobs, tax revenue and general stimulus to local, State and US economies are benefits too significant to be squandered. The BOEM has done a thorough job of assessing the potential environmental impacts to exploration and development in the Chukchi Sea. Mitigation measures in place, and agreed to by the lessees, provide a high level of protection of the environment and the local use of wildlife. The BOEM has demonstrated of improved conventional and proven drilling techniques than it will be an exercise in development of new techniques.

Denton Civil and Mineral Comment
We have the technology, experience and will to allow responsible development of the Chukchi Sea oil and gas resources without having to sacrifice our natural wonders, as Alaskans have done in many other resource development venues. Please confirm lease sale 193 and allow the United States to benefit from the great treasure in the Arctic once again, as it did from oil development on Alaska's North Slope.
General Comment

see attached files for signed letter and additional comments*

Dear Mr. Kendall:

On behalf of Eagles' Enterprises, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Thank you for the opportunity to comment.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Catkin Kilcher Burton
President/Co-Founder

Eagles' Enterprises, LLC
and make it extremely difficult to do business. But ensuring our domestic production will increase our energy supply and help meet growing demand. For this reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

[Signature]
Partner, EnergyNorth America, LLC

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**ENSTAR Natural Gas Co. Comment**

**PUBLIC SUBMISSION**

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0003
Comment from Catherine Gardner, ENSTAR Natural Gas Co.

**Submitter Information**

Name: Catherine Gardner  
Address: 23005 Whispering Birch Dr.  
Chugiak, AK, 99567  
Email: gardnersinak@gmail.com  
Phone: 907-688-8806  
Organization: ENSTAR Natural Gas Co.

**General Comment**

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea...
Drilling in the Arctic offers distinct differences than deeperwater exploration and development in the Gulf of Mexico. The pressure encountered in deeperwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BDE0 to conclude that exploration should move forward in the Chukchi. Uncertainties are inherent to any future event however uncertainties in OCS development are manageable and should not be a basis justifying inaction.

Thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

Independent third parties have estimated that an annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. An estimated $63 billion in payroll shall be paid to employees in Alaska as a result of OCS development. New offshore oil and gas development in Alaska shall also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance. $82 billion in payroll shall be paid to employees in the Lower 48 under a full OCS development scenario. Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling $193 billion, of which the federal government would collect $567 billion.

Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future. Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore. Increased domestic oil and natural gas production shall reduce the U.S. dependence on foreign sources for energy including transportation fuels and thereby reduce the U.S. imbalance of foreign trade and currency exchange.

Sincerely,
The Great Fairbanks Chamber of Commerce

Richard Heiarden
Board of Directors, Chair

Lisa Herbert
Executive Director

Drilling in the Arctic offers distinct differences than deeperwater exploration and development in the Gulf of Mexico. The pressure encountered in deeperwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BDE0 to conclude that exploration should move forward in the Chukchi. Uncertainties are inherent to any future event however uncertainties in OCS development are manageable and should not be a basis justifying inaction.

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Sincerely,
The Great Fairbanks Chamber of Commerce

Richard Heiarden
Board of Directors, Chair

Lisa Herbert
Executive Director

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Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future. Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore. Increased domestic oil and natural gas production shall reduce the U.S. dependence on foreign sources for energy including transportation fuels and thereby reduce the U.S. imbalance of foreign trade and currency exchange.

Sincerely,
The Great Fairbanks Chamber of Commerce

Richard Heiarden
Board of Directors, Chair

Lisa Herbert
Executive Director

Drilling in the Arctic offers distinct differences than deeperwater exploration and development in the Gulf of Mexico. The pressure encountered in deeperwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BDE0 to conclude that exploration should move forward in the Chukchi. Uncertainties are inherent to any future event however uncertainties in OCS development are manageable and should not be a basis justifying inaction.

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Independent third parties have estimated that an annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. An estimated $63 billion in payroll shall be paid to employees in Alaska as a result of OCS development. New offshore oil and gas development in Alaska shall also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance. $82 billion in payroll shall be paid to employees in the Lower 48 under a full OCS development scenario. Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling $193 billion, of which the federal government would collect $567 billion.

Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future. Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore. Increased domestic oil and natural gas production shall reduce the U.S. dependence on foreign sources for energy including transportation fuels and thereby reduce the U.S. imbalance of foreign trade and currency exchange.

Sincerely,
The Great Fairbanks Chamber of Commerce

Richard Heiarden
Board of Directors, Chair

Lisa Herbert
Executive Director

Drilling in the Arctic offers distinct differences than deeperwater exploration and development in the Gulf of Mexico. The pressure encountered in deeperwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BDE0 to conclude that exploration should move forward in the Chukchi. Uncertainties are inherent to any future event however uncertainties in OCS development are manageable and should not be a basis justifying inaction.

Thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

Independent third parties have estimated that an annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. An estimated $63 billion in payroll shall be paid to employees in Alaska as a result of OCS development. New offshore oil and gas development in Alaska shall also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance. $82 billion in payroll shall be paid to employees in the Lower 48 under a full OCS development scenario. Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling $193 billion, of which the federal government would collect $567 billion.

Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future. Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore. Increased domestic oil and natural gas production shall reduce the U.S. dependence on foreign sources for energy including transportation fuels and thereby reduce the U.S. imbalance of foreign trade and currency exchange.

Sincerely,
The Great Fairbanks Chamber of Commerce

Richard Heiarden
Board of Directors, Chair

Lisa Herbert
Executive Director
On behalf of the First National Bank Alaska, I would like to express my strong support for oil and gas development in Alaska's Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit this public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 28th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is part of the government's plan to proceed with Lease Sale 193 so that America's energy needs can be met. Oil and gas development in Alaska will strengthen our national security, create jobs in Alaska and across the country, and protect our natural environment. A conservative estimate of 7 billion barrels of 132 trillion cubic feet of natural gas, energy production on the OCS is critical to America's long-term energy supply. It is estimated that approximately 80% of the development's costs and benefits would result in an annual average of $70,700 jobs created. Government revenue generated from the Chukchi Sea is estimated to be nearly $1 billion the next five years. The benefits of energy production on the OCS cannot be overstated; development of our domestic energy resources is critical to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import from unstable and adversarial countries despite vast North American resources available. We are largely dependent on oil imports, which put the United States at risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and cannot be afforded by this government. Expanding our domestic production will help meet growing demand. For that reason, we strongly support proceeding with Lease Sale 193.

200 North Union Street, Suite 100, Alexandria, Virginia 22314

Sincerely,

David M. Lally
Senior Vice President & General Counsel

First National Bank Alaska Comment
July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 185 Chukchi Sea
Regional Director James Kendall
BOEMRE - Alaska OCS
3301 Centerpoint Drive Suite 500
Anchorage, AK 99503-6820

Re: Revised Draft Supplemental Impacts Statement for Lease Sale 183

Dear Mr. Kendall:

On behalf of B’nai B’rith LLC, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 183. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20. Lease Sale 183 has undergone extensive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea will and should be done safely, and it is past time for the government to proceed with Lease Sale 183 so that Americans can truly realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 37 billion barrels of oil and 130 trillion cubic feet of natural gas, production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 74,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $10 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overstated, development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. Expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 183.

Upon conclusion of this public comment period, I respectfully request that the lease holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Mark V. Johnson
B’nai B’rith Development Manager
601 N. 10th Street
202-628-7451

Industrial Energy Consumers of America
The Voice of the Industrial Energy Consumers
1105 15th Street, NW, Suite 509, Washington, DC 20005-222-1420

Mr. James Kendall
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
3301 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall:

I am writing to express my firm support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and offers realistic mitigation to minimize risk. I hope that Lease Sale 193 has been fully reviewed. I urge BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been a recession that has increased demand significantly. According to the Energy Information Administration, the United States will consume over 18.5 million barrels per day of crude oil and liquid fuels in 2011, up 15.0 million barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPIC projections are aimed at significantly increasing in comparison to non-OPIC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation’s economic health.

With these facts in mind, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska’s Outer Continental Shelf. The United States needs to continue to produce oil and natural gas at home to protect our energy security. By relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes, it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move quickly to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Teresa E. Mikeson
Principal

Industrial Energy Consumers of America
The Voice of the Industrial Energy Consumers
1105 15th Street, NW, Suite 509, Washington, DC 20005-222-1420

Mr. James Kendall
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
3301 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall:

I am writing to express my firm support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. This latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and offers realistic mitigation to limit risk. I hope that Lease Sale 193 has been fully reviewed. I urge BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Without argument, the United States is overly reliant on foreign imports of a commodity that is critical to our nation’s economic health. Thus, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska’s Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, I believe the BOEMRE must move quickly to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Evan J. Gifford
President
Dear Mr. Kendall,

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone extensive environmental review, and the potential environmental impacts have undergone a very thorough and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,200 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $60 billion over the next 50 years. The benefits of energy production on Alaska’s OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy — not less. The United States continues to import 60% of its energy from unstable and unreliable countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes, while our energy crisis hinders economic growth and makes it extremely difficult to do business. By expanding our domestic production we will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

[Signature]

President & CEO
Iowa Motor Truck Association
July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Louisiana Trade Consultants, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $50 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Paris J. Theriot
President

Louisiana Trade Consultants, LLC
June 29, 2011

Name: Erin Double
Address: 6441 S Airpark Place
        Anchorage, AK, 99502
Email: double@lynden.com
Organization: Lynden International
Government Agency Type: Federal
Government Agency: BOEM

I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska’s Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lease to engage only in “ancillary activities” that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state’s OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation’s energy security. Alaska’s OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. A lease in Alaska’s North Slope region has already produced 16 billion barrels of oil in the last years, so the OCS really could fuel Alaska’s economy and provide much needed energy for the nation for decades.

A gain, please adopt the SEIS and reaffirm Lease Sale 193."
Mcintosh Consulting, LLC Comment

McIntosh Consulting, LLC
Solutions for the oil, gas and mining industries
19411 Indian Trailbox Drive, Houston, TX 77094
Telephone: (713) 960-4897 Email: hillary.mcintosh@gmail.com

June 7, 2011
James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centennial Drive, Suite 500
Anchorage, Alaska 99503

Re: Comments on Revised Draft SES, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company’s support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (DEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightly concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SES and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil it consumes. And that has been a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day in 2011 and 1.6 million barrels per day in 2012 and 2013, respectively. At the same time, U.S. oil production has dropped sharply in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation’s economic health.

With these facts in hand, it is imperative that BOEMRE allow Alaska to develop its abundant energy resources, especially those in Alaska’s Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries such as Saudi Arabia, Libya and Venezuela not only subjects the United States at risk for disruption in supply and price spikes but also acts as a stabilizer of anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster energy security.

Sincerely,

July 10, 2011
Comments on the Revised Draft SEIS-Lease Sale 193 Chukchi Sea
cc: Regional Director James Kendall
BoEMRE Alaska OCS 301 Centennial Drive Suite 500
Anchorage, Alaska 99503-4620
Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support for oil and gas development in the Chukchi Sea and other areas of America’s Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20, 2011. Lease Sale 193 has undergone extensive environmental review and the potential environmental impacts have undergone a lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is vital to our economy’s long-term energy security. It is estimated that economic activity from the development of the Chukchi’s and Beaufort Seas would create an annual average of 64,750 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $50 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be understated; development of our domestic energy resources are an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are being tied to an oil import, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I anticipate BOEMRE’s consideration to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Sound Financial

July 2, 2011
James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
301 Centennial Drive Suite 500
Anchorage, Alaska 99503

Dear Mr. Kendall:

I am writing to express Matanuska Electric’s support for Lease Sale 193 as well as to indicate appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. This latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a large oil spill and concludes that the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources.

Clearly the United States is overly reliant on foreign imports of the oil that is crucial to our nation’s economic health; hence, it is imperative that BOEMRE permit development of our abundant energy resources, especially those in Alaska’s Outer Continental Shelf (OCS). Continued import of oil from unstable and adversarial countries despite the vast North American resources available makes no sense whatsoever. Relaying on oil from countries such as the Saudi Arabia, Libya and Venezuela places the United States at risk for disruptions in supply and price spikes and supports repressive and anti-American regimes.

In conclusion, I believe the BOEMRE must move quickly to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Evans E. Griffith, General Manager
General Comment

We are writing collectively to support OCS drilling in the Chukchi Sea, specifically in the area of Lease Sale 193. We encourage BOEMRE to move forward with responsible development of the Chukchi Sea. The federal government has a tremendous opportunity at hand in terms of economic revitalization, strengthening national security, and job creation for everyday Americans. Today's economic outlook is bleak; with many state government and our federal government creeping further into debt, it's time for these entities to partner with the private sector in order to generate public revenue and begin the process of freeing ourselves from the financial chains that hold us back from success. Resource development is one of the major solutions to the problems before our country. Supporting Alaska supports our entire country, and this issue is proof that we are a key component to building a better America. Oil and gas development in Alaska is one of the steps our country can take to ensure national and energy security.

Sincerely,
Benjamin Mohr
Chair, Anchorage Young Republicans

National Association of Manufacturers Comment

July 11, 2011

James Kendall
Regional Director
BEGEMER - Alaska OCS
3810 Centerpoint Drive
Suite 900
Anchorage, AK 99503-6820

Dear Mr. Kendall:

The National Association of Manufacturers (NAM) welcomes the opportunity to provide comments on the Department of Interior’s revised Draft Supplemental Environmental Impact Statement, announced by Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) on May 20, 2011. We respectfully submit the following comments in support of oil and gas development in the Chukchi Sea and areas of Alaska’s Outer Continental Shelf (OCS).

By way of background, the NAM is the largest manufacturing association in the U.S. representing nearly 13,000 small, medium and large manufacturers in all 50 states. We are the leading voice in Washington, D.C. for what matters most to manufacturers, including policies that promote high-wage jobs in the U.S. and generate more than $1.9 trillion GDP. In addition, two-thirds of our members are small businesses, which serve as the engine for job growth.

Our mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth. While the Manufacturers support environmental regulations designed to protect the environment and public health, we concurrently oppose regulations that create adverse economic impacts on manufacturing without providing any real environmental or public protection. Therefore, we ask that this BOEMRE allow access to the Chukchi Sea by finalizing the environmental review process for Lease Sale 193 in a timely manner and without excessive delays.

Manufacturers use one-third of the nation’s energy. As such, a reliable, secure, and affordable source of energy is vital. At a time when gas prices are at an all-time high, the nation needs to safely and effectively develop its own energy resources. Despite the vast domestic sources of energy, the U.S. continues to rely on foreign sources for energy. As a result, the U.S. is put at a greater risk for disruption in supplies, leading to price spikes. By exploring and developing our own domestic resources, we will have access to safe, reliable and affordable sources of energy for manufacturers in the U.S.

Moreover, offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generates significant government revenue.

Sincerely,
Paul A. Yost
Vice President
Energy and Resources Policy

National Association of Manufacturers
Sea is estimated to be nearly $50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and dependable energy production in the Chukchi Sea.

Sincerely,

[Signature]
John L. Conley
President
National Tank Truck Carriers, Inc.

The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

I have been involved in the energy business in the US, internationally and in Alaska for over 30 years, including experience as project manager for the first Department of Energy-funded gas hydrate exploration program in Alaska. I am convinced (and the majority of the public is convinced) that the Chukchi and Beaufort Seas will be developed in a safe and environmentally responsible manner. I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and dependable energy production in the Chukchi Sea.

Sincerely,

[Signature]
Thomas E. Williams
President and Managing Director, Nautilus International LLC.
The altar of fear.\n
...we should not sacrifice the enormous benefits of domestic energy production on...\n
...BP Deepwater Horizon blowout in 2010 have been documented and numerous new prevention...\n
...the one-in-40...\n
...of 1,829 barrels (0.0000115% of the volume produced). Learnings from the...\n
...From 1971 to 2009, 41,514 wells were drilled on the OCS with 50 well control incidents (0.1%)...\n
...Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really...\n
...for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and...\n
...Alaskans have and continue to support the development of our state's OCS as it is not only vital to...\n
...only in "ancillary activities" that do not harm the environment. The lease holders have been...\n
...Waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop...\n
...Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage...\n
...I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi...\n
...I strongly support the development of Alaska's Outer Continental Shelf. The SEIS is just for the...\n
...over the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the...\n
...The North Slope and the offshore are now perhaps the most studied energy basins in America. In the...\n
...Over 81% of Alaskans consistently support OCS activities.\n
...New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance.\n
...Industry has committed to unprecedented provisions for prevention and spill response that go...\n
...New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance.\n
...The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.\n
...New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance.\n
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...Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore.\n
...Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore.\n
...The Very Large Oil Spill Analysis is hypothetical and so extremely unlikely as to be irrelevant.\n
...The BP Deepwater Horizon blowout in 2010 have been documented and numerous new prevention measures have been implemented as a result. Having learned how to prevent the one-in-40...
NOIA Comment

Additionally, economic activity from the development of the Chukchi and Beaufort Seas could create an average annual of 15,000 jobs nationwide and generate nearly $140 billion for the treasury over the next fifty years. The benefits of moving forward with Lease Sale 193 – and with broader Alaska OCS development – are abundantly clear.

NOIA strongly encourages SEEMR to move forward now to complete this environmental review and complete the leasing procedures of Lease Sale 193 as soon as possible.

Sincerely,

Michael Kearns
Director, External Affairs

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0124
Comment from Joseph Beedle, Northrim Bank

Submitter Information

Name: Joseph Beedle
Address: 1985 Brandilyn Street
Anchorage, AK, 99516
Email: beedle@qi.net
Phone: 907-250-3202
Organization: Northrim Bank

General Comment

James Kendall, Regional Director Alaska OCS Region Bureau of Ocean Energy Management, Regulation and Enforcement 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99510

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

I wish to encourage affirmative action to accept the Revised Draft SEIS. As a near life-long Alaskan working and living in all regions of the State (including 6 years as president/CEO of a large ANCSA Corporation, 6 years as the CFO/VP Finance for the University of Alaska System and 25 years in finance/banking positions, and having experienced visitation to remote regions offshore and outside of the North Slope, ANWR and Point Barrow - I wish to communicate my personal and professional confidence in the ability of this Stage of the Sale/Lease to perform in complete compliance with the Plan. As I reviewed the 180 pages of Analysis of Incomplete or Missing Information as included in Appendix A of the SEIS I was overwhelmed with the efforts to get distracted with the appeal process - absent evidence of constructive intent. I am convinced that this Draft SEIS sets an extremely high standard for compliance and that these significant companies are committed to absolute compliance and should be permitted to pursue their exploratory process. Future phases can and will undoubtedly experience additional oversight, but please proceed to approve this phase for the benefit of all concerned. The Plan, science, controls, oversight, commitment and liability combine to make this project fully supportable by any rational, reasonable and prudent authority.
North Star Terminal & Stevedore Co., LLC Comment

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North Star Terminal & Stevedore Co., LLC

TEL: (907) 272-7373
FAX: (907) 272-8927

Valdez Homer Seward Dutch Harbor

Regional Director

July 5, 2011

Subject: Comments on the Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 Chickaloon Sea OCS

To Whom It May Concern:

On behalf of North Star Terminal & Co and North Star Equipment Services, I would like to express our support for the approval of this draft SEIS for lease sale 193 for offshore drilling on Alaska's outer continental shelf because:

- Lease Sale 193 should be affirmed as in 2008. The SEIS provides sufficient information and analysis to support an informed decision regarding Sale 193.
- Rescinding the leases and allowing oil to fall to market continues to harm Alaska's economy and discourage future investment, with a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security. The Chickaloon OCS is an important source of U.S. energy supply with up to 29 billion barrels of oil and 127 trillion cubic feet of natural gas potentially in place. The Lease Sale 193 is considered the most prospective undeveloped offshore area in the country.
- The goal of Lease Sale 193 is to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. Lease Sale 193 continues to meet the goals set forth in previous sales and is expected to result in significant economic benefits.
- Industry and stakeholders have provided additional data and analysis to support the approval of Sale 193.
- Drilling in the Arctic offers distinct benefits compared to deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where drilling would be in relatively shallow water.
- There are also major differences in well design, as well as fundamental differences in the geology of the regions. All of these contracts should be BOEM to conclude that exploration should move forward in the Chukchi.

Respectfully Submitted,

Steve Peterson
Vice President, North Star Terminal & Stevedore Co., LLC

Federal Inland Office

North Star Terminal & Stevedore Co., LLC Comment

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North Star Terminal & Stevedore Co., LLC

TEL: (907) 272-7373
FAX: (907) 272-8927

Valdez Homer Seward Dutch Harbor

Regional Director

July 5, 2011

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Respectfully Submitted,

Steve Peterson
Vice President, North Star Terminal & Stevedore Co., LLC

Federal Inland Office

North Star Terminal & Stevedore Co., LLC Comment

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North Star Terminal & Stevedore Co., LLC

TEL: (907) 272-7373
FAX: (907) 272-8927

Valdez Homer Seward Dutch Harbor

Regional Director

July 5, 2011

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Respectfully Submitted,

Steve Peterson
Vice President, North Star Terminal & Stevedore Co., LLC

Federal Inland Office

North Star Terminal & Stevedore Co., LLC Comment

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North Star Terminal & Stevedore Co., LLC

TEL: (907) 272-7373
FAX: (907) 272-8927

Valdez Homer Seward Dutch Harbor

Regional Director

July 5, 2011

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To Whom It May Concern:

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- There are also major differences in well design, as well as fundamental differences in the geology of the regions. All of these contracts should be BOEM to conclude that exploration should move forward in the Chukchi.

Respectfully Submitted,

Steve Peterson
Vice President, North Star Terminal & Stevedore Co., LLC

Federal Inland Office
June 21, 2011

Mr. James Kendall, Regional Director
Alaska ACS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company’s support for Lease Sale 193 as well as my appreciation for the thorough review undertaken by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised regarding the potential for a large oil spill and that it rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. In 2011, the country imported 13.8 million barrels per day of crude oil and liquid fuels. The United States is heavily reliant on foreign imports of crude oil and oil products, which is a significant source of greenhouse gas emissions. The United States must act now to address this dependence and ensure a secure and sustainable energy future.

Sincerely,
Mary T. McElhiney
General Manager
Northwest Technical Services

June 22, 2011

NORTHWEST TECHNICAL SERVICES

Mr. James Kendall, Regional Director
Alaska ACS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company’s support for Lease Sale 193 as well as my appreciation for the thorough review undertaken by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised regarding the potential for a large oil spill and that it rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. In 2011, the country imported 13.8 million barrels per day of crude oil and liquid fuels. The United States is heavily reliant on foreign imports of crude oil and oil products, which is a significant source of greenhouse gas emissions. The United States must act now to address this dependence and ensure a secure and sustainable energy future.

Sincerely,
Mary T. McElhiney
General Manager
Northwest Technical Services
global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

PEAK OILFIELD SERVICE COMPANY

[Signature]

Patrick M. Wash, P.E.
Senior Vice President

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July 11, 2011

Comments on the Revised Draft SEIS
Lease Sale 153 Chukchi Sea
on Regional Office-James Kendall
BDEER - Alaska OCS
3801 Deadwood Drive, Suite 920
Anchorage, AK 99503

Re: Revised Draft Supplemental Impact Statement for Lease Sale 153

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 153. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement (SEIS), presented by BOEMRE on May 20. Lease Sale 153 has undergone an exhaustive environmental review and the potential environmental impacts have been a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 153 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Oil and gas development in Alaska will strengthen our energy security, create jobs, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 65,250 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $5 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated, development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy — not less. The United States continues to import oil from unstable and authoritarian countries despite the vast North American resources available. We are forced to rely on all imports, which put the United States at greater risk for disruptions in supply and price volatility. Volatile energy prices hinder economic growth and make it extremely difficult to do business. Expanding domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 153.

Upon conclusion of this public comment period, I respectfully request that the lease sale be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to the important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

PILE CO. INC.
JIM BRIDGMAN
President

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June 22, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Deadwood Drive, Suite 920
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 153 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 153 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 153 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 29 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 3.5 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. imports have dropped slightly in 2011 while OPIC projection is slated to increase significantly in comparison to non-OPIC production. Clearly, the United States is heavily reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in mind, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and authoritarian countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes, it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

PRICE GREGORY INTERNATIONAL, INC.

[Signature]

David L. Mathias
Vice President and Alaska Area Manager

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June 22, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Deadwood Drive, Suite 520
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 153 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 153 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 153 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 29 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 3.5 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. imports have dropped slightly in 2011 while OPIC projection is slated to increase significantly in comparison to non-OPIC production. Clearly, the United States is heavily reliant on foreign imports of a commodity that is critical to our nation's economic health.

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In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

PRICE GREGORY INTERNATIONAL, INC.

[Signature]

David L. Mathias
Vice President and Alaska Area Manager

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PURVIS OPERATING CO.
139 N. Texas St. 77003

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Deadwood Drive, Suite 520
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 153 Chukchi Sea

Dear Mr. Kendall:

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In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

PURVIS OPERATING CO.

[Signature]

David L. Mathias
Vice President and Alaska Area Manager
administration to move forward with policy that encourages job creation, supports national energy security while growing the economy, and providing the nation with much needed domestic energy supplies.

RDC has a high level of confidence that exploration and development can occur safely in the Arctic and that mitigation measures can be put in place to address most concerns. Development can and does occur without harm to polar bears, caribou and other species.

Since the 2010 oil spill in the Gulf of Mexico, opponents of offshore drilling are calling for an indefinite ban on new exploration and development in Alaska. RDC sharply disagrees. Operating conditions in these waters are categorically different than those in the deep waters of the Gulf of Mexico and pose much lower risk. Moreover, the processes and safeguards in place today in Alaska should allow leasing and exploration activity to resume in the Alaska OCS.

Drilling in the Arctic offers distinct difference than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than those in deep water. The blowout preventers would also be directly accessible to divers, unlike the Gulf where any maintenance or repairs had to be accomplished by remote control vehicles. Another distinction is that many Alaskan offshore operations are seasonal in nature. For example, Shell has proposed conducting its exploratory drilling during the summer and fall open water season. Ice management vessels will be positioned on site to deflect any ice flows that could potentially approach a rig. There are also major differences between state and federal oversight and regulatory frameworks, as well as fundamental differences in the geology of the regions. All of these contrasts warrant special consideration in public policy decisions and should lead the BOEMRE to conclude that exploration should move forward in the area covered by Lease Sale 193.

Advances in technology provide an additional measure of confidence in Alaska drilling. Energy development in Alaska is subject to in-depth analysis by federal law, a stringent permitting process, and oversight by state and federal agencies. In every instance, development is preceded by extensive studies.

RDC recognizes that subsistence whaling is vitally important, both economically and culturally to North Slope villages. Industry and government working together have the ability to protect subsistence resources while producing needed domestic energy for the nation. Strong regulatory oversight, combined with other mitigation measures, can be employed to protect all resource and subsistence users.

While the Chukchi and Beaufort Seas are considered frontier areas, exploration activity has occurred there before. In fact, thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. Moreover, there has never been a blowout in the Alaska or the Canadian Arctic that has resulted in an oil spill.

Opponents of oil exploration have cited the lack of infrastructure in the Arctic as a reason not
to drill in the region. However, it is important to note that additional infrastructure will be built to accommodate future needs once exploration and development activities move forward. The lack of infrastructure today is due directly to the fact that there has been virtually no ongoing development or commercial activity of any kind offshore in the Arctic.

The SEIS concludes that the probability of a very large oil spill is very minimal and Shell has defended its ability to quickly cap blowouts and to contain and clean up spilled oil. Shell has committed to stage extensive resources onsite to immediately respond to and contain any releases. The company has also committed to building and staging in the region a pre-fabricated dome to place over a troubled well. Moreover, virtually all functions of Shell's operations will be monitored at remote sites off the rig, giving industry and government critical "real-time" data and allowing for early detection of potential problems. In addition, the Alaska Clean Seas consortium has substantial resources and experience in the Arctic and has done extensive mapping to identify sensitive areas. The consortium has also conducted extensive safety and oil spill drills in the Arctic and has active research programs dating back into the early 1980s.

Some groups opposing offshore development will insist that all scientific and research data gaps be eliminated before exploration is even considered. In our view, this is unreasonable. A significant scientific record exists in the Arctic and industry and others are well positioned to add to it with new studies, while exploration moves forward in a cautious and responsible manner. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million on studies in Alaska and in the past decade the agency has funded hundreds of studies here, with the majority of those focused on the Beaufort and Chukchi Seas. Rather than wait for all the questions to be answered, drilling should proceed as research continues to advance our knowledge of the Arctic.

Those who oppose exploration in the Arctic would study this issue indefinitely and use any data gaps as an excuse for inaction. There will always be gaps and unanswered questions, no matter where exploration and development occur. In fact, significant gaps existed before and during development of the North Slope's most prolific oil fields. Despite these gaps, development moved forward in a responsible manner while at the same time our knowledge and understanding of the Arctic advanced. But not all questions and concerns regarding oil and gas exploration and development can be answered and met. Not all risks can be eliminated. If we wait until we have all the answers, drilling will never commence. Also, there may be a goal of some, but that ignores the nation's need for domestic sources of oil. If the federal government insists that every risk be eliminated, then it must be prepared to significantly increase foreign imports to meet future needs. It must then also accept the consequences of a heavier reliance on foreign oil, including higher trade deficits, a weaker and more vulnerable economy, and compromised national security. Put another way, failure to proceed would be worse than proceeding.

New production in the Alaska OCS would reduce America's reliance on foreign energy. The Alaska OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil in place and over 235 trillion cubic feet of natural gas potentially in place. The potential recoverable reserves offshore Alaska is more than all the current total proven U.S. oil reserves of approximately 21 billion barrels. Alaska could have the ninth largest oil resources in the world ahead of Nigeria and Libya – if access is granted to these potential reserves. Moreover, OCS gas reserves would significantly improve the long-term economic viability of the proposed gas pipeline from the North Slope to the Lower 48 – a clean energy priority of the Obama administration. To become a reality, the pipeline requires additional gas reserves beyond what has already been discovered onshore.

Given its potential for immense recoverable reserves and enormous economic benefits to the state and nation, the Alaska OCS should be opened to responsible development. OCS development would generate hundreds of billions of dollars in royalty and tax revenues to the state and federal governments and aid the nation's economic recovery by reducing the trade deficit and creating tens of thousands of new jobs. Indeed, OCS leases off Alaska’s coast have already generated billions of dollars to the federal treasury.

The OCS can sustain Alaska’s economy for generations. Currently there are more than 108,000 Alaskan jobs tied to the discovered potential and shipment of Alaskan oil and natural gas, accounting for more than 15 percent of Alaska's population. According to a University of Alaska study, OCS production could provide an annual average of 54,700 jobs nationwide with an estimated cumulative payroll of $415 billion over the next 50 years. Moreover, revenues generated from OCS development in the Arctic could amount to $193 billion in revenues to federal, state and local governments over a 50-year period.

RDC and many Alaskans share President Obama’s view that America needs to conserve more and put new emphasis on renewable and alternative energy. By doing so, the nation can ultimately break its reliance on foreign oil. Yet while America must conserve more and move toward renewable energy, it still needs to pursue new domestic oil and gas production, given the fact it will take decades before renewable energy becomes a dominant energy source.

Even with the Obama administration’s goal to decrease dependence on oil, it is projected that fossil fuels will still account for two-thirds of this nation’s energy consumption in 2025. Meanwhile, every barrel of oil that is not produced in the U.S. will be imported from abroad to meet our needs. Given economic, environmental and geopolitical concerns, America must produce more of the oil it consumes – under American laws, regulations and oversight, and by American workers.

It is vital that our nation’s abundant energy resources be fully utilized for compelling economic, energy security reasons. RDC encourages BOEMRE to re-affirm Lease Sale 193 as held in 2008. Thank you for the opportunity to provide comments.

Sincerely,

Carl Portman
Deputy Director
Section V.D.1. Background. Section V.D.1 provides updated information on Outer Continental Shelf ("OCS") well control incident rates including information from 2010. However, the section does not take the necessary step of putting that information in context to inform the reader on the likelihood of a well control event that leads to a release of liquid hydrocarbons occurring as a result of the Lease Sale 193 in light of the data provided. This omission could be partially resolved by cross-referencing or summarizing the data and conclusions in Appendix B. Appendix B appears to conclude that when the OCS well control data from 1971-2010 are considered, the fault tree analysis used in the Sale 193 FEIS remains valid. Revised Draft SEIS, Appendix B at 84. The fault tree analysis used in the Sale 193 FEIS estimates the frequency of a well in the Chukchi Sea at 3.9 x 10^-7 well per year. If this is highly relevant information that should be made easily available to the reader. Revised Draft SEIS, Appendix B at 81. Further, the focus of the OCS well control impacts provided in the text in the appropriate context. To completely resolve the potentially confusing discussion of OCS well control, Shell suggests that BOEMRE inform the public that this modeled rates overstates the probability of a OCS based on historical data (see Section V.D.1, the actual empirical rate of OCS incidents that have resulted in spills greater than 150,000 barrels is 1 in 41,781, which puts the predicted frequency of an OCS spill at 3.9 x 10^-7 well per year; this actual empirical rate should be made available to the reader). Finally, Shell advises a careful review of terminology used to describe "OCS well control incidents." Because only approximately 20% of OCS well control incidents result in the release of any liquid hydrocarbons, the more relevant number for public review is the number of actual spills. Shell suggests that BOEMRE revise the analysis and properly focus on the true number of spills.

Further, the discussion later in Section V.D.1 regarding role changes following the Deepwater Horizon event provides only summaries of the regulatory changes, without any discussion on the anticipated safety impacts of those changes and consequent decreases in the probability of a OCS spill. This omission should be rectified to provide the public with the most accurate prediction of the likelihood of a OCS in the post-Deepwater Horizon regulatory environment.

B. Construction of the OCS Scenarios

The method by which BOEMRE constructed the hypothetical OCS scenarios analyzed in the Revised Draft SEIS is of critical importance. To properly evaluate the impacts discussed in Section V.E., the reader must understand the likelihood of the actual event being analyzed. To do that, BOEMRE must provide clear, plain-language descriptions of its methodologies and the descriptive language used in Section V.D.2, there are some key concepts that should be further clarified.

In summary, the three introductory paragraphs in this section make critical points regarding the role of the OCS Spill, in some cases, should be strengthened with a quantitative reference to the low probability of a OCS spill.

First, the text clarifies that the OCS scenario is a planning tool to evaluate hypothetical events and should not be "concluded with what would be expected to occur as a result of any of the other action alternatives." Revised Draft SEIS at 126. Shell strongly agrees with this position and believes that BOEMRE could make the purpose of the OCS more clear by providing the public with a cross-reference to the quantitative assessment of the likelihood of a spill in Appendix B, to further define what BOEMRE means by "hypothetical."
D. Context of the Effects Analysis

Section IV.E provides an excellent and thorough discussion of the potential impacts resulting from the VUCS scenario BOEMRE constructed. As BOEMRE acknowledges, these impacts are highly unlikely. To put the 145-page analysis in proper perspective, Shell suggests providing further clarification in the introductory section in two ways.

First, Shell recommends providing, at a minimum, a cross-reference to the probabilities analysis in Appendix B to provide the reader a clear-cut context on the likelihood that the various adverse impacts described in the section could actually occur as a result of the lease sale. As it currently reads, the text merely states that the section “presents a detailed analysis of the environmental impacts that could occur in the event of the hypothetical VUCS scenario described in the preceding section.” Without any reference to the extreme assumptions BOEMRE used to construct the VUCS scenario, a reader does not have the appropriate context to understand how unlikely such an event would be.

Second, Shell suggests providing a narrative description of the VUCS scenario. In various parts of the Revised Draft SEIS, BOEMRE refers to the VUCS scenario as “low probability, high impacts” (Revised Draft SEIS at 121), “a hypothetical oil discharge model that estimates the highest possible uncontrollable flow rate that could occur from any known prospect in the proposed Sale 193 area, given real-world constraints” (Revised Draft SEIS at 136), and a “simulation [that] is intended to model the maximum possible rate and plume size resulting from an event” (noting no reference to likelihood of VUCS). Nowhere in the document is the hypothetical clearly and succinctly defined as being an extreme, unlikely speculative scenario; a scenario that the objective due diligence would be an exceedingly remote occurrence. A concise explanation of the basis for the hypothetical should be included to avoid confusion about the likelihood of the impacts described in Section IV.E.

Shell suggests that BOEMRE states in the introductory paragraphs of Section IV.E, and throughout the section as appropriate that the VUCS scenario was intentionally designed to model the maximum plausible uncontrollable and unmitigated flow from the prospect in the lease sale area with the greatest hypothetical potential flow rate, acknowledging that the particular prospect is not known to contain oil or to offer marks capable of performing as petroleum reservoirs. Further, throughout Section IV.E, Shell requests that discussions of Phase 4 acknowledge that the impacts of spill response, cleanup, and intervention efforts are being examined solely to identify adverse impacts, and that the mitigating value of those efforts in reducing the time or volume of the spill has not been considered.

E. Original Remand Issues

A. Inconsistencies with Draft SEIS

BOEMRE updated and revised the discussion of the original remand issues in this Revised Draft SEIS. In doing so, BOEMRE has created some potential inconsistencies between the Draft SEIS and the Revised Draft SEIS. Shell suggests that BOEMRE consider providing additional explanation in the text for the following apparent inconsistencies:

- Generally: In Section III of the Draft SEIS, BOEMRE stated for a variety of resources that “analysis reviewed additional information for natural gas production and development” and that with respect to the given resource, “the information would not change the analysis or alter the environmental consequences.” Shell commented that, in light of the Court’s remand instructions, it would be desirable to identify the new information referenced by these statements, in the Revised Draft SEIS, BOEMRE has identified that information for certain resources, but for other resources, BOEMRE now states that no new information regarding the resources has been introduced in the supplement. See Revised Draft SEIS at 41 (hydrogeology), 46 (water quality, air quality, and the acoustic environment), 68 (terrestrial mammals), 69 (aerobands), 72 (aquatic/habitat systems), and 73 (archaeological resources and environmental justice). Shell is concerned that the discrepancy between the language used in the Draft SEIS and the Revised Draft SEIS creates the appearance that information was reviewed for the Draft SEIS that was disregarded in preparation of the Revised Draft SEIS. Shell suggests revising the language to clarify BOEMRE’s review process.

- Page 22: BOEMRE previously concluded that the impacts of natural gas development on fish resources was not expected to be significant, but in this document states merely that they are expected to be localized, minor. Shell comments that

- Page 23: BOEMRE previously stated that significant impacts to polar bears would “only occur during the unlikely event of a large oil spill,” but in this document, BOEMRE states that “[significant impacts to polar bears could occur during a large oil spill, depending on the location of the spill.”

- Page 45: BOEMRE previously described water quality in the Alaska Arctic region OCS as “relatively pristine,” but in this document, BOEMRE states only that the U.S. Chukchi Sea experiences little nonpoint source pollution due to runoff.

- Page 103: BOEMRE previously stated that an estimate of 25 startled older takes and 2 Shell’s older takes as a result of 20 years of natural gas development “likely overestimates the risk of collision,” but in this document, BOEMRE merely provides the estimates without comment on whether the estimates overstate the risk.

- Page 114: BOEMRE previously discussed the impacts of helicopter traffic, as opposed to fixed wing or pipeline operations, as well as the impact of ship activities on the same, but in this document that analysis is not included.

II. Shell comments on the Draft SEIS not addressed in the Revised Draft SEIS

- In Section IV.C.2, discussing the air quality impacts of natural gas exploration and production, the Draft SEIS does not specify why it forecasts emissions and impacts for some pollutants (VOCS, ozone, greenhouse gases and visibility), but not others. Specifically, the basis for the comment "any increase in the concentrations of criteria pollutants from these activities would be small, local, and temporary" is unclear. Shell suggests BOEMRE clarify the scope of the air analysis performed for the natural gas development and production scenario and provide a basis for the conclusion that increases in pollutants due to natural gas development and production are likely to be small, local, and temporary. Further, in this document, BOEMRE should identify the applicable air quality standards against which it measured the anticipated air quality impacts and provide the basis for its determination of the applicable air quality standard. The air quality analysis is unchanged in the Revised Draft SEIS.

- Shell comments BOEMRE on the explanation of its approach to missing information in the natural gas section provided on page A4 of Appendix A. To provide the reader with a full understanding of BOEMRE’s approach to missing or incomplete information, Shell suggests that BOEMRE provide a similar explanation of its approach to missing or incomplete information in the VUCS section as appropriate.

III. Conclusion

The various environmental documents that support BOEMRE’s decision to proceed with Lease Sale 193 (those completed prior to the decision to lease as well as those prepared in response to the court’s remand) are thoughtful, detailed, carefully-developed analyses that fully satisfy the requirements of the OCSA, NEPA and the court’s order on remand. Those documents reflect a significant investment of agency resources; an investment that holds tremendous promise for advancing the Nation’s future energy security.

Like BOEMRE, Shell has invested heavily in Lease Sale 193. In addition to establishing its substantial legal position, Shell has now been prepared to address the Shell Exploration & Production Company Concept...
July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
Rita Regional Director James Kendal
SOSEMA - Alaska OCS
3601 Centerpoint Drive, Suite 500
Anchorage, AK 99513-4820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Outer Continental Shelf (OCS) and urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 30th. Lease Sale 193 has undergone extensive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska’s OCS is critical to our country’s long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 84,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly $55 billion over the next fifty years. The benefits of energy production on Alaska’s OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy — not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Variable energy prices hinder economic growth and make it extremely difficult to do business. Insulating our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE’s attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Sodexo Remote Site

Kelly Patrick
Vice President of Operations

Chukchi Lease Sale Letter
July 5, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
40 Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Southgate Resources, LLC, I would like to express strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Coastal Continental Shelf (CCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservative estimate of $27 billion in average annual oil and $132 billion in average annual natural gas production on Alaska’s CCS critical to our country’s long-term energy supply, it is essential that economic activity from the development of the Chukchi and Beaufort Seas would impact our nation’s energy security. Government revenue generated from the Chukchi Sea is estimated to be nearly $6 billion over the next 50 years. The benefits of energy production on Alaska’s CCS cannot be overstated. Development of our domestic energy resources is essential to our nation’s economic stability.

In order to achieve greater price stability for consumers, America needs more energy at lower prices. The United States continues to import oil from unreliable and unstable sources, particularly from the Gulf of Mexico. This puts the United States at greater risk for disruptions in supply and price spikes. Unreliable supplies hinder economic growth and make it extremely difficult to do business. To provide consistent, affordable energy production will increase our energy supply and help meet growing demand. For these reasons, we strongly support moving forward with Lease Sale 193.

Sincerely,

President, Southgate Resources, LLC

July 11, 2011

SUBMITTED ELECTRONICALLY
Regional Director James Kendall
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Comments of Statoil USA E&P Inc. on the Revised Draft SEIS for Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

Statoil USA E&P Inc. (Statoil) appreciates the opportunity to submit comments on the Revised Draft SEIS for Lease Sale 193 in the Chukchi Sea. We believe that the opportunity for input and active engagement with stakeholders and the public is necessary to ensure a balanced and environmentally responsible approach to management of Arctic resources.

Statoil and its affiliates comprise an international energy enterprise with operations in forty countries. We have more than thirty-five years of experience from oil and gas production on the Norwegian Continental Shelf, where we operate 80% of the production. Statoil is the largest offshore operator in the world, and we are committed to accommodating the world’s energy needs in a responsible manner, applying technology, and creating innovative business solutions.

Statoil began building its upstream petroleum assets in the US in 2002, and we have invested over $14 billion to grow our upstream business. Statoil is one of the largest lessors in deepwater Gulf of Mexico and holds significant positions in the Alaska Chukchi Sea. Over the past two years, we entered into joint venture agreements for onshore gas production in several eastern states and Texas.

In 2008, Statoil acquired sixteen leases during the MMS’s OCS Lease Sale 19 in the Alaska Chukchi Sea. We successfully completed a 3-D marine seismic program on our leases and adjacent areas during the open water season of 2010 and are planning a shallow hazards and soil investigation program for the 2011 open water season. Statoil is also a 25% owner in ConocoPhillips’ Devils Paw prospect in the Chukchi Sea and has worked cooperatively with Shell and ConocoPhillips to collect environmental baseline data in the region over the past three years.

Statoil recently participated in an extensive research program regarding oil spill response capabilities in Arctic waters. We aim to continue to improve our knowledge about oil spill response and are playing an active part in joint industry efforts to further strengthen oil spill technology in Arctic conditions. We will continue to incorporate the most advanced and effective spill response techniques in any future exploration in the Chukchi Sea.

Overcoming the challenges to exploration in the Chukchi Sea requires significant investment and a regulatory environment that is predictable, stable, and transparent. Exploration in the Alaska Arctic is at a critical stage. To ensure continuing investment, it is important that BOEMRE expediently finalize the SEIS, reaffirm Lease Sale 193, and vigorously defend its decision-making from any challenges.

Statoil has reviewed the Revised Draft SEIS for Sale 193 and believes it thoroughly addresses the concerns identified by the District Court of Alaska. Further, the addition of the Very Large Oil Spill (VLOS) scenario represents a thorough analysis of a hypothetical, catastrophic spill. We have two requests of BOEMRE with respect to the VLOS analysis.

First, the SEIS would benefit from an unambiguous description of the components that are included and excluded from the VLOS analysis. For example, reference to spill response in the VLOS discussion is confusing because it may cause some readers to assume—incorrectly—that spill response efforts play a role in the calculation of the VLOS. Similarly, the SEIS should include a clear discussion of risk to put the probability of impacts resulting from a low probability VLOS into context.

Second, the SEIS should more clearly address the distinctions between the VLOS analysis, where BOEMRE has undertaken under NEPA— and the worst case discharge (WCD) analysis that occurs under the auspices of an Exploration Plan. The VLOS scenario is a planning tool for environmental impacts analysis that represents an improbably, extreme case. This hypothetical VLOS scenario differs from the WCD calculation, which is site-specific and calculated in accordance with applicable regulations. We believe there is potential for the public, regulatory, and agency reviews to confuse these two when the VLOS is being developed in the context of individual Exploration Plans. Hence, we encourage BOEMRE to more clearly address and emphasize the distinctions between the VLOS analysis and the WCD. This will minimize the possibility that the VLOS will, in any subsequent proceedings, be inappropriately taken out of context.

In closing, Statoil commends BOEMRE for developing the Revised Draft SEIS on a quick timetable and looks forward to BOEMRE’s timely adoption of the preferred alternative. The preferred action is a solid step towards fostering a predictable regulatory climate that encourages responsible oil and gas investment in the Chukchi Sea, while ensuring a balanced and environmentally responsible approach to management of Arctic resources.

Thank you for consideration of our comments.

Very truly yours,

Statoil USA E&P Inc.

Julie A. Hefferon, President, Commercial & Negotiations

July 11, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
40 Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Comments of Statoil USA E&P Inc. on the Revised Draft SEIS for Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

On behalf of Statoil USA E&P Inc. (Statoil), I would like to express strong support of oil and gas development in the Chukchi Sea and other areas of Alaska’s Coastal Continental Shelf (CCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservative estimate of $27 billion in average annual oil and $132 billion in average annual natural gas production on Alaska’s CCS critical to our country’s long-term energy supply, it is essential that economic activity from the development of the Chukchi and Beaufort Seas would impact our nation’s energy security. Government revenue generated from the Chukchi Sea is estimated to be nearly $6 billion over the next 50 years. The benefits of energy production on Alaska’s CCS cannot be overstated. Development of our domestic energy resources is essential to our nation’s economic stability.

In order to achieve greater price stability for consumers, America needs more energy at lower prices. The United States continues to import oil from unreliable and unstable sources, particularly from the Gulf of Mexico. This puts the United States at greater risk for disruptions in supply and price spikes. Unreliable supplies hinder economic growth and make it extremely difficult to do business. To provide consistent, affordable energy production will increase our energy supply and help meet growing demand. For these reasons, we strongly support moving forward with Lease Sale 193.

Sincerely,

President, Southgate Resources, LLC
Dear Mr. Kendall,

While heavy crude is not currently active in Alaska, I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (DEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the DEIS and allow the development of these vital resources to proceed, in order to maintain America’s domestic energy supply.

Currently the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. In the event the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 230,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012 respectively. At the same time, U.S. oil production has dropped in 2011 while OPEC production is slated to increase in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation’s economic health, contributing to our trade imbalance, weakening the dollar, and increasing public (and environmental) concern.

It is imperative that BOEMRE allow Alaska to develop all of its abundant energy resources, those in the Alaska Outer Continental Shelf included. The United States continues to import oil from unstable, adversarial countries, despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only puts the United States at risk for disruptions in supply and price instability; it also supports repressive and anti-American regimes and endangers American lives.

I believe BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all it is possible to bolster its energy security.

Sincerely,

Paul M. Drift
President

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THOEM AND ASSOCIATES
EH&S CONSULTING SERVICES

affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Terry L. Thoem
President, Thoem and Associates

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July 5, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft DEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

As an Alaska Citizen, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay. We need this action to keep Alaska economically viable for our children and future generations.

Respectfully,

Greg Kessler
Director of Alaska Commercial
greg.kessler@totemcean.com
907-265-7277
907-244-9961

Thoem and Associates - PO Box 323, Barter, Texas 77433 - (281) 578-1559 fax
(281) 578-1559 office * (281) 578-8431 home * (832) 722-4161 cell * (281) 578-1559 fax
I am writing to express my company’s support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the ostensible for every large oil spill and rights that considers this risk忍耐. Now that Lease Sale 193 has been fairly reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil it consumes. And that has been a trend for decades that has demonstrated itself. Still, according to the Energy Information Administration, the United States will consume over 10 million barrels per day of crude oil and liquid fuels in 2013, up 848,000 barrels per day from the year before. Further, demand is projected to increase by an additional 190,000 barrels per day in 2012, while global demand is forecasted to increase by 1.5 million barrels per day and 1.3 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has declined since 1971 in the West and in offshore areas where there is no increase in reserves.

In conclusion, we believe the BOEMRE must move efficiently to finalize the SEIS and allow the development of our domestic resources. At a time when global energy security is increasingly affected by unstable energy and political instability, the United States must do all it can to bolster that security.

Sincerely,

Charlie Allen
President
Trans Pacific Oil Company

July 8, 2011

Dear Mr. Kendall:

The Transportation Institute (TI) wishes to urge the Secretary of the Interior and the Bureau of Ocean Energy, Management, Regulation and Enforcement ("BOEMRE") to finalize the Environmental Impact Statement (EIS) and affirm the Chukchi Sea Lease Sale 193 as held in 2008. In so doing, the agency will assure a steady flow of oil and gas is available to our nation, sustain the economy of Alaska, provide critical tax and lease revenue for the federal budget, increase America’s energy security, and support the U.S. flag merchant marine.

The Transportation Institute was established in 1947 as a Washington-based, nonprofit organization dedicated to maritime education and promotion. The Institute companies participate in all phases of the nation's deep sea foreign and domestic shipping trades, and barge and tugboat operations on the Great Lakes and on the 25,000 mile network of America's inland waterways. These operations employ deep-sea and river passenger vessels, and liquid, dry-bulk, container and special purpose ships. Many are contracted to the U.S. military services. All are of U.S. registry -- crewed by American citizens operating under the world's highest safety, health and pollution standards, and proudly flying the American flag. With offices on the east and west coasts, the Transportation Institute supports a wide range of programs that promote the strength of America’s maritime capability. Our member carriers in the Alaska trade directly impacted by this crucial EIS decision include Crowley Maritime Corporation, Horizon Lines, Alaska Tanker Company, Seabulk, Inc., and Totem Ocean Trailer Express, Inc. Offshore oil and gas development in Alaska will strengthen our energy security and generate significant new revenue for the federal government. Recent estimates peg this region as having 27 billion barrels of oil and 132 trillion cubic feet of natural gas. Consequently, energy production on Alaska’s Outer Continental Shelf (OCS) is critical to our country’s long-term energy security. Furthermore, government revenue generated from the Chukchi Sea is estimated to approach $50 billion over the next fifty years.

The United States continues to rely on oil and gas from nations whose stability and alliance remain uncertain or who are in conflict with us. Such dependency invariably leads to supply disruptions and threatening economic pressures. Such volatility is ever more intimidating to a population having withstood years of economic decline and stagnation. Despite efforts to diversify our energy resource base through non-fossil fuel, alternative wind, current, and solar energy, and significantly reduce energy consumption, we will be dependent upon petroleum for a good measure of our energy needs for decades to come.

Development of Alaska’s OCS is estimated to create and sustain 35,000 jobs over 50 years in Alaska alone. The oil to be developed from Alaska’s OCS will flow through the Trans-Alaska Pipeline System (TAPS). This pipeline has seen years of declining oil output and experts have become concerned that continued low levels of oil throughput will result in significant and prolonged strain on the line and consequent rupture or premature abandonment.

Offshore oil and gas resources will reverse this trend and help to reduce operational deficiencies on a pipeline that currently provides 12 percent of our nation’s domestic supply of oil.

Furthermore, the oil flowing through TAPS to tidewater in Valdez is then carried and averts growing congestion on our highways and rail corridors. However, its viability is greatly dependent upon access to a dependable supply of fuel at a reasonable cost. Alaska's OCS assets are a most critical component of this equation.

We trust Secretary Salazar and BOEMRE will recognize these concerns, finalize the environmental review process, and quickly move forward with Lease Sale 193. Thank you for providing this opportunity to share our thoughts on this matter.

Respectfully submitted,

Richard Berkowitz
Director, Pacific Coast Operations

Transportation Institute Comment

PUBLIC SUBMISSION

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193

Comment Due: July 11, 2011

Submitter Information

Name: Charlie Allen
Address: PO Box 8001
Ketchikan, AK, 99901
Email: n/a
Phone: 907-225-0140
Organization: Tyler Rental Inc.

General Comment

Dear Mr. Kendall,

I am writing to support the oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement to proceed with the lease sale 193. I believe that the draft supplemental environmental statement for the lease sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska’s Outer Continental Shelf.

We as Americans should work together to utilize the resources that we have available to both help reduce our dependency on foreign oil and to promote jobs and economic growth. The proposed drilling in the Chukchi Sea would occur in water depths that are close to those in the shallow waters of the Gulf of Mexico, drilling in the shallow waters in the Gulf of Mexico has been done for years with a long history of safe operation.

Thank you for the opportunity to comment on this issue and I urge BOEMRE to affirm the Chukchi Sea Lease sale 193, and promote the reinvestment in America.

Sincerely,

Charlie Allen
June 2011
James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3701 Centennial Drive, Suite 100
Anchorage, Alaska 99503

Re: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company’s support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully restates the risks involved. We hope the BOEMRE will finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been an area of concern that has increased demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 150,000 barrels per day in 2012, while global demand is forecast to increase by 1.7 million barrels per day and 1.5 million barrels per day in 2011 and 2012, respectively. As a result, the U.S. oil production has dropped slightly in 2012, while OPEC projections are likely to increase significantly in comparison to non-OPEC production. Clearly, the United States is already facing a foreign import dependency that is critical to our nation’s economic health.

With these facts in mind, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska’s Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resource available. Relinquishing our own country is unsafe, and it threatens not only the safety of the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe that BOEMRE must efficiently finalize this process and allow the development of our domestic resources. As a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

[Signature]

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3701 Centennial Drive, Suite 100
Anchorage, Alaska 99503

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Sincerely,

[Signature]
General Public
General Comment

I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska's Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage only in "ancillary activities" that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state's OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. Alaska's North Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really could fuel Alaska's economy and provided much needed energy for the nation for decades.

Again, please adopt the SEIS and reaffirm Lease Sale 193.
The oil will only be sent to the Chinese or Japanese and will not alleviate any shortages here or reduce our prices. It will only entrench Shell and the fat cats in the oil industry.

Patricia Abell
264 Fence Bn, School St, Royal Palm Beach, FL 33451

In addition to the physical environmental damage of oil drilling, we now have the direct prediction of the newly released report on the state of the oceans:

...many oceans depend on fish to the already critical situation and in some ecologically fragile areas may make entire marine ecosystems unproductive.

No more oil drilling. Period.

Rita Ann Hayerson
100 Whitchurch Lane, London, DC 20000

No way should BP or any other company be allowed to take the risky steps to destroy the Arctic ecosystem.

Martha Abell
390 Pleasant Street, Rome, PA 18013

Right now, I am drinking water from a spring which flows from a water table at least 200 feet under my property and it is not just the wildlife, but we humans who could be affected. Do you want the same kind of disaster that happened in the Gulf last year?

Richard Aronson
400 Mission Rock Blvd Apt 152, Chico, CA 95926

Why ruin such beautiful pristine limit??

Eric Adam
Prescott, AZ 86301

Go Solar.

Brenda Adams
Portland, OR 97217

SHAME ON YOU MONEY GRABBING BASTARDS! You put the entire world ! Get your WACKY OL' OUTTA THERE! You aren't prepared to handle a mess like this new BP is coming to get out of there!!!

Carol Adams
14851 Jeffrey Blvd Sp 45, Irvine, CA 92618

Isn't it interesting how (Shell Oil Co) is playing God, destroying part of the world for money? How much money do you need anyway? Thank you

Tracey Adams
9475 Santa Barbara, Austin, TX 78742

What are you guys thinking, this will destroy more of our fragile ecology and not produce enough in a timely enough manner to make a bit of difference.

Frank Agapaleu
Inch, IL 61813

The oil industry coerce subsidies while we receive nothing except more taxes to pay off debt. High gas prices and the speculators who then sell then will steal our economy. Broadening great extremists millions while plunging this nation

The environmental price is too high, simply recall the devastation caused by BP in the Gulf. A disaster of that magnitude in Alaska would be even more catastrophic. This country must pursue alternative energy. Not destroy the planet to continue supporting great profits of oil.

Dennis Allard
1632 Vermont St, Denver, CO 80216

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Sandra Anderson
28202 Forest, Missoula Viejo, CA 92982

Extinction is forever.
I have been following this in the news and in my opinion allowing them to do this in this area is asking for a disaster large enough to make the Gulf Coast spill look like an oil leak under a car in my driveway. Please stop this plan.

Rachel Past
Honolulu, HI 96840
When will destroying our planet be enough? Why not encourage Shell to spend their money on alternative energy rather than oil?

Jane Fannini
Old Field Rd, Satuika, NY 11773
What if we put the very proven Research on earth at risk? Can’t we find a better way? We will need an out of this world solution if we can’t get oil off the energy as any cost money goes. We will stop destroying our water and soil when we are all gone and that day seems to be more rapidly approaching. Human intelligence is becoming at any moment.

Jesuit Faulcon
15 Parson’s Dr, Mahwah, NJ 7490
We don’t need the little bit of oil as much as we need the Arctic without an oil disaster.

Tahira Fansu-Allen
Brooklyn, NY 11229
Just in case energy. Why risk any more death and sickness with these pollutants? Their track record does not prove any risk for people.

Carol Fregon
18010 Hart Lb Nl, Bainbridge Island, WA 98110
Let’s get responsible here! NO NEW OIL WELNESS!

Christina Ferrons
3031 SW 58th Ave, West Park, FL 33823
No more oil in sensitive eco areas, save our Earth from destruction!

Yami Fernandez
Los Angeles, CA 90018
Stop killing the planet, let us learn to survive and take care of what we have left, our children are growing stop steering their future.

James Ferrons
118 Morse Ave, San Francisco, CA 94112
Please we really need all that oil? No we do not.

Man Fery
1412 S SB, Tillamook, OR 97141
The oil industry has failed to prove that it can drill responsibly, and the consequences of the Deepwater Horizon disaster not only would seem to prove the opposite, but also seem to prove that the industry is willing to take dubious shortcuts in order to improve its bottom line. We have hundreds of wells in the Gulf of Mexico right now that threaten to go the way of BPW because of this mindset...we do not need more of the same in the Arctic.

Tom Fery
16 Green Ln, Guadalupe, PA 19320
Will you GET OFF the federal fund use and start insisting in renewable, sustainable energy before you drive us all to extinction as a result of the ignorant/filthy contamination of the use of these pollutants?

Representative Form Letters of 29,676 submitted by Alaska Wilderness League

Dianne Gandel
28710 Farrell St, Quinaultfield, WA 98487
Why would any rational human or corporate risk long term destruction of the environment for short term monetary gains? Good! Aren’t we better than that?

anne gayer
Moore, NY 14510
Please stop the destruction!

Victoria Gyanee
6843 Burn St Apt A1, Forest Hills, NY 11375
Enough is enough! This is the only planet we have to live in yet we continually destroy it.

Ronald Gorden
303 La Plata St NW, Albuquerque, NM 87107
We can make the transition to clean energy most quickly by assessing the true costs of energy types including environmental degradation and disaster, ending offshore subsidies and tax breaks, and putting our money into clean sources. Stop the strong-arming of Big Coal, Big Oil, and nuclear and return the production of energy to and for the American people. Stop the corporate abuse.

Edgar Geller
150 Rd Kon, Ruggerlina, TN 37857
no drilling at all unless safety measures are in place: we don’t need another BP.

Julie Gehrig
106 Candlelight Ct, Durban, NC 27707
When will we learn? Please stop the offshore drilling.

Susan H. Grech
Richmond, CA 94808
nothing has been learned from the Gulf of oil spill. With no real backup to place to deal with an accidental oil spill any short project must be prepared. We have been lied to before, meaning we would be harmed for years to stop spill. Do we want that reasonably foreseeable disaster on our watch? Please just say no. Thank you.

Blair Gillbend
Brighton, MA 2135
Keven unappreciate: What you will be done in you and yours - sooner or later.

Genny Gerech
8 Lisa Rd., El Prodoc, NY 87729
Wipe out! Wipe out! Wipe out! It is beyond my comprehension, that the majority of those you in the administration and Congress CANNOT SEE the forest through the trees' because of your blinding greed, foreign, and in the corporate world rather than the earth, humanity, and all of creation.

Moradah Geza
543 East 5th Street, New York, NY 10009
I have numerous friends in Alaska. In the past year, one of them made a trip to see what the Sound looked like twenty years after Exxon Valdez. (Inappropriately, the beach is full of oil. It’s under every rock. There is no way to clean up all spills, particularly as for north.

Dianne George
Williamson, CA 92151-0101
I only now please for a loan well in the Arctic. – Not at or in. They are really escalating the price tags for future oil resources—think of the probability of the spill goes from a 1 in 5 cf, to a 1 in 2 cf spill, to this is an simplification, but the probability DEEPLY involves. And so to key it clean up the cold ice extreme conditions of the Arctics – 'spilled seas & wrecks, to death!'

Representative Form Letters of 29,676 submitted by Alaska Wilderness League

Dianne Gandel
28710 Farrell St, Quinaultfield, WA 98487
What is the need in alternative, renewable energy resources has never been more urgent. It does not approve AF oil spills in Arctic waters without full retraining of its employees. With the billions of dollars in profits people, Shell and the other big oil companies can certainly afford to invest in less destructive sources of energy and should be encouraged to do so.

Anne Brennan
14101 Arbor Hills Rd, Tampa, FL 33625
Don’t end up like Florida.

Gymn Boyd
1697 Stanhope Kolleggavve Rd, Jefferson, OR 94407
This is an appalling development: the arte is no longer for this drilling operation. The ecosystem will not recover as quickly as the Gulf, the spill was not recovered the same.

Lorraine Brusheim
1513 Grand St Apt 511, Hoboken, NJ 7038
Let’s begin NOW in taking care of the world’s help us find alternatives to fossil fuels!

Joyce bradley
Laguna Beach, CA 92651
When there is a spill, then what? The ecosystem is gone. We need different types of energy. We can’t destroy anymore ecosystems.

Sallie Bradley-Phillips
5419 3/4 Fountain Ave, Los Angeles, CA 90029
Mr. Salazar is no friend of the environment and as far has shown to just cater to big interests. He record is abysmal.

Anky Braly
14617 Terry Park Way, Mountain View, CA 94040
Make the oil companies responsible for their acts. Make sure they are as careful with our environment as possible that there is an environment to leave to our children and grandchildren.

Jenny Bramlett
5909 Feyes Ln, Wesley Chapel, FL 33543
Not again! No more disasters to the making. Your campaign contributions may have congressional feasts, but not those of us that care about our homeland?

Mary Ann Brant
Jumon, AZ 85901
Please don’t let it. it won’t worth the rich to the marine and marine life.

Patricia Brich
5813 Northern Moos Sq, Baltimore, MD 21227
Please do not allow another disaster from deep water drilling. It will be far more difficult, if not impossible, to clean up to the Arctic compared with the Gulf (which is far from clean now, as you well know).

Bonne Brekenridge
4143 48th St, San Diego, CA 92105
How can this even be considered after the disaster in the Gulf, a much friendlier environment than the Arctic? Our oceans

Representative Form Letters of 29,676 submitted by Alaska Wilderness League

Kitty Johnson
121 E 66th Apt 132, Frederick, MD 21701
I have had it with Corporate Interests supressing the public interest. The whole right wing agenda is based in lies and has no logical justification since it’s good to in enrich and empower a small number of extremely arrogant individuals who think they are God’s chosen. Don’t allow yourselves to be bought. There is no price that justifies the destruction of the environment.

Larry Johnson
2555 S Baker St, Butte, MT 59701
Line come here we in the USA pay so much for gas especially named by the citizens: as we do the staff he buy from abroad. there is something fishy about this whole darned up. All oil all publicly owned resources should not reserved property of the oil companies. They steal public property and then selling it back to us... I790 are stupid letting this happen.

Mark Johnson
Box 441, Redland, AK 99752
As a wildlife biologist in the Arctic, I wholeheartedly the potential of viable data on marine and coastal environments and the effect of any subsequent air with local residents, policymakers, researchers, and industry together. We will see the impact of oil production.

Mike Johnson
22713 St Apt 7, Sacramento, CA 95816
Save Alaska’s environment!!

Randy Johnson
2753 NW Sounda Loop, Bend, OR 97701
Simple, instead of drilling and continuing to build an antiquated infrastructure that will have oil companies trying to utilize regardless of its negative impact, put the money into alternatives!!

Sharon Johnson
475-750th St, Overlake, WA 98242
Please protect this fragile ecosystem. We need to develop clean energy and not continue to destroy our heritage

Cain Johnson
181 Thomsberry Branch Rd, Louisiana, 41230 stop drilling.

DOLLYE JOHNSTON
Jackson, MS 48213
AT THIS RATE OUR WORLD WILL HAVE NO WILDERNESS

Gordon Johnston
2917 North Edendale Street, Portland, OR 97217
General Comment

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

Thank you for the opportunity to comment on the Revised Draft SEIS, Lease Sale 193, Chukchi Sea.

The development of oil production in the Chukchi Sea is paramount in achieving energy security in the United States not to mention the economic benefits to the United States.

Time and industry awareness have proven that Lease Sale 193 and other leases in the Chukchi Sea can be developed safely and responsibly.

Again, thank you for the opportunity to comment and I strongly urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Best regards,

Paul Axelson
I strongly urge you to move forward with the lease approvals so we can begin to work on and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities. Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species. Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in wet

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General Comment

After the disaster in the Gulf of Mexico you're still considering drilling in the Chukchi Sea? Seriously? When are we going to stop risking the health of the earth and it's people for short term gains.

Susan Bucknell Comment

I'm concerned about an incident at the June 21st BOEMRE hearing in Kotzebue.

In response to a question of mine about what happens to oil in the ocean, Conoco Phillips spokesperson Bruce St. Pierre replied that oil floats. End of discussion.

But when I had a chance to actually look at the revised draft supplemental EIS for Lease Sale 193, I found lots of references to oil both sinking to the ocean floor, and remaining in the water column. (See pages 146 and 147.) This seems particularly relevant because people at the hearing were saying the Chukchi Sea is safer to drill because it's so shallow. But those shallow waters are important marine mammal feeding grounds. Information about the possibility of oil and tarballs on the seabed and in the water column should have been an essential part of the discussion.

It's concerning that misleading information was presented during a BOEMRE hearing. And it's concerning the eight BOEMRE people in the room let that incorrect science pass without a word, or challenge. (See pages 146 and 147.)

• Industry has committed to unprecedented provisions for prevention and spill response that go above environmental standards.
• Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards.
• New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.
• The Alaska OCS is a critical U.S. energy supply with up to 27 billion barrels of oil and 132 trillion cubic feet of natural gas potentially in place.
• Rescinding the leases and allowing a de facto moratorium to continue will harm America's economy and discourage future industry investment.
• A flowing lease to go forward from Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
• The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
• Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards.
• Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law.
**Public Submission**

**Docket:** BOEM-2011-0044  
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

**Comment On:** BOEM-2011-0044-0001  
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

**Document:** BOEM-2011-0044-0115  
Comment from Katherine Capozzi, Personal

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**Submitter Information**

**Name:** Katherine Capozzi  
**Address:** 4316 Birch Run Dr., Anchorage, AK, 99507  
**Email:** katherine.capozzi@gmail.com  
**Organization:** Personal

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**General Comment**

The very thorough process of research and permitting has already taken place. Please do not waste any more money and time by delaying OCS development. Let’s make this happen and help reduce our dependency on foreign oil.

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**Public Submission**

**Docket:** BOEM-2011-0044  
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

**Comment On:** BOEM-2011-0044-0001  
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

**Document:** BOEM-2011-0044-0044  
Comment from Danielle Carlson, Self

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**Submitter Information**

**Name:** Danielle Carlson  
**Address:** 1300 W. 7th Ave. #209, Anchorage, AK, 99501  
**Email:** alaskadani@gmail.com  
**Phone:** 907-347-1750  
**Organization:** Self

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**General Comment**

I am writing to support drilling in the Chukchi Sea, in the area of Lease Sale 193. I also encourage the idea of drilling in the Beaufort Sea, and support a cooperative relationship with the State of Alaska and the federal government that yields revenue sharing from the proceeds of this venture.

It’s not hard to explain why I am supportive of this action. Drilling is a technology that is more environmentally-friendly than it has been in past years, especially here in Alaska where our State Department of Environmental Conservation works so hard to protect the beauty and cleanliness of our beautiful state. “Drilling” is not a term that is feared or rejected here in Alaska; drilling provides access to Alaska’s resources. Resource development is the broad and butter of Alaska’s economy; Prudhoe Bay employs many up on “The Slope” and the oil they extract from the ground flows through the pipeline, and, really, straight into our state budget.

Oil puts people to work, places food on the table, builds roads and schools, keeps energy prices down, and provides a decent chunk of domestic oil production in the United States. As oil begins to not surge but trickle through the Pipeline, we can expect employment on “The Slope” to decrease, paychecks helping families to buckle, and the overall Alaska economy to suffer. Truth be told—If our state is going to survive, we need oil. Not only does it ensure our state’s survival, but it also ensures our country’s best interests. The less we rely on dangerous foreign oil coming from countries who do not operate in our best interests—and have in the past used revenue from oil to harm civilians and our men and women in uniform serving overseas—the better off our country and our allies are.

Drilling in the area of Lease Sale 193 has far too many benefits for it to be denied. The federal government is gazing at a tremendous opportunity for resource development and the establishment of fiscal stability. Thank you!
July 11, 2011
James Kendall, Regional Director
Alaska OCS Region - Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Comments on Revised Draft SS5, Lease Sale 139, Chukchi Sea

Dear Mr. Kendall:

Please accept the enclosed comments in support of the revised Draft SS5 and oil and gas development in the Chukchi Sea from individual Consumer Energy Alliance members as well as stakeholder organizations. In an effort to conserve energy and paper, you will find these electronic docs that contain these individual letters and the data of their signatures:

- Doc 1 contains 26,660 letters;
- Doc 2 contains 41,455 letters;
- Doc 3 contains 51,239 letters.

In total, you will find 127,584 letters.

In addition, I have included official comments from the following:
- Consumer Energy Alliance;
- The Honorable Derrick Seaver;
- Wheat Musiors;
- Shell/Woodside/Anadarko and Mid-Atlantic Petroleum Distributors' Association.

If you have any questions on these comments, their signatures, or any other matter, please contact me at (907) 345-3213.

I appreciate the opportunity to comment on this important matter.

Thank you,

Natalie J. Butler
 Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011
James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpointe Drive, Suite 100
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I appreciate all the additional stops the Bureau of Ocean Energy Management, Enforcement, and Regulation (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and believe the revised Draft Supplemental Environmental Impact Statement (SEIS) rightfully determines a very large oil spill remains highly unlikely. While I agree the BOEMRE needs to take all thoughtful precautions, I think most recent EIS concludes that development of Alaska’s offshore resources can proceed safely.

As the revised draft EIS states, a very large oil spill in the Chukchi is highly improbable given the history of exploratory drilling and oil control incidents in the Outer Continental Shelf (OCS). Since 1971, 84 wells have been drilled in the Alaska region alone, all without incident. Moreover, the proposed drilling in the Chukchi would occur in waters similar in depth to the shallow-waters in the Gulf of Mexico, which boasts a long history of safe operations. The Deepwater Horizon blowout and resulting very large oil spill in the Gulf of Mexico, conversely, was the first incident of this magnitude in nearly 40 years of OCS exploration.

Notwithstanding, producers and regulators have made significant investments—both in time and resources—to ensure all drilling processes in the safest manner possible. Pursuant to the Notice to Lessees 65, producers were required to assess the potential impacts of a worst-case discharge. As such, Shell devised its exploratory plan for the Chukchi Sea using calculations of spill estimates based on the known geology of the basin and has since determined that the company maintains the capacity needed to prevent a blowout and respond swiftly and effectively in the unlikely event a blowout occurs.

The revised supplemental EIS notes that since 1979, for every 130 billion barrels of oil produced, one well incident resulting in a very large oil spill has occurred, though one-third of these spills have been the result of military action. Clearly, the probability of a well incident is very low, even if some risk exists. Given the economic and energy security benefits of increased domestic oil production, I believe this minimal risk is acceptable, particularly because of the advanced response capabilities in place.

I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Sincerely,
Joy Hardyace
P.O. Box 917
New Castle, PA 17352

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Representative Form Letters 127,584 submitted by Consumer Energy Alliance

June 2011
James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpointe Drive, Suite 100
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska’s Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I urge BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska’s Outer Continental Shelf would have a tremendous ripple effect throughout the nation’s economy—creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska’s OCS are significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,300 jobs nationwide with a cumulative payroll of $134 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 55,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Alaska’s Outer Continental Shelf.

Sincerely,
Theresa Lust
1347 Greenbriar Dr.
Pawcatuck, CT 06255

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Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011
James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpointe Drive, Suite 100
Anchorage, Alaska 99503

RE: Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193

Dear Mr. Kendall:

I am writing today to encourage you to finalize the environmental review process for Lease Sale 193 as expeditiously as possible and allow for oil and natural gas development in the Chukchi Sea to proceed.

I appreciate the extensive efforts the Bureau of Ocean Energy Management, Enforcement, and Regulation has taken to ensure appropriate changes to offshore processes and regulations are made so that we are better prepared for the unknown event of an oil spill. Lease Sale 193 has undergone a thorough, exhaustive environmental review, and it is clear that safe exploration and production can occur in the Chukchi Sea. Both regulators and operators in the region have undertaken extraordinary efforts to augment the blowout prevention and spill response capabilities if an incident were to occur.

While I applaud all of these noteworthy precautions, I believe the Revised Draft Supplemental Environmental Impact Statement (SEIS) rightfully concludes that the probability of a very large oil spill is very low. Moreover, the proposed drilling depths in the Chukchi Sea are similar to that of shallow-water operations that have occurred safely in the U.S. Gulf of Mexico for decades. In these shallow waters, the blowout preventer is more easily accessible and will not likely experience the challenges present during the Deepwater Horizon Blowout in 2010.

Finally, if a discharge were to occur, the anticipated spill volume in the Chukchi Sea would be much lower than the values used in the BOEMRE’s hypothetical analysis. In accordance with the Notice to Lessees 65, Shell Gulf of Mexico Inc. Shell Offshore Inc. revised its anticipated spill impacts in its exploration plan for the Chukchi and concluded that the company maintains capabilities that meet or exceed the standards for blowout prevention and spill response.

I appreciate the opportunity to comment today, and I applaud the Obama Administration’s efforts to ensure offshore energy development proceeds in the safest manner possible. Following the conclusion of this last iteration of the SEIS, I urge the BOEMRE to finalize the review process and allow the exploration of the Alaska OCS.

Sincerely,
Glenda Wollen
3602 Woodside Dr.
Pearl River, LA 70052

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Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011
James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpointe Drive, Suite 100
Anchorage, Alaska 99503

RE: Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193

Dear Mr. Kendall:

As you know, energy production is a key driver of the American and Alaskan economies. At the same time, energy remains one of the top expenses for American businesses and individual consumers. This cost has been driven up substantially by many factors in recent months, including overseas volatility in the Middle East and start-up offshore production in the United States. Compounding these problems, the natural decline in onshore production in Alaska jeopardizes the longevity of the Trans-Alaska Pipeline, which is already running at one-third of its capacity. With abundant resources offshore, Alaska is an obvious place for the United States to augment its production to meet domestic demands.

With global supply of oil increasingly strained, price volatility will continue to cause hardship for many American businesses and families. While the United States cannot completely insulate itself from the global economy, there are actions we can take to bolster our energy security and provide positive signals to the market. Moving forward with development of our abundant OCS resources is one such measure that will provide relief to American consumers now and in the future.

The federal government estimates that the Chukchi and Beaufort Seas contain approximately 25 billion barrels of oil and 130 trillion cubic feet of gas. With current U.S. daily consumption over 19 million barrels, these resources are equivalent to over three and a half years of U.S. demand. Furthermore, bringing these Alaska OCS resources online would decrease foreign imports, helping to lessen the influence countries like Saudi Arabia, Libya and Venezuela have on the United States and on global oil markets. Finally, if the United States were to produce these domestic resources, trillions of dollars would remain in the United States increasing our burgeoning trade deficit.

Given the tremendous impact Alaskan OCS development can have for our economic and energy security outlook, it is imperative that BOEMRE proceed with Lease Sale 193 in a timely manner.

Sincerely,
ROBERT SALLER
3100 BOSTON ST
MOUNTAIN HOME, AR 72653
Public Submission

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Comment On: BOEM-2011-0044-0001
Environmental Impact Statements: A availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale
Document: BOEM-2011-0044-0020
Comment from Sean Cochrane, Individual

Submitter Information
Name: Sean Cochrane
Address: 5820 Beverly Dr
Anchorage, AK, 99516
Email: s_p_cochrane@hotmail.com
Organization: Individual

General Comment
I write to support the adoption of the Supplementary Environmental Impact Statement on Oil and Gas Lease Sale 193. The SEIS provides the Secretary with sufficient information and analyses to make an informed decision to affirm Sale 193. Contrary to what some may assert, there has already been exploration in the Chukchi Sea. In fact, since the 1980s, some 35 wells have been drilled without incident including five in the Chukchi. These wells are also significantly different in nature than those in the deepwater Gulf of Mexico, in terms of depth, pressure and temperature. I am a concerned Alaskan who believes that study of this issue has gone on too long. The time for endless process has passed. An effort to rescind these leases will effectively result in a moratorium which is inconsistent with federal policy and the needs of Alaskans and Americans. The exploration and development of America's oil and gas resources is critical to Alaska's future economy and the nation's long-term energy security.

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Comment On: BOEM-2011-0044-0001
Environmental Impact Statements: A availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale
Document: BOEM-2011-0044-0009
Comment from John Cookson, Self

Submitter Information
Name: John Cookson
Address: 20442 Williamsburg Dr.
Eagle River, AK, 99577
Email: cookson@gci.net
Organization: Self

General Comment
I encourage Secretary Salazar, the BOEM RE and other regulating officials to promptly affirm Oil and Gas Lease Sale 193, Chukchi Sea. Development of our offshore resources, including the Chukchi leases, is critical to our national prosperity and security. The Deepwater Horizon incident has greatly heightened sensitivities to the risks of a very large oil spill (VLOS). However, it must be recognized that the risks of a VLOS in the Chukchi are significantly lower than in the deepwater Gulf of Mexico, in terms of depth, pressure and temperature. Thank you for your consideration of this matter.
It is my belief that the Lease Sale 193 should be affirmed. All current wells in Alaska were drilled without incident, even though most were drilled beyond legal requirements. The industry has committed to preventing spills that are beyond legal requirements. The wells in Alaska are rescinded, it will, no doubt, harm Alaska's economy, as well as the rest of the country's. Considering the impact of high energy prices that affect each American and our economy, the United States has an obligation to develop domestic energy sources. Demand continues to rise and our country reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production. America has for too long relied on foreign oil while we have it here at home. The federal government by stopping the exploration and utilization of USA owned and controlled does unnecessarily cause high petroleum prices. Now is the time to start using some common sense and move forward on this project. I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources. Sincerely, Richard L Coose

General Comment

James Kendall, Regional Director
Alaska OCS Region

Dear Mr. Kendall,
I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193. The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a complete analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been held in 2008, it is vitally important to Alaska and the nation's economy. Please affirm Lease Sale 193 as held in 2008. It is vitally important to Alaska and the nation's economy.

Deantha Crockett

Considering the impact of high energy prices that affect each American and our economy, the United States has an obligation to develop domestic energy sources. Demand continues to rise and our country needs to continue to develop the resources we have. Lease 193 should be affirmed as held in 2008. There is sufficient information and analysis to support an informed decision affirming Sale 193. If the leases are rescinded, it will, no doubt, harm Alaska’s economy, as well as the rest of the country’s.

The Chukchi OCS is an important future source of energy. Lease Sale 193 has the potential to refill the alaska oil pipeline and produce much needed energy and jobs. The industry has committed to preventing spills that are beyond legal requirements. The wells in Alaska would be in very shallow water where pressures are much lower than in deep water drilling, thus lowering risk. All current wells in Alaska were drilled without incident, even though most were drilled using 1980’s technology.

It is my belief that the Lease Sale 193 should be affirmed.

Deantha Crockett

Please affirm Lease sale 193 as held in 2008. It is vitally important to Alaska and the nation's economy. Industry has gone above and beyond to implement environmental protections. There is NO reason not to move forward in the OCS. I say this as a 30-year resident of Alaska. I SUPPORT OCS development. Thank you!

Deantha Crockett
Dear Mr. Kendall:

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska’s Outer Continental Shelf would have a tremendous ripple effect throughout the nation’s economy – creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska's OCS is significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide with a cumulative payroll of $154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 12,100 U.S. jobs annually during the production phase and an average of 2,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Alaska’s Outer Continental Shelf.

Sincerely,

Les Cronk
P.O. Box 8800
Ketchikan, Alaska 99901
Phone 907-225-6157
Fax 907-225-8254
Email les@hustevic.com

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska’s Outer Continental Shelf would have a tremendous ripple effect throughout the nation’s economy – creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska's OCS is significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide with a cumulative payroll of $154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 12,100 U.S. jobs annually during the production phase and an average of 2,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Alaska’s Outer Continental Shelf.

Sincerely,

Les Cronk
P.O. Box 8800
Ketchikan, Alaska 99901
Phone 907-225-6157
Fax 907-225-8254
Email les@hustevic.com
Representative Form Letters of 15,047 submitted by EARTHJUSTICE

Sidney Stetson
Northfield, VT 05663-5738
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99037-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

If they can prove they have the technology and capability of stopping a deep-water oil leak within 48 hours after it begins, then they may drill at that depth. Sidney Stetson

BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort sea starting in 2012 and revisions to the accompanying oil spill response plans. It is too soon to permit oil and gas activities in the Arctic Ocean. BOEMRE and Interior should not allow drilling and should not approve Shell’s plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis and before realistic and effective plans to respond to a large oil spill are in place. Stetson urges to not to move forward with risky, aggressive leasing and drilling plans in America’s Arctic Ocean.

Sincerely,

Sidney Stetson

Representative Form Letters of 15,047 submitted by EARTHJUSTICE

Penny Wild-Perkowski
Poquoson, VA 23662-1124
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99037-5820

RE: Comments on Revised Draft SEIS, Lease Sale 195 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

It urge you not to move forward with risky, aggressive leasing and drilling plans in America’s Arctic Ocean. After the BP disaster, it is clear that there isn’t the knowledge needed to react to another similar catastrophe in the ocean. We can’t afford to make these mistakes any longer. We depend on the health of the planet, and the planet depends on us to care for it. The Bureau of Ocean Energy Management, Regulation, and Enforcement and the Department of the Interior are currently making important decisions about the Arctic Ocean that threaten long-term consequences for the region. BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort sea starting in 2012 and revisions to the accompanying oil spill response plans. It is too soon to permit oil and gas activities in the Arctic Ocean. BOEMRE and Interior should not allow drilling and should not approve Shell’s plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis and before realistic and effective plans to respond to a large oil spill are in place. Penny Wild-Perkowski

Sincerely,

Penny Wild-Perkowski
Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

To drill anywhere in the Arctic would be catastrophic. Offshore drilling is an enormous risk. The explosion of Deep Horizon was a foregone conclusion. The question was never if it would happen, the question was WHEN. Just as it was inevitable that there would be a nuclear meltdown sooner or later, it is inevitable that if we are foolish enough to let anyone drill in the Arctic, an accident will inevitably happen. Oil companies don’t mind taking risks, because they are all about profit, keeping us dependent on fossil fuels, and they don’t care what they destroy. That is not true of the rest of us. Most of us want to leave behind a world fit for our children and their children to live in. Please discard this insane idea.

Sincerely,

Jertia Turner

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Regional Director
Bureau of Ocean Energy Management, Regulation, and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Attention: RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

To develop resources in the Chukchi Sea will create a particularly dire need for environmental review and the restrictions and conditions needed to protect the environment from the devastating effects of any spill. The questions are not whether there will be an accident, but how much damage will be caused.

Without the rigorous and demanding environmental review required by the National Environmental Policy Act (NEPA) and the National Marine Fisheries Act (NMFS), and the additional, special, states-specific requirements of Alaskan law, and the SEIS, no one can adequately assess the potential environmental damage of the development and extraction of the Chukchi Sea resources. We need to be sure that we don’t continue to allow the development of these mineral resources so that they can be safely developed, and the sensitive marine environment protected.

The oil and gas companies have the right to drill in the Arctic if they can demonstrate that their methods are safe and sustainable. But we need to be confident that these resources can be developed safely, and permit review by all the agencies is within federal laws and done a good job of protecting the environment. If the state and companies feel development of these resources has led to clean water, good housing, energy, the development of new industries, and the development of the outer continental shelf of Alaska. The oil and gas companies in the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 have been allowed to develop these leases the guidelines, then the should be allowed to develop these leases they have bought in good faith.

Sincerely,

Jertia Turner

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Ilona Farr
3945 Geneva Place
3310 Starboard Ln
Anchorage, AK 99518
Email: afmc4045@yahoo.com
Phone: 907-561-7020
Organization: self
Government Agency Type: Local
Government Agency: Vdler and an Alaskan resident

General Comment

Please allow development of the outer continental shelf of Alaska. The oil and gas companies in Alaska have done a good job to date of developing our resources in a responsible manner. The development of these resources has led to clean water, good housing, energy, the development of roads and schools for all of us here in the state. The companies have followed state, local, and federal laws and done a good job of protecting the environment. If the state and companies feel that these resources can be developed safely, and permit review by all the agencies is within guidelines, then they should be allowed to develop these leases they have bought in good faith.

Sincerely,

Ilona Farr

---

John Fisher
3130 Starboard Ln
Anchorage, AK 99518
Email: fisher215@gmail.com
Phone: 907-223-6444
Organization: Myself
Government Agency Type: Federal
Government Agency: BOEM

General Comment

“I urge you to adopt the Supplemental Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska’s Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lease to engage only in ‘ancillary activities’ that do not harm the environment. The lease holders have been holding for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required. Alaskans have and continue to support the development of our state’s OCS as it not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation’s energy security. Alaska’s OCS is estimated to hold 27 billion barrels of oil and 1,322 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. A lease in Alaska’s North Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really could fuel Alaska’s economy and provide much-needed energy for the nation for decades.

Again, please adopt the SEIS and reaffirm Lease Sale 193."
moral obligation to develop all types of domestic energy sources especially oil and gas. A gain I urge you to affirm the Lease Sale 193. Respectfully, Kevin Greenfield
Representative of Form Letters 30,124 from Individuals (Greenpeace)

Jul 7, 2011
James Kendall
Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America’s Arctic Ocean may be decided this summer. The writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

The Arctic’s rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly about the impact to the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BLM/NOAA conducted an analysis that shows that large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the species, such as the threatened polar bear as well as endangered species. As of this writing, no serious analysis, BLM/NOAA’s predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic’s unique conditions. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in this one-of-a-kind area. There is too much at stake.

Sincerely,
Mr. Chris Colden

Jul 7, 2011
James Kendall
Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

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The Arctic’s rich marine environment is the least understood area in the world. AS IS THE DRILLING INDUSTRY’S SAFETY PRACTICES.

There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. THERE IS ALSO A BASIC LACK OF COMPOURSE FROM THE OIL INDUSTRY TO EXPLOIT THESE LANDS FOR PRIVATE PROFIT.

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As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiak traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The

Sincerely,
Ms. Cynthia Britt

Jul 7, 2011
James Kendall
Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Mr. MINE. SHALL we answer no plans stop destroying nature, preserving it, to which we have wind fields producing more than can be said. As many, when they do not own property maintain what they have. The future of America’s Arctic Ocean may be decided this summer. The writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

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Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

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Jul 7, 2011
James Kendall

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Dear James Kendall,

I’m writing to ask that no drilling be permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

The Arctic’s uniquely rich marine environment is one of the last undisturbed areas in the world. It is a lack of basic science ranging from simple species counts of marine mammals such as the banned polar bear and endangered birds and whales. If this were not serious enough, BOEMRE’s predecessor agency, the Minerals Management Service previously stated that new technology exists to clean up a spill in the Arctic’s fragile sea ice environment. The threat of oil spills and the inability to clean them up is reason enough to cancel any plans for proposed drilling.

I would further add to this the deleterious track record and attitude demonstrated over many years by Shell in the Niger Delta.

The Inupiat people, who have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spend weeks at a time in the Arctic Ocean, their food, resources, and traditions depend on the Ocean in their garden and we must protect it for future generations. It is also part of the world’s ocean garden - where will we find comfort some day?

Sincerely,
Mr. Stewart Foulkner

-----

Jul 7, 2011
James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I subscribe to this statement by Greenpeace: Oil is not the long-term answer to energy needs. We cannot continue to gamble with delicate ecosystems. Please direct America’s energy efforts toward truly sustainable energy resources.

The future of America’s Arctic Ocean may be decided this summer. I am writing to ask that no drilling be permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

The Arctic’s rich marine environment is the last undisturbed area in the world. It is a lack of basic science ranging from simple species counts of marine mammals such as the banned polar bear and endangered species such as the threatened beluga whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fixed fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

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As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time in the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these unique waters. There is too much at stake.

Sincerely,
Mr. Robin Widdis

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July 7, 2011

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Sincerely,

Poti Donnelly

July 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I have lived and worked in the arctic for the past 36 years and know that much of it is no longer pristine because of oil exploration and development. I have tried to clean up oil spills there and know it is very difficult to impossible. Therefore I request that any massive drilling effort (the drill proposal be deferred) the industry develops a technology and procedures that can be effective for clean up because spills are unavoidable ultimately. The future of America’s Arctic Ocean may be decided this summer. I’m writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

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Sincerely,

Mr.rik williams

July 7, 2011

Poti Donnelly

Mr. rik williams

PO Box 52222

Fairbanks, AK 99707-2221

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. rik williams,

We’ve noticed too much of the environment is drilling and melting it is to it. Where oil companies can PROVE they have the capability of stopping a spill at a given depth in 48 hours of occurrence, maybe we could reconsider allowing them to drill. Until then, no drill.

The future of America’s Arctic Ocean may be decided this summer. I’m writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic’s unique conditions.

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Sincerely,

Ms. Sidney Staton

July 7, 2011

James Kendall

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Jul 7, 2011
James Kendall

Within the past year we've encountered catastrophic damage to the Gulf of Mexico, numerous Alaska spills and now another Exxon oil spill in the pristine Yellowknife river and surrounding area. It is hard to fathom why we are even considering permitting Big Oil interests and good to know damage the Arctic Ocean. The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling be permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the last undamaged area in the world. There is a lack of basic science from simple species studies of marine mammals such as the threatened polar bear and the endangered beluga whale to information about marine and birds and whales. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could tip the very foundation of the Arctic Ocean ecosystem.

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A people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inuit traditionally travel seals or ice on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar please do not allow the oil industry to move forward aggressively risky plans to drill in these once-in-a-lifetime waters. There is too much at stake.

PROTECT ALL AMERICAN Citizens and the unspoiled beauty of the Arctic.

James Kendall

Dr. Hila Lottes

July 7, 2011

Mr. Kyle Embrick
6822 Music Street NE
Atlanta, GA 30312-1520

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

It is very important that no drilling be allowed in the Arctic. The oceans of the world are already harmed enough by the activities of man.

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling be permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

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James Kendall

Dr. Hila Lottes

July 7, 2011

Mr. Kyle Embrick
6822 Music Street NE
Atlanta, GA 30312-1520
Regional Director, ROBIE ALASKA OCS Region,

The Chukchi Sea is a place of immeasurable value. It is valuable as a home for endangered polar bears, walruses, seals, fish and other species of aquatic life. It is valuable as the ancestral homeland of the Inupiat people who have been living in this place for centuries before Western scientists discovered that the earth was round. It is valuable in ways that we simply cannot conceive about at this point. These values are the kind that will last forever, if we are wise enough to protect them.

To grant Shell Gulf of Mexico, Inc, a few passes to wreak havoc in our fragile Arctic oceans with their current inadequate plan would be intolerable irresponsible. The revised Draft SIIS does not remedy the missing information that made the first draft so flawed.

With our scarce resources, we must at least have the humility and wisdom to learn and admit how little we know. Shell openly admits that there is not enough basic scientific information about the Arctic - from simple species counts of marine and coastal fish and marine mammals such as walruses to information about currents and tidal systems - to fully understand the potential impacts of development to this already imperiled place. Without this vital information, how can Shell possibly make intelligent decisions regarding our common waters?

I am very concerned about the possibility of a major oil spill in the Chukchi Sea if Shell is allowed to drill. If the corporation can’t manage to clean up a spill in the Gulf of Mexico, there is no way they can deal with the Arctic Ocean where they have thus far shown no interest in developing. Shell’s plans for cleaning up a spill in a region characterized by extreme cold, extended periods of darkness, hurricane-strength storms, and permafrost ice include glidered tugs and barges. To make matters worse, the nearest coast guard station is 1,000 miles away.

I urge you to hold off decisions about drilling in America’s Arctic Ocean until there is a plan that gathers and synthesizes adequate baseline ecological information, basic essential information, and the technology exists to clean up an oil spill in the Arctic Ocean’s extreme conditions. Please mandate more environmental monitoring. Consider the impacts from a potential blowout spill during the proposed drilling. Please mandate MMS to fill the data gaps and work with agencies like NPS to provide the necessary information about the Arctic Ocean.

The way it stands, the Chukchi Sea Lease Sale 193 is not in line with America can afford to take. Please protect our land and sea from corporate haste and greed.

With trust and hope,
Jenna Hoets

Richard A. Hughes Comment

permitting process, give the Chukchi Sea a high level of confidence that exploration and development can occur safely.

- Drilling in the Arctic offers distinct differences from deep water exploration and development in the Gulf of Mexico; the pressure encountered in deep water drilling is multiple times greater than in Alaska whereas water depth is not very shallow; there are also major differences in well design, as well as fundamental differences in the geology of the regions.

- Thirty exploration wells have been drilled in the Beaufort and five in the Chukchi - all without incident; these wells were drilled in the 1990's, utilizing older technology compared to what exists today.

- The North Slope and the offshore are now one of the most studied energy basins in America; in the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

- An estimated annual average of 56,000 new jobs would be created and sustained over 50 years by OCS-related development in Alaska; an estimated $83 billion in payroll would be paid to employees in Alaska as a result of OCS development.

- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout the US — in manufacturing, computer technology, construction and maintenance; $35 billion in payroll would be paid to employees in the Lower 48.

- Federal, state and local governments would realize substantial revenue from OCS development, with the base case totaling $193 billion, of which the federal government would collect $157 billion.

- Demand for energy is continuing to rise and the US requires continued development of America’s oil and gas resources as the nation transitions to alternative energy sources of the future.

- Given the impact of high energy prices on Americans and their economy, the US has an obligation to develop domestic oil and natural gas sources, both onshore and offshore.

Thank you for your consideration.

Yours truly,
Richard A. Hughes

Richard A. Hughes Comment

318 Lurerue Ave.
Fairbanks, AK 99701-3708
(907) 457-1212, email: ralHughes@alaska.net
July 8, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
13000 Comment Drive, Ste. 500
Anchorage, AK 99503

Dear Mr. Kendall:

This is to provide comments relative to the proposed Outer Continental Lease Sale 193 in the Chukchi Sea. I support this sale and encourage you to move forward as soon as possible to enable this lease. The draft SIIS has been reworked in compliance with US District Court order to include a "worst case" oil spill scenario. Considerable information is now included to make an informed decision. I would like to add certain comments in support of my position:

- Lease sale 193 should be advanced as soon as possible; the SIIS provides sufficient information and analysis to support an informed decision affirming Sale 193.

- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska’s economy and discourage future industry investment, without any corresponding benefit to the environment.

- Sale 193 is critical to Alaska’s future economy and the nation’s long-term energy security.

- The Chukchi OCS is an important future source of US energy supply with up to 19 billion barrels of oil and 293 trillion cubic feet of natural gas potentially in place; the Chukchi Sea is considered the most prospective unexplored offshore basin in the country.

- The goal of Lease Sale 193 is to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits; the OCS production has the potential to refuel the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.

- Oil and gas production resulting from Sale 193 will occur under the world’s highest safety and environmental standards; activities will be governed by stringent lease stipulations, numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

- Industry has committed to unprecedented provisions from prevention and spill response that go above and beyond what is required by law; these provisions, combined with stringent

Representative of Form Letter Campaign to Congress over 1,000 received

Wednesday, July 8, 2011
The Honorable Representative Pete Visclosky, 2nd Congressional District Office Building, Washington DC 21055

Representative Visclosky:

June 2011
James Kendall, Regional Director Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
3911 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Dear Mr. Kendall:

I write to express my strong support for energy development from Alaska’s federal lands and waters, and specifically, to urge your agency to do what is necessary to move forward with Lease Sale 193 in the Chukchi Sea.

Both the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has revised its analysis of the environmental impacts introducing offshore energy development in Alaska. I am encouraged that operations in Alaska’s OCS can proceed in such a way that ensures these operations are proceeding throughout the world where countries recognize that oil and gas are essential to economic growth and a strong economy. I hope that BOEMRE shares my belief that a strong American allies with opportunities for future generations requires that Alaska’s resources not be placed off limits, as some have urged. We need jobs, and Alaska’s energy will help.

I was very surprised to recently learn that less than 3% of America’s OCS is leased for energy production, and that included the lawsuit is question in Alaska. It seems to me that if the government is truly concerned about job creation and economic growth, it will follow through on those areas that have been leased like the Chukchi Sea and allow those who have already paid the government for the right to explore the opportunity to exploit. By recent accounts, expected production of oil from Alaska’s OCS could exceed 50,000 jobs. Additionally, any oil found and produced would help fill the Trans-Alaska Pipeline System (TAPS) that is running below sea-level of its capacity. The 1.5 million barrels...
Thank you for the opportunity to comment.

Sarah W. Keller
169 Eagle Ridge Rd.
Fairbanks, AK 99701

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition, Congress needs to fully fund the regulatory agencies involved so they can function as partners in prevention and response to any incidents. For example, there needs to be increased investment in the Coast Guard so it can receive equipment, staff and training to be ready to respond to all manner of incidents in the arctic.

We need to have a transparent and traceable inclusion of science and expertise in a more effective way. I strongly support the recommendations from the 2011 excellent report by Holland and Barrows and Pierce of the USGS (An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1376, 278 p.) in that report, there is evidence of the wide gaps in our current knowledge and our understanding of the arctic ecosystems. Comprehensive research should be integrated and focused in helping us understand how the ecosystem works. Much work is needed to establish baseline data before any drilling. If the funding isn't there to support such work, then drilling should be delayed.

A collaboration of arctic nations should ahead of time establish best practices methods and training appropriate to the special challenges of the arctic. Any spill will become an international incident. We as a nation need to be prepared to respond. We have seen what happens when there is ill preparedness for the inevitable. No one benefits from that. Again, a spill, blowout or similar incident WILL happen and we should do all we can to prevent it. It will cost, but it will cost much more if we do not.

As Gulf Oil Commissioner and fellow Alaskan, Frances Ulmer noted in a public forum in Fairbanks, AK this past spring, the arctic doesn't just belong to the US; it belongs to a group of nations. A collaboration of arctic nations should ahead of time establish best practices methods and training appropriate to the special challenges of the arctic. Any spill will become an international incident. We as a nation need to be prepared to respond. We have seen what happens when there is ill preparedness for the inevitable. No one benefits from that. Again, a spill, blowout or similar incident WILL happen and we should do all we can to prevent it. It will cost, but it will cost much more if we do not.

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Sarah W. Keller
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In 2011, the United States spent $50 billion annually to transport crude oil from the nine oil fields in the Chukchi and Beaufort Seas to the U.S. West Coast. The average cost of transportation was $67 per barrel and growing. This price is more than the world market price. In 1980, the price was $39 per barrel.

The transportation costs, mostly pipeline carrying, were not passed on to consumers.

To whom it may concern:

Frankly, I am reluctant to endorse any oil exploration in the Chukchi Sea given recent events such as the Deepwater Horizon oil spill in 2010 and the current spill from a broken pipeline into the Yellowstone River in Wyoming. Spills, blowouts and other incidents, regardless of the reasons behind them, shake the nation's confidence in oil companies and their partners as well as in regulatory agencies.

It seems more than reasonable to suggest a shift in the mindset from "it will never happen" to "it WILL happen" and to choose to be prepared. I would urge all to take up the full recommendations of the findings of the National Commission on the BP Deep Water Horizon Oil Spill and Offshore Drilling. Regardless of the depth of the water, any oil exploration and drilling needs to follow these recommendations to safeguard the environment and establish financial responsibility.

In addition, Congress needs to fully fund the regulatory agencies involved so they can function as partners in prevention and response to any incidents. For example, there needs to be increased investment in the Coast Guard so it can receive equipment, staff and training to be ready to respond to all manner of incidents in the arctic. Coupled with this, NOAA needs support to increase its abilities and do its part for improved quality of necessary weather forecasting and real-time sea ice conditions. If the funding isn't there, then drilling should be delayed.

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nationwide with a cumulative payroll of $154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 15,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Alaska's Outer Continental Shelf.

General Comment
Industry got this state going and has sustained it through the years. Sale 193 is important in ensuring a future for our state, our children and our businesses.

Without opposition we can become complacent... We, as Alaskans, have never been complacent in keeping our land/sea safe and will continue to make every effort to do just that.
Dear Secretary Salazar and BOEMRE Alaska OCS Regional Director,

The Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the Department of the Interior (DOI) are currently making important decisions about exploratory drilling in the Arctic Ocean. At a minimum, the BOEMRE should suspend the leases sold until the necessary baseline information is available to consider plans in America's Arctic Ocean. Disappointingly (but not surprisingly), the revised draft supplemental EIS does not address many of the key scientific and environmental questions about the Arctic Ocean that threaten long-term consequences for the region. The BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal Court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort seas starting in 2012 and revisions to the accompanying oil spill response plans.

It is horrifying that we have to fight our own government to save the environment.

-- Ansel Adams

Disappointingly (but not surprisingly), the revised draft supplemental EIS does not sufficiently account for missing information and, as a result, the BOEMRE should not move forward with Lease Sale 193. The BOEMRE and the DOI should not reauthorize the Chukchi Sea leases and should not approve Shell’s plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis (such as research on the effects of oil and gas activities on fish, birds, and marine mammals) and not before realistic and effective plans to respond to a large oil spill are put in place. Urgent steps must be taken toward a more robust, adaptive leasing and drilling plans in America’s Arctic Ocean. At a minimum, the BOEMRE should suspend the leases sold until the necessary baseline information is available to determine whether drilling activities should occur and, if so, under what conditions. The decisions you make as part of this process will provide important direction for our ocean resources, in particular for Alaska’s Chukchi Sea.

“Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our magnificent estate in perfect order, and then has left his fields and meadows, forests and parks to be sold and plundered and wasted.”

-- John Muir

It is too soon to permit oil and gas activities in the Arctic Ocean. Oil drilling companies must have basic, essential information and technologies to clean up an oil spill in Arctic conditions beyond today’s inadequate means. The Presidential commission on the BP-Deepwater Horizon disaster identified there are “serious concerns” and “special considerations” regarding Arctic drilling. The BOEMRE’s own analysis shows that very large oil spills similar in size to that of the BP-Deepwater Horizon disaster could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region’s communities and species, such as the threatened polar bear as well as endangered birds and whales. As if these were not serious enough, BOEMRE’s predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic’s volatile sea ice environment.

There are no trained personnel or equipment in the region capable of carrying out an effective response plan and there is a clear lack of basic scientific information about the ocean ecosystem. The vibrancy and biodiversity of the Arctic ecosystem depends on the management of future development.

“Then I say the earth belongs to each generation during its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence.”

-- Thomas Jefferson

Last year’s disaster in the Gulf of Mexico taught us that preparation is key. However, Shell Oil Company’s oil spill prevention plan for the Chukchi Sea is wholly inadequate. It must be based on flawed and unrealistic assumptions. The Coast Guard and other agencies agree—we are woefully unprepared to respond to a large oil spill in the Arctic Ocean.

Then I say the earth belongs to each generation during its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence.

-- John F. Kennedy

With all of this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean. The Arctic Ocean is too special a place to risk with incomplete data on the ocean’s marine resources and poor spill response plans. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized. The oil in the Arctic Ocean isn’t going anywhere, and can wait for proper research and preparedness.

“I think America will have come to maturity when it will be possible to erect somewhere in the United States a great bronze marker which will read: ‘Beneath these lands which surround you there lies enormous mineral wealth. However, it is the judgment of the American people, who locked up this area, that these lands shall not be disturbed, because we wish posterity to know that somewhere in our country, in gratitude to nature, there was at least one material resource that we could let alone.’”

-- Freeman Tilden

Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot possibly make informed decisions about whether oil and gas activities should occur in Arctic waters, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem. BOEMRE must ensure that Shell Oil’s plans to drill in the Chukchi Sea for 2012 and 2013 address these issues, including the impacts from a potential blowout. Drilling our way to safety is the wrong way to go.

“Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot possibly make informed decisions about whether oil and gas activities should occur in Arctic waters, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem. BOEMRE must ensure that Shell Oil’s plans to drill in the Chukchi Sea for 2012 and 2013 address these issues, including the impacts from a potential blowout.”

-- Theodore Roosevelt

America’s Arctic Ocean is in your hands. We need to ensure that any offshore development puts our coastal communities, wildlife, and waters first. Please do not allow Shell Oil’s risky and aggressive offshore drilling plan to occur in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic’s icy waters. There is too much at stake.

“A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

-- Aldo Leopold

Thank you for the opportunity to comment on the Revised Draft Supplemental Environmental Impact Statement (EIS) and Lease Sale 193 in the Chukchi Sea. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,

Christopher Lish

Glema, CA
With high energy prices in the United States and the impact on our economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore. We need to stop these delays by the EPA and BOEM in the Chukchi Sea now.

I urge you to affirm Lease Sale 193, and allow exploration to move forward in the Chukchi Sea. This could be an important source of domestic energy for the U.S., and could help keep the trans-Alaska pipeline operating well into the future. New jobs would be created and revenues from the OCS could help offset the federal deficit. Industry is committed to exploring in a way that respects the environment and the lifestyle of local residents. More studies are in progress to better understand the science of the Arctic, but even now, the Chukchi Sea is one of the most studied basins in the world. I support the SEIS and believe it provides sufficient information and analysis to move forward with Lease Sale 193. Thank you, Natalie Lowman

A lifelong resident of Alaska.
section from P.A. Miller et al. 1993. Oil in Arctic Waters, Chapter 8, p.74 (see Attachment). At all three Chukchi Sea wells for which records could be obtained, there were critical curtailments of operations. The movement of wells off the drill location and suspension of operations adds considerable risks to the drilling operation.

There have been many gas blowouts in Alaska, including in Cook Inlet (see P.A. Miller, 1993, p. 78) and along the coasts of the Beaufort Sea. In June 1989, a Kulkik drillship which is now proposed for use in Shell’s Beaufort Sea drilling program had a natural gas blowout in the Canadian Arctic. This was also the same rig used for the earlier Kuvium well in the U.S. Beaufort Sea.3 A thorough assessment of natural gas blowouts should be done, especially in light of the assumption that natural gas drilling will be done on the same exploratory rigs and production platforms as oil exploration and development.

The revised draft SEIS fails to address the risks from critical curtailment operations, and their expected frequency, and this additional risk from natural gas drilling (as well as combined with risks from oil well drilling) needs to be considered along with more specific information regarding movements of sea ice during the year. This could affect not only mitigation measures regarding timing of exploratory and production drilling but also geographic scope of lease sale areas and where particular activities and operations are prohibited due to the nature of the conditions.

I have been told by an environmental scientist from BOEMRE that if there is an oil spill in the Chukchi Sea it will go "all over the place." This is not the impression that the commodified presentation of the trajectory analysis in the OSRA presents. The revised draft SEIS fails to address how this may affect pileups, pressure ridging, ice movements, ice gouging, striation scouring, and the force of ice that can affect the integrity of offshore exploratory and production platforms, including for natural gas development, subsea buried pipelines especially in the transition zone at landfall, and coastal erosion which could affect the integrity of offshore pipelines. If the (oil) and natural gas pipeline landfall is near Wainwright, how might gas pipeline breaks, leaks, and explosions affect local residents?4

During prior exploratory well drilling, sea ice and major weather factors such as wind and waves caused drilling operations to need to be shut down and the rigs moved offshore. This operation is called critical curtailment. The attachment provides information obtained from MM4 about the Chukchi Sea and Beaufort Sea drilling critical curtailments as of 1993 when the analysis was done, as is described in the following

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I attended a hearing this evening in Fairbanks, AK, regarding the DSEIS for 193. I am not against oil exploration and/or development, but wish only to see that it is done in the most environmentally save manner. My concerns are as follows:

1. weather; extreme cold, high winds, making any clean-up efforts more difficult.
2. shifting ice; very powerful, unstoppable forces that could damage or destroy drill rigs/platforms
3. fragile ecosystem, very sensitive to contamination by petroleum products
4. lack of any experience anywhere in the world with oil recovery from spills in extreme cold regions, in broken ice, or even under-ice spills, which could go undetected
5. a fragile, local food chain for the Inuit who have lived along this cost for thousands of years and whose livelihood and culture depend on maintaining a healthy ocean environment
6. regarding the DSEIS itself, I see mention of cleanup, response, etc., but no mention of PREVENTION. If industry can develop foolproof methodology, perhaps spill response would be a moot point; we did, after all, land men on the moon!
7. the DSEIS actually seems to admit a 27-54% possibility for a large oil spill from drilling activities in this area; is that really a risk we should be taking for our ocean?
8. with the lax permitting for, lack of strict governmental agency scrutiny of, and in some cases covering up of abuses, oversights, and mistakes by the oil companies by agencies charged with protecting the environment, I find it hard to look at the process under discussion with a level eye. The district court has asked for clarification of many point that had been left out of the original EIS, and I still do not see them addressed in the current draft. Issues concerning baseline environmental information, wildlife populations, etc., needs to be fully studied, reported and addressed.

I feel some of these concerns can be addressed adequately, but, if not, then the leases should not go ahead in area 193.

Thanks
Subject: Revised Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193

Mr. Bob & Tallie M. Moore-Bush
3601 Centerpoint Drive, Suite 500
Anchorage, AK 99503

June 30, 2011

Dear James Kendall,

I urge you not to allow the oil industry to move forward with risky plans to drill in these one-of-a-kind waters, with so much at risk should a large spill occur.

Sincerely,

Mary Anne Vortel

Representative Form Letters from NRDC submittal of 51,975

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up an oil spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that showed that very large oil spills could occur from drilling in the Chukchi Sea. This analysis showed that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's variable sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

Sincerely,

Mary Anne Vortel

Representative Form Letters from NRDC submittal of 51,975

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

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Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's variable sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

Sincerely,

Mary Anne Vortel

Representative Form Letters from NRDC submittal of 51,975

I urge you not to allow the oil industry to move forward with risky plans to drill in these one-of-a-kind waters, with so much at risk should a large spill occur.

Sincerely,

Mary Anne Vortel

Representative Form Letters from NRDC submittal of 51,975

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up an oil spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

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Sincerely,

Mary Anne Vortel

Representative Form Letters from NRDC submittal of 51,975

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up an oil spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

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Sincerely,

Mary Anne Vortel
Furthermore, BOEMRE’s predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic’s volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry’s response plans than just glorified mops and buckets.

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic’s extreme conditions. There is too much at stake.

Sincerely,
Mr. Max Macauley

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I don’t need to tell you that BOEMRE conducted an analysis showing that very large oil spills could occur from drilling in the Chukchi Sea. And that such a spill could have catastrophic effects on the region’s species, including polar bears, birds and whales.

I don’t need to tell you that the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic’s sea ice environment. But here I am doing it anyway. Why? Because some things matter should (and do!) matter more than the rush for yet more profits by an industry that does not possess the necessary knowledge or skill to prevent or control a spill or blowout in this volatile and irreplaceable environment.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic’s extreme conditions. There is too much at stake.

Sincerely,
Mr. Jim Cokas

Jun 30, 2011

Secretary Ken Salazar
Interior Building, Room 6166
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don’t Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry’s spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Sincerely,
Ms. Virginia Hanson

Jun 30, 2011

Mr. Jeff Baker
242 Melody Ln
Watsonville, CA 95076-1217

Jun 30, 2011

Ms. Virginia Hanson
73 Wendt Way
Kalispell, MT 59901-6911

Mr. Jim Cokas
3438 Irvine Ave
Newport Beach, CA 92660-3114

Mr. Jeff Baker
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Ms. Virginia Hanson
73 Wendt Way
Kalispell, MT 59901-6911
Dear James Kendall,

My feelings are less measured than those of NRDC. I say, after Deepwater Horizon and Fukushima: no new underwater drilling, no new nukes. We've had our chance at being responsible enough to handle this stuff, now it's time to admit that the planet is already awash in wind, sunlight, and other renewables, which together should become 99% of our sources of energy ASAP.

Best,
Thomas Marshalek

Sincerely,
Mr. Thomas Marshalek

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Dear James Kendall,

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. As you know, there is too much at stake.

Thank you for consideration.

Sincerely,
Ms. Debra Neel

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Mr. Steve Rollner
Foothill Avenue
Sierra Madre, CA 91024

Jun 30, 2011
James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Stop this insanity of allowing big oil to destroy our environment! We are demanding this from YOU.

You MUST rely on science, not greed, to be true guardians of this nation’s resources. We are really tired of government that can easily be bought!!!!

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

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We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Sincerely,
Mr. Steve Rollner
I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic’s extreme conditions. There is too much at stake.

Please, please listen to me. This has to be the tenth letter I’ve sent pleading for those who make a difference to realize the tremendous biological significance of the polar bear’s plight. As they go, so will we. Please stop this profit at any and all costs mentality. We can’t just glorify mops and buckets.

Sincerely,
Ms. Christine Carrinnes

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Sincerely,
Ms. Christine Carrinnes
spill in the Arctic’s volatile sea ice environment. As you consider all
proposed activities in the Chukchi and Beaufort Seas, I urge you to
ensure that the oil industry’s response plans actually work and match
in magnitude the level of oil that can be lost in just one day! We
can’t be so stupid as not to have learned by our past mistakes. Greed
and profits are not an excuse for taking risks when we already know the
price that would be paid should such a catastrophic oil spill be
repeated!

There is too much at stake to allow aggressive drilling in these
waters. The oil industry has failed and is reporting the level of needed
information gathered nor is there a proven plan in place to
clean up an oil spill in the Arctic’s extreme conditions given the
diverse species that would be directly impacted.

If there has ever been a time when caution should be followed, that
time is now. Given the aquatic, marine, and animal diversity as well
as ecological importance of the Arctic land and sea environment, this
area is unique in so many ways.

Sincerely,

Ms. Kay Woods

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Rachael Prokop, Alexandria, VA
— Tofanae Marshall, Washington, DC
— Chris Weiss, Milford, CT
— Jonathan Dimm, Chesterfield, MO
— Sara Staton, Marrero, LA
— Phoenix, AZ
— David Powers, San Francisco, CA
—爪 Taung, Anchorage, VA
— Lauren Macera, Palm Bay, FL
— Betty Jean Murphy, Kings Beach, CA
— Amy Lagrot, Austin, TX
— Annette Felter, Palisades Park, NJ
— Shana Fischer, Granville, NY
— Margaret Neal, Pompano Beach, FL
— Lisa Thompson, Beverly Hills, CA
— Koko Yskawra, Palisades Park, NJ
— Kyrsten Muesbrat, Cannon Beach, OR
— Geoff Knight, Palisades Park, NJ
— Amy Anderson, Irvington, CA
— Nancy Munchak, Warren, OH
— Melanie Oldham, Mission Hills, CA
— Eric Florence, MI
— Maren, Dearborn, MI
— Ana Godorst, Chestnut Hill, MA
— Todd Snyder, San Francisco, CA
— Lecile Siler, Paso, TX
— Gabriela Alonzo, Plainfield, NJ
— David Martin, Canoga Park, CA
— Nancy Corella, Seaside, RI
— Mrs. odette chave, Morengua, IL
— Ian Schmitt, New Canaan, CT
— Maury Briggs-Carrington, Tempe, MA
— Maria MacDowell, Bennett, NC
— Ms. Ruth Rodriguez, ,
— Tracy Steenkamp, Seattle, WA
— Sara Brayley, Aurora, CO
— Carol Curtis, Colorado Springs, CO
— Leannia Stechou, Groveland, MA
— Bob Qs, chagrin falls, OH
— Maria Ochak, Pocomo Sumer, PA

Oceana

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— Ms. Shannon Saldaña, Loveland, CO
— Victoria Ferrara-Moore, Miami Beach, FL
— Linda Well, Moravia, NY
— Herby Martin, Boulder, CO
— Rick Bestor, 
— Marissa Myers, Staten Island, NY
— Jamay Enick, Jacksonville, FL
— Deb, Bronx, NY
— Tanya Aberson, Waldorf, MD
— James Stawver, Rochester, NY
— Donald Mackay, South Padre, CA
— Nana, 
— Kerry Marchetti, Centerville, MA
— Kathleen Hope, ,
— Howard Cohen, Newati, DE
— Fang Vu, Cambridge, MA
— Janey Ras, 
— Karin Laskervitch, ,
— Stan, Brooklyn, NY
— Richard Neville, 
— Joe Watson, Superior, WI
— Caryl McIntire Edwards, South Paris, ME
— Barbara Rose, water renowned, MA
— Susan Tucker, Albuquerque, NM
— Ann S Hege, Rockville, VA
— Michael Balanizzi Forier, Washington, DC
— Ashley Weisner, Cary, NC
— Sandy Sanders, San Francisco, CA
— Vicki Gunaward, Brookeville, FL
— Janey Ras, Center Cross, VA
— Bethany Larkin, North Kingstown, RI
— Michael Miffl, Pownal, VT
— Anthony Lirri, 
— Nadja Smilova, Spasik-Daly, CO
— Cathie Cather, Brooklyn, NY
— Mrs. Carol Carne, Corpus Christi, TX
— A R. Asbury, NJ
— Jill Miller, Berkeley, CA
— Richard Duf, Erie, PA
— Anne Peterson, Evanston, IL

Oceana
Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0017
Comment from Tomala Paulson, individual

General Comment

After the Gulf Oil spill last year haven’t we proven that the oil companies are incapable of protecting our environment? The Chukchi area is so harsh and extreme in it’s weather conditions that a spill there would not be a matter of if, but rather, when. This area is irreplaceable and irreparable. From my understanding, the Prince William spill stiill has residual problems to this day and it was no where near as remote or untouched. Yes, we’re addicted to oil but this is an incredibly short-sighted response to our problems. Let’s put a stop to this foolish give-away of a National treasure.
Dear Secretary Salazar,

Subject: Don’t Risk a Spill in U.S. Arctic Waters

Before approving drilling in the U.S. Arctic, the administration should implement a plan that protects ecologically important habitats in the U.S. Arctic. The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient.

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months, in the late fall and winter months, sea ice and darkness pose additional challenges. Given the lack of infrastructure to support a significant oil spill response, the remote location of the lease sites and the challenging weather, the response would be inferior to what happened in the Gulf and that was a major catastrophe. Remember? There are still animals dying in the Gulf due to that spill fourteen months ago. Oil is still present. It is still not cleaned up and you want to drill in the Arctic??

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months, in the late fall and winter months, sea ice and darkness pose additional challenges. Given the lack of infrastructure to support a significant oil spill response, the remote location of the lease sites and the challenging weather, the response would be inferior to what happened in the Gulf and that was a major catastrophe. Remember? There are still animals dying in the Gulf due to that spill fourteen months ago. Oil is still present. It is still not cleaned up and you want to drill in the Arctic??

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient.

Sincerely,

Ms. Sheri Kuticka
require balancing potential resource extraction and development with fully informed decisions regarding the Arctic Outer Continental Shelf and subsistence communities. A modified alternative should be selected that protects marine species and marine species and subsistence communities. Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Wendy Mydlar.

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**Representative Form Letters of 9,719 submitted by PEW**

that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic slope is unable to respond to a spill in the nearshore and shoreline in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean and Energy Management failed to determine which of the missing information from the DEIS was important to know in order to determine whether, when, where and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale. A modified alternative should be selected that protects marine species and subsistence communities.

Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Wendy Mydlar.

---

**Representative Form Letters of 9,719 submitted by PEW**

Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be deployed near the drill site. Additionally, a second drilling vessel should be available nearby that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment.

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Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Tesla Stimpfled

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Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Tesla Stimpfled
Mr. Randall Abrams
2700 James Trl
Edmond, OK 73012-4411

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration giving forward without critical information on the occupation and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter harsh conditions year round, such as dense fog, high winds, and freezing temperatures even in the summer months. In the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and wash away any investment in spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the administration should require that operators have built and tested a containment system in Arctic conditions to be stationed near the drill site. Additionally, a second drilling vessel should be available nearby that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

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harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and oil spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be stationed near the drill sites. Additionally, a second drilling vessel should be available nearby to drill a potential late-season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic is unable to respond to a spill in the nearshore and shore zone in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean and Energy Management failed to determine which of the missing information from the EIS was important to know in order to determine whether, where, and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals, and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale.

Fully informed decisions regarding the Arctic OCS require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Dr. BD Stillion

Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503.

June 20, 2011

Dear Mr. Kendall,

I certainly hope that you support offshore drilling for Alaska.

As a WWII veteran that spent several years at Ladd Air Force Base at Fairbanks I came to appreciate the beauty and vastness of the State. I don’t think that offshore drilling per Lease Sale 193 Chukchi Sea will adversely affect Alaska’s charm.

Since gas prices, mostly based on foreign sources, surged past $4 per gallon recently the USA should develop its own resources to avoid international difficulties that might drive gas costs even higher.

Additional benefits that can be attributed to Alaska’s offshore oil drilling include: creating a multiplicity of jobs, primarily, in Alaska; adding billions of tax revenue dollars to both state & nation; and most importantly, raising the wild gas price rises created by disruptions to foreign sources.

To conclude I hope this has helped you to recognize the impact that your vote will have on energy security and job opportunities for your state and the nation. Please support offshore drilling for Alaska.

Sincerely,

Gordon T. Ray
28 Pinecrest Plaza
Southern Pines, NC 28387
Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement.

The Arctic's rich marine environment is one of the least understood areas in the world...
created recently — in the Yellowstone River or last year’s BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic’s rich marine environment is one of the least understood areas in the world. There is a lack of basic science — from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems.

As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. Shell has yet to demonstrate the ability to implement a clean-up plan in all of these reasons, I strongly urge you to reject Shell’s drilling plans for this special area. Thank you.

Sunday
524 Heather Dr
Virginia Beach
VA 23462-4569

I URGE YOU TO REJECT SHELL OIL’S DANGEROUS PLANS TO DRILL OFF THE ARCTIC COAST. IT’S OBVIOUS FROM PREVIOUS DISASTERS THAT WE DO NOT KNOW HOW TO HANDLE A MAJOR OIL SPILL: IT IS A NO-BRainer TO ALLOW SHELL TO DRILL. As a concerned member of the public and a supporter of DEFENDERS OF WILDLIFE, I’m writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic’s volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry’s response plans than just glorified mops and buckets. The President’s commission on the BP Deepwater Horizon disaster specifically concluded that there are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic’s rich marine environment is one of the least understood areas in the world. There is a lack of basic science — from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems.

There is too much at stake. Thank you.

Mary-Ann
113 Knoof Road
Meadowdale
MA
2609

Meadowdale

Has not damaged the earth enough!! Leave God’s creatures & their land alone!! I am a concerned member of the public and a supporter of DEFENDERS OF WILDLIFE, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response, and Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer.

The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walruses and other sensitive wildlife. An oil accident — like the one Exxon created last week in the Yellowstone River or last year’s BP Deepwater Horizon tragedy — would be truly disastrous here. Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters, until important information is gathered and a plan is in place to clean up an oil spill in the Arctic’s extreme conditions. There is too much at stake.

Thank you.
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drilling before it has critical missing information. The revised draft Supplemental Environmental
Impact Statement for Chukchi Lease Sale 193 shows that very large oil spills could occur from
drilling in the Chukchi Sea. If such a spill does occur, it could have catastrophic effects on the
region's species, such as the iconic polar bear as well as birds and whales. An oil accident like
the one Exxon created last week in the Yellowstone River or last year's BP Deepwater Horizon
tragedy would be truly disastrous here. Please do not allow the oil industry to move forward
with aggressive, risky plans to drill in these one-of-a-kind waters, until important information is
gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is
too much at stake. Thank you.
Teri
Apodaca
PO Box 725
Ben Lomond
CA
95005-0725
I am a supporter of Defenders of Wildlife, and a protector of Nature and Mother Earth. It's
time to stop destroying our planet and everything on it. I oppose the proposal to allow Shell
Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national
commission on the BP Deepwater Horizon disaster specifically concluded that there are
"serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.
Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as
next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is
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There is a lack of basic science -- from simple species counts of marine mammals such as
the threatened polar bear and the endangered bowhead whale to information about currents
and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy
strike as it too often does. And Shell has yet to demonstrate the ability to implement a
clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to
reject Shell's drilling plans for this special area. Thank you.

Chara
Armon
309 Dogwood Ln
Wallingford
PA
19086-6007
America's people, animals, and natural environment do NOT need any further drilling or any
further drilling disasters. Renewables are our solution now. As a concerned member of the
public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill
ten wells in the coastal waters of the Arctic over the next two years. The national
commission on the BP Deepwater Horizon disaster specifically concluded that there are
"serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.
Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as
next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is
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Standring
137 ave. Chant d'Oiseau, Brussels
Brussels, 1160
NY
10025Dear Mr. Salazar, Please REJECT SHELL's offer to develop endangered wildlife and polar bear
regions with wells., They have already caused much environmental harm and are willing to
do so many times more. They are crooks. Thank you for REJECTING SHELL's offer. Yours
sincerely, Helen Standring ---------------------------------------- As a concerned member of
the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to
drill ten wells in the coastal waters of the Arctic over the next two years. The national
commission on the BP Deepwater Horizon disaster specifically concluded that there are
"serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.
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strike as it too often does. And Shell has yet to demonstrate the ability to implement a
clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to
reject Shell's drilling plans for this special area. Thank you.

David
Stassen
330 N Orange Grove Ave
Los Angeles
CA
90036-2136
As an employee of the government, you work for me, a citizen, and not for big oil. As a
concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge
you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in
Arctic waters before a plan is in place to gather essential information and there is proven
technology to clean up a spill in the Arctic's unique conditions. The original environmental
analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to
fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement
still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an
aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental
analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the
government has admitted that no technology exists to clean up a spill in the Arctic's volatile
sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort
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disaster specifically concluded that there are "serious concerns" and "special considerations"
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clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to
reject Shell's drilling plans for this special area. Thank you.

Carla
Arneson
PO Box 336
Ely
MN
55731-0336
We need alternatives not more drilling. Stop the oil monopoly and put the money supporting
it into research. As a concerned member of the public and a supporter of Defenders of
Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring
that no drilling takes place in Arctic waters before a plan is in place to gather essential
information and there is proven technology to clean up a spill in the Arctic's unique
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and "special considerations" regarding Arctic drilling and oil spill response. The agency must
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threatened polar bear and the endangered bowhead whale to information about currents and
tidal systems. The Department of Interior must not move forward with decisions about
drilling before it has critical missing information. The revised draft Supplemental
Environmental Impact Statement for Chukchi Lease Sale 193 shows that very large oil spills
could occur from drilling in the Chukchi Sea. If such a spill does occur, it could have
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the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind
waters, until important information is gathered and a plan is in place to clean up an oil spill in
the Arctic's extreme conditions. There is too much at stake. Thank you.

Helen

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until important information is gathered and a plan is in place to clean up an oil spill in the
Arctic's extreme conditions. There is too much at stake. Thank you.

Marc
Stein
15220 Steinbeck Ln
Colorado Springs
CO
80921-3529
Come on Ken. We just had the Deep Water Horizon disaster and then the Yellowstone
disaster. What does it take to convince you that these oil companies cannot be trusted to
use our natural resources in a responsible manner. Thank you.

Karl
Zimmerman
156 Columbia Dr
Amherst
MA
01002-3127
Have you ever seen a heroin addict looking for his next hit? It's not a pretty sight. He'll act
out violently, threatening his wife and kids. He'll steal, he'll attack. He'll do _whatever_ he
thinks he needs to do to get drugs. Drugs that will ruin his body; that _are_ ruining his life.
He'll do anything, even though the next syringe-full might kill him. That's what I think of
when I hear about plans to drill for oil in the Arctic. Global warming is what makes this
drilling feasible -- the carbon we've dumped into the air from our prior use of oil, coal, and
natural gas has warmed the Arctic, melting the summer ice and all but eliminating the thick
perennial winter ice. We know this has happened. We're already suffering consequences;
more severe weather events, drought in the south and midwest, loss of trees in the Rockies
and Sierra Nevadas from beetle damage. The oceans are becoming more acidic. It takes half
a century for the sea to reach equilibrium with carbon concentrations in the atmosphere. We
can measure the change in acidity, yet what we see represents equilibrium with atmospheric
carbon from 1961. Krill populations are declining and coral reefs are bleaching now. What
will be the damage in 50 years? And yet we can't seem to restrain ourselves from looking for
our next hit. Shell is seeking permits to drill ten wells in shallow Arctic water -- wells that are
possible because of global warming; wells that will provide us with more oil to burn, more
carbon to emit. Yet the House wants to hamstring the EPA, and won't even consider
meaningful caps on carbon emissions. How can we stop this insanity? I strongly urge to you
make a start now. Reject Shell's drilling plans for the Arctic. Start to send Big Fossils a new
message: We can quit. We won't keep buying their harmful product. We are ready to help
ourselves; to put ourselves on a healthier path. Thank you.


Representative Form Letters from Defenders of Wildlife 48,000 comment letters

Anonymous
7520 N Keeler Ave
Lincolnwood
IL
60712-2021

Alternative energy sources must begin to inject themselves into our lives so that we do not continue to destroy pristine areas of our habitat that can never be replaced even with thousands of years of healing. Please do not allow Shell to drill in the Arctic. Thanks, Buzz

As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walruses and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale
Document: BOEM-2011-0044-0016
Comment from Mark Sabol, PhD, N/A

Submitter Information
Name: Mark Sabol, PhD
Address: 6231 S. Bell
Tacoma, WA, 98408
Email: marksabol@hotmail.com
Phone: 2062436362
Organization: N/A

General Comment
Dear protectors of the public trust,
The idea of allowing oil extraction in the location of Oil Lease Sale 193 is ludicrous. What does it take for us to learn? The most fundamental natural resource of all, upon which we DEPEND as a species, is our oceans. They key life-forms there are already shown to be at increasing risk due to climate change, over-fishing, and factors still not identified (pollution a likely culprit).

Existing technology, and technology in the foreseeable future, is simply inadequate to even BEGIN to make a claim that this sale is anything less than a recipe for disaster.

To allow this sale would be irresponsible in the worst sense of the word. Do YOU want to be the ones we point back to when the question is asked: WHO approved this? PLEASE take Oil Lease Sale 193 OFF the auction block.

Thank you for your consideration and responsible public service in this matter.

Sincerely,
Mark Sabol, PhD
Tacoma, Washington
General Comment

I have had the incredible fortune to travel through much of the Arctic this summer for work, observing it from both the ground and the air as I map the Alyeska Pipeline. It is an incredibly harsh, breath-taking landscape. There are people who live here, throughout the North Slope and on the coast of the Chukchi Sea, surviving subsistently off of the sea ice while highly valuing their way of life.

Daniel, a native Inupiat from Barrow, shared his perspective at the public hearing in Fairbanks and his story shook me to my core. Most of us do not know what it is like to come from a traditional culture, one that nurtures a relationship to the land and sea. His is a lifestyle that is hard, but balanced. To hear the passion with which he spoke about his home...it was powerful to witness that such cultures are still alive in the U.S.

The SEIS was written by folks in Washington D.C. who have never lived in the Arctic. Their plan for an oil spill clean-up relies heavily on air support, when there are no airstrips anywhere near close enough to be effective. The winds and weather are so violent at times that simply accessing an oil boom in the Chukchi Sea would be impossible, let alone cleaning up a spill. Not to mention that it is completely dark for months on end- the sun simply does not rise. We are fooling ourselves if we think we would be able to clean up an oil spill in the middle of the Chukchi Sea.
Katherine Schake Comment

We simply don't have the skill to do this. One thing I've learned working in a technological field: no matter how great our technology is, it will still break down. We cannot assume that an oil spill would not occur, let alone foresee all the consequences that an oil drilling operation in the midst of sea ice may have for the natives who depend on this ecosystem for their existence. Please do not drill for oil in the Chukchi Sea.

Melody Schake Comment

Thank you.

Douglas Smith Comment

Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deeper water drilling is multiple times greater than in the Arctic where wells would be in very shallow water.

Please do not drill in the Chukchi Sea as we don't have the technology to immediately stop and clean up a spill should one occur. Please learn from what happened in the Gulf. Protecting the delicate balance of nature and the lives of the people who live in the region is far more important than feeding our oil dependent lifestyles. We can shed our cars and rely on public transportation. That is the right and responsible thing to do.

Thank you.
Lori Stepansky Comment

As of: July 25, 2011
Received: July 10, 2011
Status: Posted
Posted: July 11, 2011
Tracking No.: Bl06be89
Comments Due: July 11, 2011
Submission Type: Web

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0041
Comment from Lori Stepansky, ARWC

Submitter Information
Name: Lori Stepansky
Address: 510 Glacier Bay Circle B
Anchorage, AK, 99508
Email: alcanlori@gci.net
Phone: 907-222-7501
Organization: ARWC

General Comment

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. Government revenue generated from the Chukchi Sea is estimated to be nearly $50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy - not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Bill Stevens

As of: July 25, 2011
Received: July 10, 2011
Status: Posted
Posted: July 11, 2011
Tracking No.: Bl06be89
Comments Due: July 11, 2011
Submission Type: Web

PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0040
Comment from BILL STEVENS, citizen

Submitter Information
Name: BILL STEVENS
Address: P.O. BOX 8596
NIKISKI, AK, 99635
Email: cascon1@acsalaska.net
Phone: 907-276-7404
Organization: citizen

General Comment

I believe that OCS Lease Sale 193 should be affirmed. Sufficient information and analysis, as provided by the SEIS, is available to support Sale 193.

It is of paramount importance for Alaska's economy, National economy, and National Defense that Sale 193 be affirmed. The Chukchi Sea will likely be a major supplier of energy for the United States in the future and ease our importation of oil from undesirable foreign sources.

Thank you.

Bill Stevens
The full ramifications of exploration and development in the Chukchi Sea still needs further study. As the permanent northern polar ice cap continues to shrink, it is inevitable that new shipping lanes through and across the Arctic Ocean will evolve. This can only further complicate the migratory and feeding patterns of marine and seabird life across the entire area.

Climate changes are likely to continue; this will further affect the weather and sea ice flow patterns. Can there be a N.Y. proper planning and preparation for disasters when these factors have yet to develop and be studied?

It is already known that the climate and weather in the area can be extreme. During the war in the early 1940s, it is on record that the military --on both sides-- LOST MORE equipment from the weather and freezing than from enemy attack.

Climate changes are likely to continue; this will further affect the weather and sea ice flow patterns. Can there be proper planning and preparation for disasters when these factors have yet to develop and be studied?

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Dear Interior Secretary Ken Salazar,

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villages for food.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean’s marine resources and poor spill response plans. The oil in the Arctic Ocean isn’t going anywhere, and can wait for proper research and preparedness.

After the destruction and pollution of the Gulf oil spill, we must not drill in such a vulnerable remote place until we are absolutely sure we can do it without harm.

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic’s icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean’s science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding.

With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean’s marine resources and poor spill response plans. The oil in the Arctic Ocean isn’t going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill, which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically is possible—would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized.

Sincerely,
M. Doris Lynch
Dr. Tim Tarbell  
3765 Mayfair Dr  
Los Angeles, CA 90065-3208  

Jun 29, 2011  

Interior Secretary Ken Salazar  

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea  

Dear Interior Secretary Ken Salazar,  

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Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean.  

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans.  

Sincerely,  

Dr. Tim Tarbell  

Ms. Heidi Jackson  
10006 W 61st St  
Merriam, KS 66203-3214  
(913) 362-8853  

Jun 29, 2011  

Interior Secretary Ken Salazar  

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea  

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Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean.  

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans.  

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. It would be impossible to clean it up. Now is the time to take proper precautions and do the required scientific research. Even wells that are for exploration -- not production -- still pose threats to the fragile Arctic Ocean habitat. Do not allow drilling.  

Sincerely,  

Ms. Heidi Jackson  

James Thomson, N/A  

Docket: BOEM-2011-0044  
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193  

Comment On: BOEM-2011-0044-0001  
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale  

Document: BOEM-2011-0044-0026  
Comment from James Thomson, N/A  

As of: July 25, 2011  
Received: July 06, 2011  
Status: Posted  
Posted: July 07, 2011  
Tracking No. (EOL): 5640  
Comments Due: July 11, 2011  
Submission Type: Web  

General Comment  

The isolation and extreme climate of the Chukchi Sea make it nearly impossible that an accident or spill could be effectively contained or cleaned up. Oil spills in active drilling areas are not a question of "if," but rather of "when?" Pack ice, darkness for months on end, extreme cold, and lack of access by plane or ship make clean up of an inevitable accident a technological challenge for which no one is prepared.  

The revised SEIS shows a lack of understanding of this area and the unique environmental challenges of working there.  

Sincerely,  

James Thomson  
2534 SE 31st Ave  
Portland, OR, 97202  
abcjlt@gmail.com  
N/A  

Ms. Gena Tillisch  
388 Thurner St  
Goldendale, WA 98818  
(360) 947-4316  

Jul 8, 2011  

FES, Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale  

Dear FES, Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale:  

How can the Obama Administration even consider allowing new oil drilling anywhere near water? Considering BP’s ability to clean up its mess from the Deepwater Horizon disaster, I don’t think the oil industry is the only entity ignorant of its profits into researching and developing new technologies for clean up operations after oil spills. If BP can’t clean up its mess in the Gulf, how is it going to clean up a spill in the Arctic?!  

I just heard the news that Exxon makes $5 million dollars profit per hour. 365 days a year, 24 hours a day. PROFIT. ‘Cause they can just dump it into the Yellowstone River, or any other river, or lake, or any body of water. Exxon produces the Vaseline... still not fully cleaned up.  

Why? Because it doesn’t matter how much money you have, oil spills do not respond adequately to money being thrown at them. They are stubbornly resistant in the passage of time. That’s why there is no miracle technology. That’s why the oil industry doesn’t waste its time developing such a technology, because it will never exist. Just forgot about filthy, dirty, 20th century lead and fuel and put our money, energy, research, new technology into clean energy sources. Oil companies should be required to pay 12% of their profit into clean energy, so they can become the energy companies of tomorrow, but if it is kinder, gentler now.  

COME ON, GET REAL!!!  

Sincerely,  

Gena Tillisch  

PLEASE — no new permit for oil drilling until the gas company has proven it can clean up 100% of all leaks.
I am writing in support of the revised draft Supplemental Environmental Impact Statement (SEIS) for the 2008 Chukchi Sea lease sale. This new SEIS—three years in the making—answers not only the technical issues cited by Judge Ralph Beistline in his July 2010 ruling, but also the potential impacts of a theoretical “worst case” oil spill.

As it now stands, the SEIS provides a clear path forward to responsible development in Alaska’s Outer Continental Shelf (OCS). This path is a long-time coming. Oil and gas exploration in the Alaska OCS dates back to the early 1980s. The company I work for, in fact, provided numerous surveying and geotechnical projects to aid in these activities. Industry drilled more than 30 exploratory wells during this time, including five wells in the Chukchi; all without incident.

This prior experience underscores a couple of important points. First, the Alaska OCS isn’t “uncharted territory” as some would argue. Rather, industry has a proven record of success working in these waters, even without the advanced surveying and drilling technology available.

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As of July 25, 2011
Page 1 of 2

Scott Widness Comment

today. Second, while the region poses unique challenges, it is not inherently more dangerous or difficult than other offshore locations. The risks are simply different.

In developing the revised SEIS, government has identified the unique challenges of offshore exploration in the Chukchi and has formed rigorous stipulations that will ensure the safety of the ocean environment and coastal communities. Let us adopt these regulations and lead other Arctic nations in responsible development. Doing so could help refill the Trans Alaska Pipeline System, create nearly 35,000 new jobs over the next 50 years and provide billions of dollars for the federal treasury.

Thank you for considering my comments.

Scott Widness

Comment from Scott Widness, Fugro

Public Submission

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0128

Comment from Scott Widness, Fugro

Submitter Information

Name: Scott Widness

Address: 5761 Silverado Way

Suite O

Anchorage, AK, 99518

Email: swidness@fugro.com

Phone: 907-561-3478

Fax: 907-561-5123

Organization: Fugro

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Public Submission

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0128

Comment from Scott Widness, Fugro

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Phone: 907-561-3478

Fax: 907-561-5123

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As of July 25, 2011
Page 1 of 2

Scott Widness Comment
Dear Ms. Judy Criswell,

The future of America’s Arctic Ocean may be decided as soon as this summer. I am writing to ask for your support in an effort to protect our nation’s Arctic. The Arctic Ocean is one of the last wilderness areas in the world, and it is under threat from human activities.

The Arctic holds unique ecological and cultural values, and it is critical for the survival of many species. The Arctic is also home to indigenous communities who rely on the ocean for their livelihoods. The Arctic is a unique ecosystem that supports a diverse range of marine life, including whales, seals, and polar bears. It is also a critical living laboratory for understanding climate change.

Unfortunately, the Arctic is facing a number of threats, including climate change, shipping, and oil and gas development. These activities can have a profound impact on the Arctic’s delicate ecosystem.

I hope you will consider supporting efforts to protect the Arctic Ocean. Your support can help ensure that the Arctic remains a wild and wonderful place for future generations.

Sincerely,

[Signature]

Mrs. Judy Criswell
432 Lake Drive
Pembroke, CA 92024
909-765-0557

https://secure2.convio.net/wwf/site/Advocacy/EB/9138/AlohaOuterContinentalShelf...
29 Letters received from the World Wildlife Fund On July 14, 2011

World Wildlife Fund

Jul 7, 2011

EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear Ms. Anna Gornidus,

The future of America’s Arctic Ocean may be decided as soon as this summer. I’m writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up a spill in the Arctic’s unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are urgent steps that need to be taken to address oil spills in the Chukchi Sea. This analysis shows that such a spill could cause catastrophic effects on the region’s species, such as the iconic polar bear, birds, and whales.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,
Ms. Jean Adams
4133 Sago St.
Sweet Home, OR 97386-3136
(541) 367-1468
https://secure2.convio.net/wwfsite/Advocacy/EIS4343B-AlaskaOuterContinentalShelf...
29 Letters received from the World Wildlife Fund on July 14, 2011

Jul 7, 2011

EIS, Alaska Ocean Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear EIS, Alaska Ocean Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,
The future of America’s Arctic Ocean may be decided as soon as this summer. I’m writing to ask that no decisions about drilling in Arctic waters be made before the public has time to learn and consider the enormous environmental information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up an spill in the Arctic’s unique conditions. The proposed correlation to the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Consider that the Arctic’s rich marine environment is one of the least understood in the world. There is a lack of basic science—from simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information—including the potential impact of an oil spill on the life in the Arctic Ocean ecosystem.

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such gaps before making any leasing decisions.

Consider that the health of people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks as in the water, hunting to feed their families and their communities. The Arctic Ocean is their chief food source, and we must protect it for future generations.

Consider not to act as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE concluded an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region’s species, such as the iconic polar bear, birds, and whales.

And finally, consider that even BOEMRE’s predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic’s vexing sea ice environment.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell’s plans in the Chukchi for 2012 and 2013, more fundamental questions must be answered:

- The environmental information on the potential impact of a major oil spill in the Arctic is inadequate.
- The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information—including the potential impact of an oil spill on the life in the Arctic Ocean ecosystem.
- Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such gaps before making any leasing decisions.
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Sincerely,

Danielle Westman

29 Letters received from the World Wildlife Fund on July 14, 2011

Jul 7, 2011

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Sincerely,

Danielle Westman
Dear EIS, Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,

The future of America’s Arctic Ocean may be decided as soon as this summer. I’m writing to ask that you consider a pipeline from Alaska to the Arctic to allow before a plan is put in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be reached only after proven, accessible technology exists to clean up spills in the Arctic’s unique conditions. The president’s commission on the BP Deepwater Horizon disaster specifically concluded that there are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response.

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Before BOEMRE considers any drilling in the Arctic Ocean, including Shell’s plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missed information is an essential component of a much-needed plan to conserve and manage America’s Arctic Ocean. And I urge you to ensure that the oil industry’s response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,
Dr. Norma Hamilton
2901 Bovay Rd
Punta Gorda, FL 33952-8344
The future of America's Arctic Ocean may be decided as soon as this summer. I'm writing to ask that you consider the following. Before I begin, I want to make one thing perfectly clear. It is critical that we do not make decisions about drilling in the Arctic's unique environment before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up spills in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Considering that the Arctic's rich marine environment is one of the last understood in the world, there is a lack of basic science—simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information—regarding the potential impact of an oil spill on the life in the Arctic Ocean ecosystem.  

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such data gaps before making any leasing decisions.

Considering that the Inupiat people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks at a time on the water, hunting to feed their families and their communities, the Arctic Ocean is their chief food source, and we must protect it for future generations. If Inupiat people have been able to gather their sustenance from the Ocean for centuries, it is our job to ensure that the industry's response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

Ms. Anatolya Yakovleva
3400 26th
Fort Lauderdale, FL 33312

Dear Ms. Anatolya Yakovleva,

I am writing to ask you to please hold off on any drilling in Arctic waters. I would love to see another "Green Oil Spill" happen. Thank you.

Marc Hoffner
food source, and we must protect it for future generations.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region’s species, such as the iconic polar bear, birds, and whales. And finally, consider that even BOEMRE’s predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic’s unique ice-sea environment. Before BOEMRE considers any drilling in the Arctic Ocean, including Shell’s plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America’s Arctic Ocean. And I urge you to ensure that the oil industry’s response plans are sufficient to meet the challenges of a spill in the Arctic. Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

Karen Naifeh

Ms. Karen Naifeh

Please, for all our sake.

World Wildlife Fund

Jul 8, 2011

EIS, Alaska Outer Continental Shelf Region, Chukchi Sea Fleming Area, Oil and Gas Lease Sale

The future of America’s Arctic Ocean may be decided as soon as this summer. I’m writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up a spill in the Arctic’s unique ice-sea environment. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that these are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response.

Consider that the Arctic’s rich marine environment is one of the least understood in the world. There is a lack of basic science—from simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information—including the potential impact of an oil spill on the life in the Arctic Ocean ecosystem.

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such data gaps before making any leasing decisions.

Consider that the Inupiat people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their chief food source, and we must protect it for future generations.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region’s species, such as the iconic polar bear, birds, and whales. And finally, consider that even BOEMRE’s predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic’s unique ice-sea environment.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell’s plans in the Chukchi Sea for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America’s Arctic Ocean. And I urge you to ensure that the oil industry’s response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive.
risky plans to drill in these one-of-a-kind waters until the necessary
information is gathered and feasible spill cleanup plans are in place.
There is too much at stake.

Sincerely,
Ms. Carolyn Smith
2201 Group Rd
Stoneville, NC 27964-8634
(336) 971-5963

---

Mr. Hector Orozco
2318 Avenue H
Apt 1618
Grand Prairie, TX 75050-2765

Jul 7, 2011

Dear EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale:

The future of America's Arctic Ocean may be decided as soon as this summer. I am writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up spills in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are serious concerns regarding Arctic drilling and oil spill response.

Consider that the Arctic's rich marine environment is one of the least understood in the world. There is a lack of basic science—the simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information—information the potential impact of an oil spill on the life in the Arctic Ocean considers.

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such data gaps before making any leasing decisions.

Consider that the Inuit peoples have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spelling Avengers, fishing, hunting, and herding their families and wildlife communities. The Arctic Ocean is their food source, and we must protect it for future generations.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 191, BOEMRE conducted an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the iconic polar bear, birds, and whales.

Sincerely,
Robert Peterson
And finally, consider that even BOEMRE’s predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic’s volatile sea-ice environment.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell’s plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America’s Arctic Ocean. And I urge you to ensure that the oil industry’s response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

[Signature]

Mr. Hector Oviedo

P.S. I know you have the power to protect our environment.
Please listen to my voice and the voices of all people who want a better place to live. Thank you.
Appendix E – Section 4

Draft SEIS

Public Hearing Transcripts

Point Hope
Point Lay
Wainwright
Barrow
Anchorage
Bureau of Ocean Management Regulation and Enforcement

Public Hearing
Environmental Impact Supplemental Statement
Relating to Chukchi Sea Sale 193

November 2, 2010
Point Hope Library
Point Hope, Alaska

VOICE CHECKED/CONNECTED

REPRESENTATIVE MEMBERS:

JEFFERY LOMAN, Deputy Regional Director
MIKE HALLER, Community Liaison
MICHAEL BOUTHIER, NPEA Coordinator
BOB GORDON, Senior Geologist
JOHN CALLAHAN, Public Affairs Officer
MARY COBY, Wildlife Biologist
SHAUN WARREN, Program Analysis Officer

PROCEEDINGS

THE REPORTER: On the record. 7:06 p.m.

JEFFERY LOMAN: Good evening and welcome -- thank you very much for taking your time to attend our meeting. Again my name is Jeffrey Loman, J-E-F-F-E-Y, L-O-M-A-N -- I am the Deputy Regional Director of the Bureau of Ocean Energy Management and Enforcement, Alaska Region. We'd like to start this meeting with introductions. But first, Dorcas, if you would be so kind as to say a blessing for us -- we would appreciate that.

DORCAS ROCK: Stand up please. (Blessing given in Native language.) Amen -- thank you.

MR. LOMAN: Thank you very much Dorcas. To make it easier for the court reporter who is memorializing this hearing, I'd like to go around the room, starting with Earl, and have you introduce yourself and spell your name. Hopefully, then we'll only do it once as we exchange information and communicate.

EARL: Thank you.

JEFFERY LOMAN: Earl Kingik, Native -- I'm a member of the Native village of Point Hope. I work out there -- Environmental Liaison for Alaska's Wilderness League. And I started working with Alaska's Wilderness League a few months back. Now I'm the Native Liaison for Alaska's Wilderness League, in which we take tribal members to Washington D.C. -- anywhere they have any kind of meeting like that -- thank you.

EARL KINGIK: Earl Kingik, Native -- I'm a member of the Native Village of Point Hope. I work out there -- Environmental Liaison for Alaska's Wilderness League. And I started working with Alaska's Wilderness League a few months back. Now I'm the Native Liaison for Alaska's Wilderness League, in which we take tribal members to Washington D.C. -- anywhere they have any kind of meeting like that -- thank you.

THE REPORTER: Okay. Could you spell your last name for me again?

MR. OVIK: O-V-I-K.

COURT REPORTER: I'm sorry.

MR. OVIK: O-V-I-K.

GEORGE KINGIK: I'm George Kingik, a member of the Native Village of Point Hope, also with the City of Point Hope. I'm also with the History and Culture -- with the History -- Language and Culture with the North Slope Borough. I'm a Commissioner. And I have known Jeff and his house. The reason why I'm here -- back in the time when you guys celebrated and it was a disgrace to me and my community when you had that

THE REPORTER: Thank you.

THE REPORTER: Thank you.

THE REPORTER: Thank you.
big cake. So you're going to be hearing some few things from me
as a member of the tribe and also a community member.

COURT REPORTER: Could George spell his last name please?

MR. GERGOE KINIKI: My last name is K-I-N-N-I-K-I.

COURT REPORTER: Thank you.

RAREN WEBER: Karen Weber, one b.

COURT REPORTER: K-A-B-E-K.

Ms. WEBER: Uh-huh (affirmative).

COURT REPORTER: W-E-B-E-K.

Ms. WEBER: Uh-huh (affirmative).

COURT REPORTER: Thank you.

RICKY NASHOOKPUK: My name is Ricky Nashookpuk.

COURT REPORTER: Spell your last name.

MR. LOMAH: Spell it please.

MR. NASHOOKPUK: N-A-S-K-U-P-U-K.

COURT REPORTER: Thank you.

MR. LOMAH: Yes.

KEN PAUL: Ken Paul -- P-A-U-L.

COURT REPORTER: What was your first name?

MR. PAUL: Ken, K-E-N.

COURT REPORTER: Thank you.

AOQIE L. FRANKSON-HENRY: I'm Aggie L. Frankson-Henry

tribal member.

Okay. So our primary purpose tonight is to take your
comments on a draft Supplemental Environmental Impact
Statement that we've prepared. As I think almost everyone knows, the
Minerals Management Service, now the Bureau of Ocean Energy
Management, Regulation and Enforcement -- did an Environmental
Impact Statement for a oil and gas lease sale -- Sale number 193
in the Chukchi Sea. Yes ma'am?

MS. FRANKSON-HENRY: Why did you change your name from
Minerals Management Service to BORER?

MR. LOMAH: They changed the name because the Secretary of
the Interior wanted to reorganize the Agency.

MS. FRANKSON-HENRY: What was the purpose of it?

MR. LOMAH: He wants to restore public trust.

MS. FRANKSON-HENRY: And was it because of the corruption
with Minerals Management Service in the Lower 48?

MR. LOMAH: I think that was one of the reasons -- one of
many. Yes ma'am. So the Agency did an Environmental Impact
Statement for Lease Sale number 193 in the Chukchi Sea. And in
February of 2008 they held a Lease Sale in the Chukchi Sea and
issued 465 leases, for a total of about $2.6 billion with Shell
Oil Company being the largest holder of leases -- $2.1 billion
worth of leases in the Chukchi Sea.

The Agency was challenged in Federal Court and the
challenge involved the Agency's compliance with the National
Environmental Policy Act of NEPA. The people that brought
that litigation asserted that the Agency didn’t comply with NEPA. And the court found that, with respect to a couple of elements, the Agency did not fully comply with NEPA. And Sharon is going to explain to you that court decision. Sharon.

MS. WARREN: Thank you. And thank you for allowing us to come into your community.

The court found, on most parts, that we -- that the Agency complied with NEPA. But there were three things that they said -- the court said -- that we had to go back. And we had to do a better job of what we did in the Environmental Impact Statement. And so we failed to analyze the environmental impact of natural gas. There was an incentive for natural gas to put into the leases, but that portion had not been analyzed in the Environmental Impact Statement. So the court says, you have to go back and you have to analyze that.

Other things that we failed to do is, we failed to determine whether the missing information that we said in the EIS in a number of places there was missing information or uncertainty or lacking. The court said that we had to go back and look at that and determine whether or not it was essential to the decision. So we had to go back and look at that. And then we also had to look at if -- if it was essential to the decision, then we had to determine whether or not we could obtain it and what would be the cost of getting the information.

So the court ruled July 31st of this year -- 2010 -- the...
UNIDENTIFIED MALE: Yes.

MR. LOHMAN: Do a better job because we didn’t analyze the
effects of natural gas that would be developed as a result
of these leases. Do a better job of analyzing each and every --
and it’s 40 pages -- of missing information that the plaintiffs
submitted to the court and asserted -- you have all this missing
information that you noted in your document -- how can you make
a decision with all of this information? So the court was
requiring us to do what’s called a 1502.22 analysis.

What does it mean when something is missing? I’ll give
you one example. One of the things that they say in the
document is, there is substantial uncertainty with respect to
the population structure of the bowhead whale. That’s what it
said in the sale 193 ESC -- okay. That was sometime between
2004 and 2007. At that point in time, the Scientific Committee
with the International Whaling Commission was debating -- it
there was any stocks amongst the bowhead -- a Bering stock -- a
Bering stock -- multiple stocks? They settled that argument
or scientific debate in 2007. And they decided, these
scientists, that there is one stock. Well, our job is to do
even more. Is there any significance to it and respect to
making decisions to explore for oils, produce oil, produce
natural gas if there were multiple stocks? I would say no --
there’s no context.

It doesn’t make any difference to us primarily because it
doesn’t make any difference to you. The subsistence whalers
never differentiated between the bowhead in taking them and
hunting them, etcetera. So if the scientist said, there’s a
Bering stock and there’s a Bering stock, it wouldn’t make any
difference to you, if it didn’t make any difference to the
decision maker with respect to making decisions to let industry
explore for oil. Does that make any sense?

UNIDENTIFIED MALE: Because -- .

MR. LOHMAN: That’s one example of 40 pages of things.
UNIDENTIFIED MALE: Because one little mistake could
become a big problem. Thank you for your answer.

MR. KOTHIER: Sure thing. Most of the document itself
pertains to that first item that was rendered by the judge back
to us. And that is the natural gas analysis that was missing --

UNIDENTIFIED MALE: Could you ask people in here -- how
many people see your document?

MR. KOTHIER: Sure. How many people have seen the
document? And if anyone would like to acquire, you know, copies
of the document, we could certainly get those to you.

MR. LOHMAN: There is one -- for the record -- we have
looked for it because we sent it here -- here in the Library.

Who saw it? And we mailed it to a number of the Native Village

of Point Hope -- to the library here and to a number of other
key stakeholders who had asked for the document and others here
in Point Hope. The mail is pretty slow even when you send it by
FedEx or the fastest means that are available. So shod.

MR. KOTHIER: Just wanted to -- if anyone would like an
extra copy -- you could take this one after the meeting. I’ll
just need it for a few moments here.

So basically again -- the first thing was the lack of a
Natural Gas Analysis in the original document. At the time we
prepared the original document, we didn’t really feel like
natural gas development, as opposed to oil development, was
really that perceivable. We didn’t analyze it. Certain things
changed between -- on the issue of that first document and the
time that the judge issues his ruling. Judge felt, yeah, we
should have analyzed the gas. So that’s the first thing that we
sat out to do, analyze the environmental impacts of natural gas
development and production.

So to figure out exactly what it was we should analyze,
our Environmental Analysis Section consulted with our Resource
and Economic Analysis Section. I’m just going to turn it over
to our expert Bob here. He can speak to that.

JACK SCHAEFER: Before you do -- Jack Schaefer for the
record -- S-C-H-A-E-F-E-R. As far as I know, neither the
Regional Tribes of the Inupiat Community of the Arctic Slope or
the Native Village of Point Hope -- has ever seen the 40-page
document that was referred to in regards to missing information.

Mr. Arneson -- the Inupiat Community of the Arctic Slope --
Informed us to what was missing, including the natural gas
that’s in that Environmental Impact Statement. So I am really
confused as to how you got to that point as to, was it the judge
that came to an understanding that the natural gas portion was
left out or -- and 40 pages, or was he -- or told by
representation of those people that were involved with the law
suit?

MR. LOHMAN: The Native Village of Point Hope is a
plaintiff. And it didn’t -- .

MR. SCHAEFER: Right. Now it was in the judge that made
the decision to come up with that criteria for that Environmental
Impact Statement, did he come up with that decision by himself
or was he told by legal representation of, you know, ICAS and --
I’m trying to understand because I was completely unaware that,
you know, the natural gas portion was that. And the majority of
that Environmental Impact Statement just focusses on natural gas?

And I’ve never seen the 40-page document that regards to what is
missing, you know, the information that is missing.

MR. LOHMAN: That’s the plaintiffs -- you’re a member of
the Native Village of Point Hope.

MR. SCHAEFER: Right, right, right.

MR. LOHMAN: That’s your witness.

MR. SCHAEFER: Right -- exactly.
MR. LOMAN: You went to the court and said there were 40 pages of stuff that this document -- Agency --.

MR. SCHREPER: It wasn't us, though.

MR. LOMAN: -- didn't include.

MR. SCHREPER: It wasn't us.

MR. LOMAN: Well it wasn't you, Jack. But it was your lawyer that --.

MR. SCHREPER: Right -- right.

MR. LOMAN: -- submitted the thing.

MR. SCHREPER: (Indiscernible).

MR. EARL KINGIN: Excuse me, a point of reference for you that Jack continue on? You're here to listen.

MR. LOMAN: Sure -- I'm listening.

MR. SCHREPER: So you know we -- we didn't have a real clear understanding what was going on in regards to our representation. They never clearly explained to us what information was missing, you know, and the natural gas portion of that. And nor were we given an opportunity to make a comment in regards to whether or not that document and that conclusion is accurate. And, you know, and to find out later on that it was whitewashed down to natural gas, you know, was really disturbing for me personally. And I don't know, you know, what the other Council members' interpretation of that is. And I don't know what Native Village of Point Hope's position on that, but we were not -- the Regional Tribe was not told what that

I wanted to indicate because, you know, that document is so small -- it's only 300 pages long -- 143 pages is a question and answer thing in regards to whether a type of puffin or certain type of snow goose that some type of significance and all of that is, you know -- we haven't really reviewed that or, you know, had any feedback as to what was in there and what questions were asked. I don't know if that means anything, but, you know, it certainly was surprising to me to see that most of that document only refers to natural gas. When we were concerned about the professional integrity of those federal employees that had to deal with their report that was submitted for the Environmental Impact Statement that was done in 2007, when they were forced to alter their positions by this supervisor, which resulted in law suit by a non-profit that represented them. And so, you know, there's some confusion.

I don't know. I can't speak for the Native Village of Point Hope. I was just speaking for ECOM in regards to that document. And what had taken place through that litigation and what we missed and what we can do as a government to government relationship. I mean, some people would feel comfortable with this done because it did buy time or it will buy time. But just the process of how it was done and how it was handled is somewhat confusing. And maybe there was -- the timeframe might have been too short. I'm not sure.

MR. LOMAN: Well it's obvious that you read the document...
MR. JOHNSON: Mr. Johnson. I'm going to cut my hair, and I will be here. But I am not going to lie to you and say that anybody's going to be very effective at cleaning up an oil spill in the worst weather conditions in the Chukchi Sea. And when the Assistant Secretary of Land and Minerals approved, or right before he approved the Chukchi Sea lease sale, he asked the question. He asked question first -- he asked, do the people on the North Slope now understand or believe that the oil companies can respond effectively to a major spill after the Secretary of Interior has gone up there and talked to Shell and talked to his people, did all of these things. Do they feel that the industry can respond effectively? Dead silence in the room. Nobody likes to tell somebody what they don't want to hear or they don't (indiscernible). So I've just been up here -- I just met with many folks that are in this room and other people in the communities. And I said, so they don't feel that there is an effective cleanup. And then he asked the question, well can they? And I said, on the worst weather day, no, I put my money on prevention. But on the worst weather day in the Arctic it will be a struggle just to stay alive much less clean anything up. And so, at least he asked the question. And I gave him the best answer which I thought was an honest answer that I could give him.

That is what NEPA's about, inform the decision maker. I think it's pretty clear now that when a decision is made to allow industry to explore, conduct exploratory drilling, that there is a risk. I don't think any President, at least in our lifetime, could honestly get before the country and say, I was assured that it was 100 percent risk free or absolutely safe. It's not risk free and it's not absolutely safe. And we -- it's our job to tell the decision maker the truth, the truth about your concerns and the truth about industry's effectiveness. That being said, because of the Deepwater Horizon spill, Shell has done a lot of things, put extra things in their plan to better respond to a spill. Go ahead.

MR. PETERSON: I guess any other questions?

EARL KINSIG: Earl Kinsig for the record E-N-I-N-G-I-N-E. You kind of mentioned the word pipeline.

MR. PETERSON: Yes.

MR. KINSIG: What kind of recommendation are you doing for our oil pipelines? Are you go into inland or are you going to go through the coast, ocean or --.

MR. LOWAN: We support working with the North Slope Borough and --.

MR. KINSIG: Are you giving your Impact Statement or maybe --?

MR. PETERSON: No, I think when you looked at our Impact Statement -- again this is a scenario. This is -- we don't know where the oil and gas is going to be discovered because the wells haven't been drilled yet. So what we have done is -- done something that is a reasonable model. You know -- here looks like a good place for some discovery. Based on that, here's where we think would be a reasonable place to come ashore. That could change depending where the actual oil or gas deposit is found. That could change after additional NEPA work.

consultation with other governmental agencies -- Tribal agencies, could change for any number of reasons. So, where you have seen it come ashore is just a place where we can draw a line and say, now we have something to study. So there are only recommendations. It is the NSF policy that we want to see oil and gas pipeline to shore, if possible. And then from there we said, the most reasonable case that we saw was across NPRA. And it would be a gas -- I'm sorry -- an oil pipeline first then a gas pipeline along the same right-of-way. Did that sort of answer your question?

MR. KINSIG: No, it just kind of --. Wondering because the State of Alaska, you know, got this coastline and North Slope oil, I was wondering how are you going to get to the mainland from your pipeline where you find the oil? How are you going to -- pipe it all the way to Seattle or go the main land of the State of Alaska?

MR. PETERSON: The scenario that we had is the most reasonable look would bring a pipeline from somewhere offshore to a shore base across the NPRA over to Prudhoe Bay where the oil pipeline would join up with the TAPS. Trans-Alaskan
1. Pipeline. And, of course, that terminates in Valdez. And the
gas pipeline would go to Prudhoe Bay. And I don’t think anyone
knows where a gas pipeline. Denali or ANIA, is really going to
go. But it would hook up with that facility.

Mr. Kimzick: In other words, you’ll be talking to the
Department of Transportation?

Mr. Peterson: We would be talking to a number of people,
one could be —

Mr. Kimzick: You’re talking about (indiscernible).)

Mr. Peterson: Yes. I mean this has a great number of
uncertainties. And again I’m going to stress, a scenario is
important because we lay out something that is reasonable to
give us something to critically analyze.

Mr. Logan: Let me just say, if we run out of coffee,
please let us know. We’ll make another pot. And there are —
there is coffee and some pies and some really good cakes that we
get from a charity effort that was taking place at the store
today, and it’s good. So help yourself, please, to that stuff
in the back while we talk. Jack.

Mr. Schaper: The pipeline that was referred to, that
exists now, in 1989 there was an employee that had looked
information that resulted in public knowledge that there were
over 200 holes in that pipeline, the Trans-Alaska Pipeline. And
this was 1989. And this was essentially kept in a low profile
for quite some time since that. And that person was processed

1. in the eyes of stakeholders, voiced through the North Slope
Borough to us here in this Village, that they had no way of
influencing and addressing concerns that fell under that Act.
And, so I’m wondering what Federal laws have been looked
at and how our Governor had caused problems with this. And how
it affected the North Slope Borough and how it left the Federal
government’s partners, for lack of a better phrase, to federally
recognized tribes which we have this government to government
arrangement.

And this Coastal Zone Management plan was done by the
State of Alaska, with some input by the North Slope Borough
which was not passed on to the Tribe whether it be Native
Village of Point Hope or the Regional Tribe Inupiat (ph)
Community of the Arctic Slope in responding to that particular
law and program. And what effect that program has on this
project with that critical missing link. It’s hard to
understand how we, as tribes, with this government to government
partnership, forced upon us, arrangement had been pushed aside
in favor with the State of Alaska and how they moved forward
with this, without our input. And whether or not the State was
just as semi-corrupted as the supervisors of the Federal
employees that put that document together. We had no real idea
as to what this animal was, this Coastal Zone Management program
was, other than hearing that it had some mechanism for control
and funding for gathering information and trying to come up with

1. for leaking that information and making it known. I was
wondering -- can, in that Environmental Impact Statement,
whether it’s a 2007 or this one, was that pipeline looked at as
to whether or not it can handle, knowing that condition of that
pipeline had exceeded its life?

UNCERTIFIED NAME: I have no knowledge. Are you
talking about the TAPS, the existing pipeline?

Mr. Schaper: Yes.

UNCERTIFIED NAME: No, neither of those documents were as
far as to analyze the TAPS. We assume that other regulations
from other agencies in all this would ensure that, but we didn’t
quite get that far in the areas that we looked at. We
concentrated more on the Chukchi.

Mr. Logan: Between 1989 and now, because of misfeasance
associated with TAPS’ maintenance, industry has lied guilty or
otherwise been found guilty of two misdemeanors and a felony.
So the long arm of the law has swung a few times at that kind of
negligence. And we’re going to assume that long arm will
continue swinging until they maintain that pipeline
appropriately and stop behaving like that.

Mr. Schaper: And this thing that’s being developed --
there is this law that was passed called the Coastal Zone
Management Act, and it dealt with States. And a few years ago
Frank Murkowski, who was our Governor, had done something as a
Governor of Alaska that caused that Act to be considerably weak
solutions. So we were completely left out. The Native Village
of Point Hope, the Inupiat (ph) Community of the Arctic Slope,
and, how does that affect this process now as to this missing
link and --. Are there other tribes in the United States,
whether it be the McCaw (ph) Tribe that are, you know, waltzers
also, or other tribes along the coast that have participated or
may have involvement with this Coastal Zone Management program
whether it be on a agreement arrangement with their respective
States, or whether they had this one-on-one government to
government relationship with the United States? You know, we
don’t know that information.

I tried to ask. And I’ve been having a difficult time
from whoever I asked. I guess this question was really never
asked. And whether it’s something that is useful, but I feel
the act of not involving the Tribes on this is something that is
very important, and really needs to be addressed. So I -- I’m
still confused on that as to that and how does that play with
this, you know, this proposed project that’s being presented to
us. How does this Coastal Zone Management program play and --
Because we have this government to government relationship.

Mr. Logan: Thank you Jack. Very quickly, because I want
to give some folks that have to leave at 1:30 and the chance to
comment before they have to go. If the Native Village of Point
Hope or ICAS, both federally recognized Tribes, feel that the
State of Alaska’s plan is insufficient, inadequate or they don’t
I agree with it, otherwise, we can listen to that and sympathize with you. We have an obligation under Executive Order 13175 to listen to ANAG, is the native village of point hope. Under affected Tribes tell us why they think our proposed action would be inconsistent with the State's Plan. So that should take place if we're doing business the way these Executive Orders and the law tells us to. That may not be enough. But, at least that should happen. Dorraxa, you mentioned you needed to leave at eight and maybe some others. So I wanted to give you the opportunity to come, and even though we're not quite to the comment period -- in case you had something to say. Because I know that you wanted to get to another important activity. If there is anyone that needs to comment before 8:00, the floor is open to you. Okay, I'm going to give that up -- Earl.

Mr. EARL KINIK: For the record, katiesik, N-A-T-O-S-I-Q. Earl Kinik, K-I-N-I-K, member of Native Village of Point Hope. First of all, I would like to send my condolences to the family of my cousin. It is very important, knowing him, that we should continue what we are doing of what's going on in our ocean with, we love the most, the garden that we treasure. The garden that keeps our unity together. The gardens that keep our kochikio (ph) way of life together for thousands of years. And he would be very happy that you are here, even though he's gone. Thank you very much.

I work as a Native liaison for Alaska Wilderness League.

I had a chance to go down to Louisiana to witness for my first hand (sic). Because what I talk about to my people, when I go to public meetings, is what I see. And we don't want that to happen in my area. It is very sad. Our own government would go pointing fingers of the industry and the industries were own pointing fingers. And we don't want that to happen. We don't fight. We work together we do things together. Thank you.

Mr. JOHNSON: Thank you very much Earl.

Mr. KUERTY: Just to sort of finish up a few notes about the structure of this Supplemental document. Once we got the analysis, the scenario, from Bob and the rest of the geologists downstairs from us, we turned that scenario over to our scientists, our departmental analysts. And they looked at, you know, the possibility of the offshore pipeline, possibility of onshore pipeline, possibility of all these natural gas production activities. And they did their environmental analysis of those potential activities. And that's what comprises the bulk of the body of this document.

So, basically we go resource area by resource area, you know, benthic (ph) organisms, marine mammals, subsistence activities, each resource area. And we organize into analyzing the impacts of natural gas development and analyzing the impacts of natural gas production. We also summarized the effects of the oil production.

Basically, that final EIS we did a couple years ago, we
tried to summarize that so the main points are in here so it'll be easier to reference and give context to the gas impacts. So that addressed the first item of the court's remand. The second and third concern the judge had both pertained to that regulatory requirement, that 150-22 process.

It's all kind of related, so what we tried to do is boil it down into a logical sequential process which our analysts could use to analyze each piece of the incomplete or missing information and see how important they would be. So that process is captured in Appendix A. And I think it's been mentioned here for tonight. It's a rather lengthy Appendix -- it's in a very --. I'm sorry, did you ask a question?

Ms. Frankson-Henry: Yes, Aggie Frankson-Henry, for the record. F-R-A-N-K-S-O-N-H record H-E-N-R-Y. Regarding the analysis of -- would it be possible for you to also get the results and analysis of the Sakhalin Island shelf disaster and the Gulf of Mexico shelf -- disaster of the Deepwater spills and make that public? With your -- with results that may happen with these lease sales, so that things like that will not occur within the environment biologically, geologically. We are impacted even before it starts.

Mr. Loman: Towards -- after the comment period I'm going to -- if you'd like me to tell you -- I want to explain to everybody that cares to listen. The rest of the reasons for the reorganization of our Agency and the other part of the Agency.

Pretty much a wrap?

Mr. Rouxher: Pretty much all I had.

Ms. Frankson-Henry: One other comment for the Geologist and the Biologist?

Mr. Loman: Sure.

Ms. Frankson-Henry: Move forward -- do the right -- do the right thing regardless as to what your colleagues may have against you in documenting these documents -- scientifically, geologically, within the air, the land and the sea and the rivers. Make sure that you stand up for a good purpose. I know you guys have been affected in these -- in your -- within your knowledge. I know that if you say something, they will give you that boldness, BONE, used to be MRB. Now they're supposed to change and honor your decision as geologists and biologists that make these studies. So I would encourage you to do the right thing in your -- within your area of expertise.

Mr. Loman: Thank you for that and I really appreciate that because our scientists and our other experts very rarely hear that they have the support of people, especially people in the communities to do the right thing. Thank you.

Mr. Schaeffer: There's a mention of reorganization to BOSRE and the BBS or whatever that was. Bureau of Safety and Regulation or something like that. Do you foresee this reorganization following the same path as a BIA realignment that took place in 1969 and where it wound up?
1. the most rigorously you could possibly imagine. And no matter
2. how good you were, how well your equipment was maintained, how
3. closely you followed the processes and procedures, you would
4. literally look, and you can get those safety reports online.
5. pull them right off the internet today. Shareful, because when
6. true experts come in and examine every aspect of everything, you
7. will never meet the requirements in full measure. And that's
8. the kind of regulatory agency that is feared and respected.
9. And when this industry, the offshore oil and gas industry,
10. fears and respects this new regulatory agency in that way, then
11. the public trust will be restored when there is someplace
12. towards endless demonstration of safety and environmental
13. responsibility.
14. The people who are in charge of this reorganization agree.
15. And they're working very hard on figuring out how to do that the
16. right way, that's the goal. I hope you share in our desire to
17. support an Agency like that. I think you do. But it's not
18. easy.
19. MR. SCHAFFER: There were statements made by the Secretary
20. of Interior, and others that work with him, indicating that
21. there were changes in the regulations in dealing with oil and
22. gas. I was wondering, was there any consultation with Tribes
23. regarding these changes and does the Native Village of Point
24. Hope know what these changes are? And how these changes
25. addressed in the Environmental Impact Statement and are they

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1. applicable for that statement?
2. MR. LOKAN: They're not addressed in this Supplemental
3. Environmental Impact Statement. This Supplemental Environmental
4. Impact Statement -- there's really one reason why it exists
5. today in draft form. It came from the court. And the court
6. said, you didn't address natural gas. You didn't appropriately
7. address all of those things in Exhibit 129 -- the missing
8. information et cetera and so forth. And as it supplements the
9. past EIS. Now with respect to changes in regulation that are
10. taking place, I think you're talking about recent notices to
11. leasees (sic), for example -- maybe proposed rule makings, things
12. that the Agency intends to place on industry, correct?
14. MR. LOKAN: Okay. No, we here at the Alaska Region -- we
15. haven't consulted with the Tribes that would be most affected.
16. But let me just state a little bit about the need to do that.
17. And I only say that because there are things that the Agency
18. intends to place on industry. There are some elements of Tribal
19. Corporations that are part of that industry, so I will get back
20. to you on that obligation. I'm not saying yes or no, that we
21. need to do it. We certainly are willing to share it with you as
22. you requested, to conduct government to government consultation
23. in compliance with Executive Order 13175. Maybe I'll get back
24. to you on that one.
25. MR. SCHAFFER: Categorical exclusions. That was a rate or

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1. a procedure that was used to get around regulations and
2. requirements. And categorical exclusions has led to some
3. accidents such as the Santa Barbara accident that took place in
4. 1969, where the company had requested for a categorical
5. exclusion so that it would only use one single pipe instead of a
6. double, triple, quadruple layered pipe which blow and took the
7. ground up. And they were never ever able to seal that leak of
8. oil. What is being done with this categorical exclusion that
9. had somehow materialized and was taken advantage by the
10. industry? Does that still exist? Apparently this categorical
11. exclusion gets a 30-day period, and after that there's an
12. automatic approval or something of that nature. What's the
13. status of --.
14. MR. LOKAN: Non-exist --.
15. MR. SCHAFFER: That type of method that's been used in the
16. past?
17. MR. LOKAN: Well that particular categorical exclusion is
18. non-existent with respect to the Bureau of Ocean Energy
19. Management Regulation and Enforcement Alaska Region. And I
20. can't imagine that it will ever exist for any operations in the
21. Arctic.
22. MR. SCHAFFER: As far as I know, these have been
23. accusations that have been made by environmental groups
24. indicating that that categorical exclusions have not been
25. addressed to the public and what was going to done with that as
Species Act or Federal Historic Preservation rules and all of these regulatory things that govern actions. And the agency can demonstrate that it's done safely without harm to the human environment. And so they are categorically excluded from further NEPA compliance.

Exploration in the Arctic will not be categorically excluded by this Agency, ever. There's a number of reasons for it. The Agency, from within itself, knows that it has to analyse these activities at a minimum with an Environmental Assessment because there are even subtle changes that can and must be looked at, have the potential to get in the way of subsistence activities et cetera, get in the way of sensitive resources and so on and so forth. So that's not going to happen. I can say that with great confidence even long after I'm gone.

The other element is there's plenty of will to bring a legal challenge. And I know this much about NEPA. If an Agency tried to do a categorical exclusion for an exploratory drilling operation in the Arctic, and they were challenged, they would lose. So there you go.

For anybody that joined us kind of mid-course, we are taking comments on a draft Supplemental Environmental Statement that we prepared for Chukchi Sea E'ale 193 and the comment period is still open. We're willing to take comments from anybody to hear what you have to say.

MR. SCHAEFER: I have another question before I make a comment. We had, more or less, looked at what is going on around us, what is going on in Russia, what is going on in the United States. What is going on in Canada. What is going on in Greenland and those other countries in the Arctic.

And we talked with each other and we looked closely at what is going on in Canada, because they're apparently trying to go through the same path as what we are seeing that's going on here. What I noticed was somewhat different to a certain point was that Canada had a different type of interpretation on consultation with Tribes.

And so there was this court case that had materialized in a ruling that was made by the Canadjan Judicial and had indicated that there is a little more -- there is more to a government to government relationship than consultation. And what was within that context was that that consultation was talking with each other, trying to come to a solution.

There, the ruling that was made in that court case was that they felt that this government to government relationship was more than just consultation, more than just talking with each other. And in the past, that was essentially what we were doing. And it changed as the Administration changed from the Bush Administration to this Obama Administration. But I really feel that there is more than just talk with consultation. And that there should be some different type of a phrase or language.

or term used in dealing with our relationship with each other, that goes beyond just the talk. That something should be done in that regard and that we do expect that adjustment will be made since both Canada and United States are playing this dare -- double dare game as who's going to take that first step and dealing with the risks. What is interesting between Canada and the United States is the Inuit (indiscernible) back there have already got into an agreement with the industry where they have somewhere along the line of 53 percent interest. More than half of the proceeds from oil and gas will go to their people.

But they still have concerns with safety and risk and have not moved forward. Us, we have no arrangement in regards to our oil that is about to be exploited, our oil. Where we see nothing in return other than maybe 40 oil positions out of 400. which is the norm of the ratio of hire. So, you know we are looking at other areas and trying to figure out how we're going to move forward. If we are going to move forward. But it is noted that the Inuit of Canada already have this arrangement. that temptation, that proverbial apple in front of their eyes.

And they're not taking a bite out of it until they know for sure. But they're still seeing each other as to whether they're going to move forward or not. They still live in that fear like we do now, here.

But that is there. We don't have anything. We, as a matter of fact, had to deal with the United Nations Human Rights Division in 1989 regarding phosphate. regards discrimination against indigenous peoples by transnational corporations, British Petroleum. Atlantic Richfield. And so we've already gone on record in regards to our concerns and how we're being treated in the realm of Human Rights under the United Nations. And that's still ongoing as to how this turns out, has yet to be seen.

But you know we are indicating, you know, what we do know which leads to, you know, the comments that we have made in the past since 2007 of the hearings that have taken place and the statements that have been made, the concerns that we have expressed in regards to Federal employees that have their future at risk because of what they were forced to do.

Where does that information start and your adjustment that has been made regards to this Court Order that was done by the judge in a reward? Does it start from the time that the supervisor went to the employee and said, you must meet this red face test? If it didn't then, then you have to readjust your results, your documentation. And we had no idea that any of this was going on. It took them to blow their own whistle to indicate that this was going on and that phrase was used. You know it was really shocking to hear that kind of phrase. But that happened.

So where are we in the Environmental, the reward as to what stage is this addressing those concerns we're at, what
Mr. Schaefer: And that there was a law suit that was filed in New York that addressed that and made it public.

Mr. Rutherford: I wasn't aware of that. But yeah.

Mr. Schaefer: The Public Employees for Environmental Responsibility was the group that did it. There was expressions of concern by those employees to the environmental groups and to us stakeholders through teleconferences. And we responded by saying that you need to go to the Office of the Inspector General and indicate that. They couldn't figure out how to do that and so they used this organization to do it. And that's essentially what had happened which led to my question.

Roth: How far back does the document go in regards to that story? Was that looked at or was it completely ignored?

Schaefer: I wasn't talking about you know personal, you know, your experience but the events and the facts that were provided. And how far back did it go to review whether or not that information is accurate or not? And, you know, because this all materialized in a Freedom of Information Act request. And so there were internal documents that were acquired through us by direction of legal counsel to try and figure out what was going on. And this essentially -- what materialized up to that court decision. And how far back has the research gone as to, you know, whether there was information that was overlooked or ignored because of those chain of events?

Are -- you're not aware of it or the preparers were?

Mr. S. A. R.: I can answer some of that and then, you know, Jack, I'm a risk taker. So I'm going to do something you'll never see at one of these meetings. With respect to dissent amongst our people, here's what we believe. If you have an Agency that encourages and fosters dissent -- people that say look, Mr. Big Shot Jeff Lomen, Manager guy, who wants to make Headquarters deadlines to get these documents done. We don't think we can do it because we need more study or review this longer or this wasn't analyzed correctly. That, in the end, when people are right, when they're correct, end to better analysis and better decisions. It doesn't just work that way.

Mr. Rutherford: No, not at all -- and I worked with a lot with the analyst and was busy. I'm more of a coordinator so I'm trying to -- you know help the process and just facilitate the process. Let our scientists give their information and then -- as they call it. And I call the scientists in -- I'll say -- I don't think they -- none of them expressed that concern to me.

Roth: But I can only speak from my own experience, though.

Mr. Schaefer: Was you aware that that had happened down there?

Roth: I was -- yeah I was. I don't know many of the details about it, but I understand that that has been a concern in the office.

Mr. Schaefer: And that it did happen, you were aware of it?

Roth: Yes.
Ronald Ovikak, Senior. Thank you for your presentation and your reports -- also from the people of Pt. Hope. And right now I'm probably late for my traditional food gathering. That's probably you'll probably be coming back sooner or later for this -- reports. And to me, you know, I didn't know -- first time I heard about this natural gas document report. Tell you, it's about to be presented to the people and go forward and please, notify you at Pt. Hope -- (indiscernible) already go on further before people here present anything to the Department.

Thank you.

MR. LOGAN: Thank you very much sir.


MR. LOGAN: Thanks a lot.

MS. FRANKSON-HENRY: Last name F-R-A-N-S-O-N, hyphens H-E-N-R-Y. My question is, how can you clean all the oil on ice scientifically, biologically? How can you clean all the oil on ice? Do you have the expertise in this harsh environment?

MR. LOGAN: That's my question.

My other question is, how can you make sure that millions of years that may be leaked from a well be cleaned and managed in a 40 to 90 mile hour gusting wind?

As we all know, the Inuit people of the Arctic, we can't even think of certain oceans because our life would be endangered by the great seas. These are my two questions in life.

Environmental Impact Statement that I was going to comment, but since I didn't know we could ask questions I'm asking it now. And before we go on to any testimonies, are you all done of your report to the community members here in Point Hope before we go into a public hearing to inform, educate?

MR. LOGAN: We've presented all the information that we came to present. We want to continue to ask questions and you can ask questions while you're giving your testimony. I'll try to answer them. What I try to avoid doing is getting into debates with people, because I didn't come here to debate anybody. I came here to listen.

Those questions that you asked are on the record. It's now the Agency's obligation, under the National Environmental Policy Act, to answer them. Answer them in writing and memorialize that answer in a final Environmental Impact Statement. I sort of answered your first question early on.

Can you clean up, effectively clean up a 100 percent of oil on ice? I have not seen a 100 percent of oil in a major oil spill be cleaned up anywhere by anybody, anytime. So it's safe to say that they will not clean up with all the technology that's available today 100 percent of any oil in a major oil spill that takes place on ice.

If you spill a gallon of oil on ice you can clean a 100 percent of it. In 90 knot winds you will not be able to clean a 100 percent of it because it will blow through the air all over the place.

First time I came to Point Hope by airplane. I got off the plane. I was wearing a ball cap. There were 45 knot winds which in half of 90 knots and I swear to God my ball cap went to Russia. It disappeared. And so it's safe to say that spilled oil on the surface, in those kinds of winds, it's going to be far from a 100 percent. Typically, and our documents reflect it, the industry's able to clean up about 12 percent.

MS. FRANKSON-HENRY: That's all?

MR. LOGAN: About 12 percent. Much of the oil in typical situations evaporates.

MS. FRANKSON-HENRY: So our -- all our migratory marine mammals and birds will be affected by this development if it occurs?

MR. LOGAN: In the event of a major oil spill?

MS. FRANKSON-HENRY: Will you be able to help them and get another ocean for them?

MR. LOGAN: You certainly can't make an ocean -- not any man that I know of or any industry. In the event of a major oil spill in the Arctic under the activities that have been proposed and are being proposed now, exploratory drilling. What industry has put before the Agency for approval is a spill response capability that is -- it's really almost to the point where if you add more vessels or more capability, you could have a negative impact from that magnitude of -- it takes boats and
people at ceters, in an area that’s sensitive. I mean, we all
agreed that the Arctic is a sensitive environment.

So you add more and that has more effects -- negative
effects on the sensitive resources. And it’s now to the point
where it doesn’t make any sense. One, given the chance of a
major oil spill is very, very negligible. It’s not likely to
happen in the first place. Even in the Arctic conditions there
have been 81-86 exploratory wells drilled -- 30 in the Beaufort,
five in the Chukchi. There have been no major oil spills.
That’s not a lot. Eighty-three in Alaska, most in the first
half of the Federal government’s oversight for 17, 18 years.
Only three in the last half of our Agency’s existence.

So, when we look at what industry says they intend to do
with respect to spill response we know this. It’s not like Deep
water because the Deepwater Horizon incident, because it’s about
150 feet. So in the event of that catastrophic release at the
ocean floor, that oil will arrive to the surface in seconds not
days in a place that’s unknown like the Deepwater Horizon spill
occurred.

It arrives to the surface in seconds and in minutes
because their spill response capability is right there, right
there in place. That was not the case with the Deepwater
Horizon. Did they mobilize a lot right away? Yeah -- matter of
fact I’ll reserve my opinion of what was on. But what’s being
proposed now, it’s at substantial capability and it’s right

they’re not careful it will happen because of our climate.

I believe climate change is not going to melt all the ice.
You never know -- it may be even just -- even get harder and
more frozen and compact, the Lord willing. I know for sure in
the Arctic, the in the Beaufort Sea and straight down here in the
Chukchi Seas, our ice comes from afar. And it’s a challenge. We
know we cannot go on the ice. We would no longer be alive if we
didn’t know. If we didn’t have no means of transportation, your
Coast Guard officials will be endangered if they were to try to
rescue the personnel working in the rig, on the ships. Not
every ice breaker works.

With all the contaminants along with the vessels, with the
Clean Air Act regulate them -- enforce them. Put those -- get
those tax monies from them -- from those vessels to -- not only
from the amount of oil gushing out from a well. You have to see
those other impacts too that will affect our air and our water
and our land, our people.

We’ve been -- for so many years giving testimonies
regarding how affected we are not only from oil and gas but also
from Project Chariot, Cape Lisburne site. We don’t know what
kind of chemicals they have, what they put into our lands, in
our air, and our sea.

We’re affected -- the whole coastal communities along the
coast. We take it seriously when we don’t lend a whale. Maybe
it’s because of the seismic testing. Maybe that set the bowhead
whale from seismic testing has gotten them, you know, uneasy.
And the effects of seismic testing, too, needs to be informed to
the public of how our marine mammals and our people will be
affected. Once it booms on the rocks to a person, to a
mammal, to a bird, to fish. Their ears are blown off. The
whales, the seals, the stomach of the bowhead whales and all
the other marine mammal species I care about, and love to eat.
Because if they’re affected, I’m affected. Our eco-system even
through seismic testing, we did not have the voice to say no to
seismic testing other than coming here in these government to
government consultation meetings and then ask (indiscernible).

Thank you.

MR. LOMAN: Thank you.

MR. SCHAEFER: Can we testify now?

MR. LOMAN: You certainly can Jack.

MR. SCHAEFER: I’m not used to doing this right away but I
guess I can. Can you hear me okay? My name is Jack Schaefer.

I am the Council Member with a federally recognized Tribe known
as the Inupiat Community of the Arctic Slope. It is a Regional
Tribe for all the villages in the North Slope. It has the same
responsibility as any Federally recognized Tribe. And we have
expressed our concerns for quite some time. I am the grandson
of Timmy Kantok (ph). He caught 23 whales within his
lifetime. His last one was caught by his son in 1975 just
before they had this whale ban. So, you know, I grew up around
Concerns that I have in regards to these public hearings. We have very little opportunity to express our concerns regarding our government to government relationship and obligations. And so, with that said, this report GAO Report 02357 which is a report that deals with the restoration of Prudhoe Bay. There were promises that were made by the industry that they'll clean up Prudhoe Bay when they're done. We expressed our concerns in the past in regards to the migratory animals that are directly affected by development. And the migration had been changed because of development that had taken place in Prudhoe Bay, that from the view of a satellite, looks like East L.A.

There's so many lights in Prudhoe Bay and the animals have moved away from there. Now they promised that they would restore this area. GAO did a report indicating that it wasn't done and that companies had changed their name, walked away, filled for bankruptcy, and still has not been cleaned up and the impact is still there. And the caribou are moving. The animals are moving elsewhere. And development is moving closer and closer to Point Hope, moving west, without that restoration. And we feel that that restoration needs to take place so that these animals have a place to go. We feel that development should take place on land before you ever go to the ocean.

and you suck on it -- you know you get everything in that suacer. But the edge of that saucer is right at Weimnright. Point Hope, Point Lay, Barrow, Kotovik. And there aren't any taxation by the State and others. So they go where there's cheaper and that's what they were interpreting. When we confront and indicate that is a concern that we have they say, oh there's nothing. There's just little puddles over here and we got no interest. Where's the government documentation that indicates, you know, this? So we see this development taking place offshore and, you know, we miss out as a major stakeholder. And so onshore is something that should be looked at and utilized to the maximum extent. And in the meantime, you know, try to determine what type of infrastructure that you will use to transport that oil.

We had said no to Alaska Native Claims Settlement Act. We received only ten percent of the land that we have used, that we own. We have not addressed the ownership of the ocean. We feel we own the ocean. That is ours. The definition of Alaska we feel it still needs to be interpreted and defined. Whether it be something done by the Russian government, something done by the Department of Defense through Public Landsowner 92 or the three nile Alaska boundary. And so we've gone to court, saying the ocean is ours. That belongs to us. You've got to deal with us. And there are rulings that have been made over years, since the late 70s, have been -- we don't have to address this. We don't have to give you a decision now. We'll wait and decide on this from a different case that has been addressed to us and brought to our attention. And so that's been going on for years now.

So we feel we still have ownership of the ocean and still have that claim and have the authority to regulate, the authority to tax. And that hasn't taken place now. So this human right is being violated as we speak, and we need to have this addressed. As I had indicated earlier during our discussions that we have dealt with the United Nation sector on our Human Rights regarding Prudhoe Bay, the environmental impacts, the economic impacts that have taken place. What was taken from our oil away from us, the monetary value, being taxed in regards to the reduction in animals. So that's one of the things that we are, you know, about to address and are concerned about.

The impacts from previous spills like the Exxon Valdez still had -- really had a severe impact on the red fallour (ph) which is what we refer to as a south rook (ph), a little bird that is about a little longer than this. That is red. It's a sandpiper type of bird that when it swims in the water it goes in circles. That used to be a bird that was -- that had one to several hundred feet thick and 52 hundred feet in height running miles along the beach, and the form of waves when they'd fly. After that Exxon Valdez spill we never saw that again.
1 There's very few of those birds around. And that used to be
2 something that we had to get for our grandmothers because it was
3 tender meat and they enjoyed that very much. So we took great
4 pride as little kids to gather those birds for our elders to
5 eat. And so there has been some impacts in regards to animals
6 that have taken place on these disasters in the past and we feel
7 that there hasn't been enough studies for the Chukchi Sea, the
8 Beaufort Sea. As to who exactly did all these technical reports
9 for the Beaufort Sea and the Chukchi Sea is still unclear and
10 as to whether they're reliable or not.
11 The ones that I noticed in regards to the Beaufort Sea
12 were done by an accounting company, KPMG, through a contract.
13 And so as to whether or not that information is accurate or not
14 is unclear. Furthermore, they're old and that has already been
15 admitted to the Environmental Impact Statements. Baselines
16 haven't been established.

25 There's no way that you can clean up an oil spill in ice.
26 The impacts are far too great. There are no reverse sharing
27 arrangements. There's no corporate social responsibility. We
28 have no control. Decisions are being made by the North Slope
29 Borough, by the State of Alaska, regardless of their
30 relationship between Federally recognized Tribes and Federal
31 agencies regarding the Coastal Zone Management Program and other
32 programs.

35 So all of this is very much premature. I don't know why

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3 1 we're going beyond the basic concerns about cleaning up an oil
2 spill in the middle of winter and bad ice conditions. For ice
3 scouring is something that has been looked at thoroughly in the
4 80s where the ice rubs against the ocean floor and the patterns
5 shown what affects it has on wildlife and whether animals
6 that are protected within those, whether it be the muir (ph) or
7 something else.
8 The areas that has some concerns in regards to the whaling
9 ships that have sunk off of the southern part of this lease sale
10 area. The water is very shallow. And when you look at flows of
11 anything, whenever it is wide, the flow is slow. When
12 something is sharp it's just like an hour glass. So everything moves real quick. And different
13 times of the year just by the, you know, the physics -- the
14 physical risks you know -- 100 feet times 75 feet versus one
15 mile deep. The patterns and the flow of that oil will hit --
16 portland and we might not see the real impacts, but our relatives
17 will, from Wainwright and the villages all the way to Canada
18 where it's shallow and then where it mixes into deeper water.
19 What agreements have been made and were they done with our
20 consent?
21 Are we going to welcome those whaling crews that will lose
22 their ability to whal when there's a spill and come over here
23 and compete with us through this term, good neighbor policies
24 that have been established since 2000, which has not been told
26

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1 each other and trying to move in a right path to ensure that we
2 benefit both ways in the future. And the technology doesn't
3 show that we have that and taking those big risks offshore
4 at this time to the methods that are being proposed is the
5 Environmental Impact Statements that have been drawn up already.
6 And so, again, I do, encourage you -- you look offshore --
7 I mean, onshore first -- look offshore when you have the
8 technology. But, as far as I can tell, that technology isn't
9 there. The response isn't there whether you can cap well,
10 before it freezes too much is unclear. And to be going at it
11 again the following year when it melts off and there's open
12 water.
13 It's still too soon. And there are other arrangements
14 that can be made. And I feel that you need to honor and
15 implement your Federal regulations in regards to looking at
16 environmental concerns. Also the international laws like the
17 Law of the Sea and whatever else is applicable. Again, with
18 migrating animals and such and I find it really surprising that
19 the Chukchi is being looked at when there are other locations
20 that could be taken advantage of, whether it be the Ketchikan
21 Sound or whatever.
22 So I am really, you know, confused as to the location
23 other than what we've been told that, you know, it's the largest
24 oil deposit in the world. And because of your responsibility as
25 the Federal government toward us indigenous peoples, starting
1 From the time the (indiscernible) filed lawsuits from the time
2 that Jacob Adamson filed his lawsuit back in 1977 in regards to
3 the banning of harvesting bowhead whales and to the decision
4 that was made, which was somewhat controversial because of the
5 decision was said that, because the International Weather
6 Commission is going to make a decision next year, we feel that
7 we will not take a position that there's a significant impact in
8 regards to oil and gas. And therefore, we'll dismiss this case
9 with the understanding that you'll be able to whale next year.
10 So, you know, all of these decisions that have been made
11 are really controversial. We are not the only village -- we're
12 not the only Tribe to have filed in the court in regards to the
13 ocean. ICAS Native Village of Gambell, Home Eskimo Community,
14 Native Village of Akaqan, Native Village of Etq (ph) have all
15 filed lawsuits and claim ownership to the ocean, in regards to
16 their subsistence activities and their way of life and the term
17 that they had used which was inherent to them and the Federal
18 government's interpretation in dealing with inherent to them
19 doesn't apply until you turn that stone on the ocean floor
20 versus what Bush administration saw, turn on you or use that
21 phrase.
22 So there are these things that we need to have addressed
23 and we need to be at the table. I am unaware of any
24 participation in dealing with the Endangered Species Act. Bruce
25 Babbitt had given an example on how the Endangered Species Act

1 worked on the table. Draw the lines, where
2 development is going to take place. Where subsistence is going
3 to take place, where the animals are going to take place, how
4 it's going to impact and come out with a conclusion and a
5 process and after that's done, it's hard to come back to the
6 table. That was Bruce Babbitt's explanation of the Endangered
7 Species Act and how that process works. I am unsure of that
8 taking place, haven't heard of it taking place here in Point
9 Hope. I haven't heard of it taking place with the Inupiat
10 Community Arctic Slope. I feel that there has been things that
11 might have been done without our knowledge regarding the State
12 of Alaska and we need other non-governing organizations that
13 pose to have authority over us as Federally recognized Tribes.
14 And so we have human rights issues. We are concerned about
15 our future. And you know it all falls back on, you know, can
16 you clean it up, it be capped and we shouldn't even bother with
17 it. We have wasted a lot of time talking about small portions
18 of the Environmental Impact Statement. Different types of
19 animals, different types of things when we know that we can't
20 clean this up. That it can't be done safely. And we haven't
21 seen the regulations that have been announced and the
22 reassurances that have been given by the Department of Interior
23 indicating that these regulations have been changed. We haven't
24 seen that. So we haven't been able to give an opinion as to
25 you know, what has changed if anything at all. And we really

1 can't afford to starve and that's what we have at risk.
2 The people in Cook Inlet, their house has never
3 recovered. The subsistence hasn't really recovered. They have
4 had a really hard time. They've never been compensated for over
5 40 years adequately, we don't want to go happen to us.
6 There's too much of a risk. Exhaust what you have onshore
7 before you go offshore.
8 Re-look at how you're doing this and put these guys back
9 in their places because Edwards versus Norton, which was a case
10 that involved the trust relationship of the United States and us
11 regarding the impacts and the exploitation by transnational
12 corporations such as British Petroleum or Atlantic Richfield.
13 And the responsibility of the United States to protect us and
14 our interests have already been decided on through that case.
15 And we feel that still needs to be addressed. As far as I know
16 our legal representation has not addressed our trust
17 relationship in regards to indigenous peoples. The First People
18 versus the trust relationship with the general public. And
19 those are two different animals all together, still not real
20 clear understanding in regards to that but it has been asked on
21 Congressional record in regards to EPA and DOI in their trust
22 relationship only toward the general public, not to our
23 Federally recognized Tribes.
24 Our legal representation, to our knowledge, has not
25 addressed this trust relationship yet. And I don't know when we

1 will, if we will. But we are working on a trust relationship
2 and we need to continue to do that. We don't like court cases.
3 We don't like going to court. It takes a lot of our energy and
4 a lot of our time. I could be watching my favorite TV show now.
5 And -- but no, we're talking about this and we don't have this
6 relationship. You know they have no -- companies haven't even
7 partnered with us fully. We don't have a royalty management
8 system in place. We haven't established our environmental
9 regulations. We feel the regulations that are being done by the
10 State under its Coastal Zone Management program and their own
11 regulations have a conflict of interest. And the State is not
12 fulfilling its obligation. And they won't, because they have
13 this constitutional thing that deals with equality. And they
14 don't respect the sovereignty of tribes and culture.
15 So I have more to say but I can't think of anything right
16 away. Again you know we didn't have much time to completely
17 review. It's hard to imagine who is delegated to gather the
18 birds, to gather the mammals, to get the walrus and clean it and
19 let it go. That portion of the Environmental Impact Statement
20 is very confusing. Some of it is semi-blank. They have certain
21 delegation. There's only two organizations that can deal with
22 birds, rescue the birds. I can't go out there and rescue a bird
23 if there's a seal. The same goes for mammals. There are
24 delegated groups assigned to do that. They don't have the
25 technology to deal with a 2,000 pound walrus which happens to
1. have 30 other friends with him and they're all real tight. Just
2. like a gang, a family. And they're very aggressive when you
3. insult one of them. So you know, you have concerns with us.
4. And I hope we continue to move forward and try to come
5. out with a way that will work. But at this time it doesn't look
6. that way.
7. And I hope that all these other reports are incorporated
8. into and these concerns that are incorporated into this and that
9. they are responded. The Environmental assessments that have
10. been made regarding seismic completely ignored Tribal concerns.
11. They only addressed and responded to non-governing organisations
12. such as the Alaska Wildlife League. The Center of
13. Biodiversity, the Natural Resource Defense Council. Those big
14. groups are the only ones that have been responded to by you
15. know, governmental entities in these Environmental Impact
16. Statements. And Tribes need to be addressed too.
17. The North Slope Borough isn't the only authority to be
18. responded to. They have interests and they have conflicts of
19. interest also. And when the government tells them to do
20. something, they have to do it. And we had some very interesting
21. Governors in the past. They're not very trustworthy. And they
22. don't look out for our interests. They look out for Alaska as a
23. whole. And regardless of the impacts, and we seen that. Red
24. Dog has been the number one polluter in the United States for
25. six years straight. And it's going to take 40 years to clean up

1. Management Regulation and Enforcement Community Liaison, CC
2. Jeffery Lohan, Deputy Director of Bureau Ocean Energy Management
3. Regulation and Enforcement. Is that your current title?
4. MR. LOHAN: Yes, ma'am.
5. MS. FRANKSON-HENRY: This is regarding opposing the Arctic
6. Multi-Sale in the Beaufort Sea and Chukchi Sea planning areas
7. oil and gas lease sale 193, 209, 212, 217 and 221. For the
8. record, I'm Mike Frankson-Henry, a Tribal Secretary and Tribal
9. member of the Native Village of Point Hope.
10. I am opposing the Bureau of Ocean Energy Management
11. Regulation and enforcement decision on the proposed action for a
12. multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221
13. Beaufort Sea's lease sale 209 and 217. And I support
14. Alternative One, Beaufort and Chukchi Sea, no lease sale.
15. I am an Inupiat mother, wife, daughter, aunt, Tribal
16. member of the Native Village of Point Hope, and most of all a
17. whaler and harvester dependent on the Chukchi Sea and Beaufort
19. Being Inupiat is an inherit freedom to hunt, harvest from
20. the vast frozen seas to nurture my family and extended families
21. across Alaska and Lower 48. The Chukchi and Beaufort Seas
22. provides nutritional food supply on my table without any after
23. taste of spilled debris from oil and gas. As stewards of the
24. ocean, I believe there is not enough traditional knowledge and
25. scientific studies to support the lease sales. With that said

1. that nine and ten years of follow-up. And there's a lot of
2. money involved with that. And they're expanding on that thing.
3. With that I thank you for allowing me to testify and
4. please keep this file open for additional comments and I really
5. look forward to seeing our trust and our responsibilities.
6. We don't like to be adversaries in the world of -- world wrestling
7. and two cave men. And I want to be your wrestler. Thank you.
8. MS. FRANKSON-HENRY: Thank you very much air -- appreciate it.
10. I believe there should be an extension if
11. Environmental Impact Statements allow the coastal villages that
12. are impacted. As you know that -- there may be not very many
13. people that are educated with seismic testing in the Beaufort
14. (ph) house -- to the people and the marine mammals. Is Albert
15. Barros still with --?
16. MR. LOHAN: Albert retired. He went back to the Nescap.
17. (ph) Reservation.
18. MS. FRANKSON-HENRY: Is there another person that has his
19. spot?
20. MR. LOHAN: Yes -- Michael Haller -- right there.
21. MS. FRANKSON-HENRY: Okay. For the record my
24. had attentioned it to Albert Barros, Bureau of Ocean Energy
25. please, no lease sales.
26. Tikhigas, Point Hope, Alaska. Oceans is a land of
27. opportunity to preserve my culture. Because of climate change,
28. this generation is faced with for a healthier ecosystem balance
29. for bowhead whales, walruses, polar bears, seals, ducks, fishes,
30. birds, cranes, plankton, oyster, clams, seaweed, worms, killer
31. whales, narwhals, right whales, beluga whales, grey whales and
32. all the marine mammals of these two great oceans the Chukchi and
33. Beaufort that we the people of Point Hope are blessed with.
34. The Bureau of Ocean Energy Management Regulation and
35. Enforcement must conduct scientific studies before a lease sale
36. must be proposed for a lease sale. My question is, how can you
37. clean all the oil on ice? How can you make sure that trillions
38. of oil that may be leaked from a well be cleaned and managed in
39. a 40 to 90 mile gusting wind? As we all know, as Inupiat
40. people of the Arctic we cannot even think of surfing the oceans
41. because our lives would be endangered by the great seas.
42. Based on our current agriculture in Valdez, Alaska, it is not my best
43. interest to harm this great State with offshore oil, gas
44. drilling around the Chukchi and Beaufort Seas.
45. And based on the facts of the current agriculture in the
46. Gulf of Mexico, the impacts and damages brought forth into the
47. United States of America from the Gulf of Mexico and Valdez oil
48. spills, it is not my interest to have these oceans that this
49. great nation is dependent on. The natural resources that are
impacted by proposed spilled debris from oil, gas and toxic chemicals in which is an imminent threat to our ecosystem and marine life, as well as the people of this great State of Alaska who are dependent on the two great pristine oceans, the Chukchi and Beaufort Seas. I oppose the industrial development along the Chukchi and Beaufort Seas.

I am voicing my right to life, liberty and equality. I believe this great State, the Federal government agencies and industrial servants can find other means of resources to benefit the economy like wind and water generation to fuel the economy.

I am an Inupiat and I love to eat my traditional meals that are delicious, healthy and nutritious in which are provided naturally by the great seas along the Chukchi and Beaufort Seas. I am an American who strives to survive in this harsh climate through traditional knowledge and very dependent on the resources along the seas. I oppose the industrial development along the Chukchi and Beaufort Seas.

Once again I am opposing the Bureau of Ocean Energy Management Regulation and Enforcement's decision on the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 193, 212 and 211 and Beaufort Sea Sales 209 and 217. And I support Alternative One. Beaufort and Chukchi Sea, no lease sale. Thank you for your time.

MR. LORAN: Thank you very much. Anybody else that hasn't testified like to make a comment before we close? I would like...
Point Lay
PROCEEDINGS

(On record at 7:35 p.m.)

Mr. LOMAN: Good evening everybody and thank you very much for taking time out of your lives to attend this meeting.

The purpose of this meeting -- my name is Jeffrey Loman -- I am the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, formerly called NEAA. Our Agency is going through a major reorganization. The reason that we're here tonight is to comply with a Court Order from the Alaska District Court that involves our environmental compliance with respect to the National Environmental Policy Act.

The National Environmental Policy Act is a law that was signed by President Nixon and it does several things. It is designed to be open and involve the public when a Federal Agency intends to take a major Federal action. A major Federal action could be building a bridge, building a road, relicensing a hydropower project, building a large facility of any kind. And the Federal government is funding or it involves a lease that the Federal government has to approve.

In this case, the major Federal action was a oil and gas lease sale in the Chukchi Sea. That sale took place after the Agency had completed an Environmental Impact Statement in February of 2008. And the government issued, after that lease sale, 465 leases for a total of about 2.1 billion acres. Shell Oil was the largest winner of bids and is now the largest lease holder with about a $2.1 billion investment in leases in the Chukchi Sea.

Our approval of that lease sale was challenged, in part, on the grounds that we did not comply with the National Environmental Policy Act, and the case went before the Alaska District Court Judge Beeline. And the judge ruled in July of this year that the Agency had done an adequate job of most of the aspects, but did not appropriately analyze natural gas development. And there are incentives for national (sic) gas associated with these leases.

And the Agency needed to do what -- an analysis under section 1502.22 of the NEAA regulations, or about 40 pages of excerpts from the original -- original final EIS that talk about uncertainty, missing information to (indiscernible) gas, things of this nature.

That was put before the court in Plaintiff's Exhibit 129.

And it has things -- for example, like there is -- it makes a statement. There is uncertainty associated with the population structure of the bowhead whale. And, in case, because this written between 2004 and 2007 sometime, the international Whaling Scientific Committee was still debating whether or not there were multiple stocks like the Barings stock and the Beaufort stock or other stocks of bowhead whales. Since that time, the Scientific Committee for the IWC has concluded that there is one stock.
MR. HALLER: I'm Mike Haller and I'm the Community Liaison. I'm new to the Agency, but not to Alaska.

MR. WARREN: I'm Sharon Warren, Program Analysis Officer for the Bureau in Anchorage.

MS. CODY: Mary Cody -- I'm a Wildlife Biologist for the Agency.

MR. CALLAHAN: My name's John Callahan and I'm the Public Affairs Officer for the Alaska Region. And I'd like to take a few photos tonight. Is that all right with everyone?

MR. LOMAN: We were watching Predator while we were eating dinner at the Cully Cafe. So I want to flex my muscles if I can. Let's -- and it's for Judy who is our Reporter -- we'd like to have you introduce yourself and at least last night it worked pretty good. One shot at introducing your name and the spelling of your name. She may ask you again if you testify and have questions, as well. Starting with you, ma'am.

MS. ANIKSKETT: My name is Lily Aniskett.

REPORTER: Could you speak up, please?

MS. ANIKSKETT: My name is Lily Aniskett. If you want me to speak up, I've got something on my lip. I've got a pus. My name is Lily Aniskett from Point Lay, lifelong resident. I went to boarding school and I love it at Point Lay and I'm going to protect my land.

REPORTER: Okay, can you spell your last name for me?

MS. ANIKSKETT: A-K-N-K-I-S-K-E-K-T -- my husband was from Metlakatla. Yes, that's the way it's --.

MR. LOMAN: Thank you.

MR. FERREIRA III: I'm Leo Ferreira the Third. I'm Native Village Point Lay (indiscernible) President.

REPORTER: Would you spell your last name?

MR. FERREIRA III: F-E-R-R-E-I-A.

MR. LOMAN: Sir?

MR. TRACEY Sr.: Bill Tracey Senior. T-R-A-C-E-Y. So now you know there's no relation to Dick.

MR. LOMAN: Or John?

MR. TRACEY Sr.: Or John. Thirty-eight year resident. Presently Fire Chief. (indiscernible) Pusher, and a very interested resident about all these offshore leases going on.

MR. LOMAN: Thank you. Sir.

MR. LEISBOUN: Robert Laishourne, L-E-I-S-B-O-U-N. Resident here at Point Lay -- (indiscernible). We do a lot of hunting, whaling, fishing, subsistence hunter.

MS. FROK: Perry Flock, P-R-O-K. (indiscernible) Fishing, longtime resident at Point Lay.

MR. HENRY: Jack Henry is my name.

REPORTER: I'm sorry, could you spell your last name?

MR. HENRY: H-E-N-R-Y.

REPORTER: Thank you.

MS. TRACEY: I'm Marie Tracey. I work on North Slope Borough Village, Communications Liaison for our Mayor's Office.
1. I'm a Volunteer Firefighter in which I am a Captain. I'm a
2. Volunteer EMS Captain, 24-hour Volunteer, Ambulance Co-member.
3. I'm a Volunteer Coordinator under our Volunteer Search and
4. Rescue. I'm an NASTED Director for our Native Village of Point
5. Lay. I was born here in the old village. Thank you for coming.
6. And I would like you to spell your name, too.
7. MR. REIFORD: Hello, my name is Julius Reiford. I moved
8. here back in '84, '85. Came here, on and off since 1981,
9. chasing the job. I'm the Alaska Eskimo Whaling Commissioner for
10. Point Lay. I (indiscernible) workers in Point Lay and I also
11. sit on the Alaska (indiscernible) Whale Committee, as a member.
12. I'm the Search and Rescue President and Public Works Supervisor
13. for the North Slope Borough.
14. REPORTER: Could you spell your last name, please?
15. MR. REIFORD: R-E-I-F-O-R-D.
16. REPORTER: Thank you.
17. MS. HEARON: My name is Lucy Heakok, N-E-A-K-O-X. I'm a
18. ASRC Village Resource Representative. And I'm also the Native
19. Village Appointment (pn) Secretary.
20. MR. LOHAN: Thank you. Sharon can you tell us a little
21. bit about the decision out of the Alaska District Court on this
22. lawsuit, so folks understand why we're here a little bit better,
23. then I can explain.
24. MS. WARNER: Okay. I put on the table the two Court
25. Orders that came out concerning the case. Again, the case was
26. filed of January, 2008. before the lease sale was to be held in
27. February of 2008. So the Judge, when the lawsuit was filed,
28. there wasn't, like, an injunction filled with it to stop the
29. sale. So the sale went ahead and was held in February of 2008.
30. And so the lawsuit was still at the District Court and
31. over time it stayed there. And part of the reason why we have a
32. decision that you may think of, you know, it's February 2008,
33. sale happened and we get a decision out of the court in July of
34. 2010.
35. Why, you know, why did it take that long? The reason why
36. it took that long is because there was another case concerning
37. Sale 193 in the D.C. Circuit Court over the Secretary's five
38. year program. So the Secretary when we -- before we have a
39. lease sale, it's within the five year program. The Sale 193 --
40. Chukchi Sea Sale, was in that five year program. And the
41. Department was sued by the environmental organizations
42. concerning having that sale, as well as other sales in that five
43. four year program.
44. And there was -- the Chukchi Sea Sale was in there, plus
45. two more sales in the Beaufort and more sales in the Chukchi
46. Sea. So the Secretary was told in that lawsuit that he had to
47. look at the environmental sensitivity when they're looking at --
48. the (indiscernible) Lands Act require looking at environmental
49. sensitivity. And that wasn't done to the Court's satisfaction.
50. So this District Court case for the sale -- this Judge
51. didn't make any decision on that. And because, if the Secretary
52. decided once he looked it the five year program again, not to
53. have that sale in there, then the Court wouldn't have to decide
54. on this one, because it was in another Court. So it's very --
55. in several Courts I hear that's how decisions of the sale that
56. was.
57. So when the Secretary of the Interior came out with his --
58. affirming this five year program again in March 21st of this year
59. 2010, he did a preliminary revised program. It kept Sale 193
60. still there in that five year program. But he took off, out of
61. that five year program, the two Beaufort Sea Sales and the two
62. Chukchi Sea Sales. So the only sale that would be in the Arctic
63. would be the one that had already happened. The Department was
64. not looking at any more sales during this five year period of
65. 2007 to 2012.
66. So once that was made, then the District Court knew that
67. the Secretary was going to leave the sale as is. And so that's
68. why the District Court now decided to take on back the, you
69. know, look at the case and look what we did with the
70. Environmental Impact Statement, and so in July 21st the District
71. Court first issued the decision, an Order saying, as Jeffery
72. said, that, for the most part, we, the Bureau, had met its
73. obligations under NEPA. And the only places that we did not
74. meet those obligations was that we didn't consider the natural
75. gas. And we didn't consider the missing information and the
76. cost to obtain that missing information.
77. So the Court told us, and that's why this IIS is a -- you
78. notice it's a supplement. And it's small because it's focused
79. on just what the Court has remedied. Because all the other
80. issues that was raised by the governmental organizations, the
81. Native Village of Point Hope, Brett (ph) Oil, Inupiat Village --
82. Community of the Arctic Slope, were also litigants, plaintiffs
83. in the lawsuit. The Court looked at all those arguments that
84. were made there. It said, the Federal government, you know,
85. prevailed on those issues. But you need to go back, the Federal
86. government, and take cares of these others.
87. So that's why the Supplement was done and that's why it's
88. just focused on those areas. The original IIS that it
89. supplements is still there. So all the information and Mike
90. will go into more on how the supplemental IIS is done.
91. What's going to happen is that once we have the draft
92. Supplement, take public hearing, and take comments on it. Then
93. there'll be a final Supplemental IIS. And that will be filled
94. with the District Court. Because the Judge still has the case.
95. So that'll be filled with the District Court. And the District
96. Court in September of 2019, also set out what the schedule of
97. when he wanted us to reasonably meet that -- His Order and he
98. has a court date of January 21, 2011, six months from the first
99. decision Order to say, you know, -- six months you should be
100. able to reasonably, you know, meet this -- fix those
environmental compliance issues.

And so once it gets filed with the District Judge, the parties that sued the federal government is going to be able to see the document also the documents behind it that went into preparing that document. The attorneys, the legal representation will be filing briefs back and forth and why it needs it, why it doesn't need it. And then the District Judge will say whether or not it needs it. And so, I mean it's a long court process that we've been in. But the District Court Judge will hear it on the points filed.

Mr. Loman: Any questions about the court case in this litigation? Yes.

Mr. Rexford: When Point Hope filed their lawsuit and (indiscernible) also filed an injunction which would have stopped the lease sale, that's what I assumed.

Ms. Warren: Right. There was a lawsuit -- to get an injunction there's criteria that has to be met. And there was just a recent lawsuit that was filed with Sale 202 which was a Beaufort Sea Sale. And they filed an injunction on that one and the Court didn't --

Mr. Loman: Grant it.

Ms. Warren: Didn't grant it. And so, I don't know -- that's a legal strategy move for that party. And why or why not they decided. I don't have the answer. I mean, that would be something that you know, to ask them or their legal --

Mr. Arniskett: Okay.

Mr. Rexford: To warmer climates.

Mr. Loman: Mike could you talk a little about this Supplemental Environment Impact Statement that had to be prepared?

Mr. Rotunno: Sure thing. So the Judge asked us to do more with the analysis, those issues that Sharon talked about. And so we started to prepare a Supplemental Environmental Impact Statement which we feel is -- pretty in-depth analysis and the process also allows us to come out to all the communities and hold meetings like this. It's a pretty focused document in that just addresses the issues that the Judge told us to address.

The first one of those was preparing analysis of the environmental impacts of natural gas development and production. We didn't do that in the original document. After the original document was published, some circumstances changed. And by the time the Judge looked at it a couple of years later, he said, well, you know different circumstances now. You got to -- really need to do that.

So we set out to do that analysis. So, to understand the environmental effects of natural gas development and production, we needed to know what kind of -- what exactly the activities would be. And so get an understanding of a reasonable scenario to give something to our scientists to analyze, we talked with our geologists in the Resource and Economic Analysis
1. Section of our office. Bob, here, leads that Section. So I’ll
turn it over to him then to give you some more background.

2. MR. PETTSON: So that’s where I get to comment and
especially let our geologists, you know, with the basic starting
point is, okay, we’ve already analyzed the oil. Do we see a
potential for gas out in the Chukchi Sea? And, if indeed we do
-- so we have to build a reasonable model for Mike’s group and
others to have something to study. And, indeed, you know, we’re
able to say there’s a reasonable area in the Chukchi where we
have large structures. We think there’s a reasonable chance of
oil and gas being there. We’ve already studied the oil and the
question is, okay, if there’s major gas accumulation there and
the reason we put them together is oil is much greater value.

3. We still don’t believe that gas -- a gas deposit, on its own,
could make it economically. So we think it would be associated
with an oil deposit where you had the added value of the oil
that would pay for an awful lot of the infrastructure. And then
gas development would be economic, you know, sort of
piggybacking on top of this oil accumulation.

4. We picked somewhere reasonable in the Chukchi, you know,
60, 80, 90 miles offshore, provided that the amount of drilling
and oil and gas wells and all -- could be investigated. Of course
we’re now looking at not only an oil pipeline to shore, but we
would have a parallel gas pipeline that would come on at a later
date.

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1. billion onshore investment infrastructure. Some would come
earlier with the oil and the oil pipeline. That would be taxed
at the similar level we anticipate to what’s at Prudhoe Bay.

2. And supplying -- I think between $2 and $250 million a year in
tax revenue to the North Slope. And then, at a later date,
you’d see a second expenditure as the gas infrastructure came
on.

3. So that’s the -- we know, a reasonable what we think
could be discovered -- how would be developed and how that
accumulation, that field, you know, would flow into the current,
well, flow into the system. Now having done that, we can now
have something specific that Mike’s group can go, okay, now we
have something specific to analyze and examine the effects of.

4. MR. ROUSE: Yeah, now our scientists know, basically,
what could be entailed with the natural gas development where
we go forward. And so, basically, we handed off that scenario
to our scientists, our oceanographers, our Marine Mammal
Biologists, our Economists, all those people. And ask each one
of those to give their forecasts of the type of environmental
impacts that could result as -- result of those activities. And
we documented all those forecasts in this document.

5. Basically, this document -- we summarized some of the
findings and some of the facts from the prior original document,
you know, because we’re building off that document. We’re
supplementing the document. So we summarize after content and
The North Slope Borough's library -- we had a meeting the other day. Half of that library -- just, you know, a casual look, is literally those studies that we've produced and they don't have anywhere near all of them.

There is a lot of information, an incredible amount of information. Will we gather more? Yes. It's a work in progress. More yet, yes. But there have been many, many vessels that have been involved in scientific studies in the Chukchi Sea since the early '60s, or maybe even before.

MR. REDFORD: I mean the Japanese and the Chinese are in our waters with American scientists. And this is what we're finding out in our Alaska Small Whaling Commission meetings. And they're letting the United States -- was the only one that had one in Arctic waters. And they're saying it's going to be another six years before we get a working icebreaker which -- this is a long ways away, six to ten years.

I just want to echo some -- one of our elders' comments, that has passed on. This is Point Lay, E-09 Table (ph) 54. Public hearings leading to offshore development have taken place in Point Lay between 1975 and 2005. These hearings include traditional knowledge regarding the traditional migratory routes of subsistence resources, statistical hurdle to, without fail, response observed effects of noise pollution on marine mammals, cumulative effects of oil and gas development and current ice conditions.

The importance of the annual belugas harvest, including maintaining the ability to protect their seasonal moves is evident from comments made at public testimonies from 1987 to 2007.

In response to exploratory seismic operations, Point Lay residents have expressed their concerns regarding the accumulation of subsea noise pollution, pipe for offshore oil and gas development. For example, in 1987 Willie Tugarkook (ph) testified regarding this concern.

I've seen the same thing happening in Kotzebue. The belugas hardly going to Kotzebue Sound anymore, where they used to be numerous. It might be too drastic noise pollution, but I think some kind of a study should be made and included in the Draft Environmental Statement before this lease sale takes place. Willie Tugarkook (ph) 1987 Sale 105. Point Lay. Thank you.

MR. LOHAN: Thank you.

MR. REAVON: Not only Kotzebue Sound but also -- but the port studies there, Kivalina used to hunt belugas. And -- but now, you know, they're having a tough time. Last 10 years after they extended the port -- that dredge out or even when they built the port, or started to build the port they started losing their belugas. Migration would change for them. And they would have to go way out -- the belugas have to go way out just to get away from the noise.

And also, just like what's going on at Cook Inlet, you know, they're almost gone right now. When I was a little boy I used to go out to, you know, Ship Creek and watch all the belugas. You know, there would be hundreds of them, thousands of them. Today you can almost hardly see 50 because of what's going on with the Cook Inlet. You know, and all the oil platforms and everything, all the noise, all the ship traffic that's going in and out of the Port of Anchorage. And now that they're moving up, you know, that has to be a sound, with all the ships. They're losing their belugas. They have to go way out there.

Now Kivalina -- they're going half, you know -- they're losing their subsistence food because of the noise from the Red Dog Port. And now you want just to come up here and start drilling and we know that can happen to same thing to us too. We've been hunting belugas ever since, what 1979, '78, '79, maybe even earlier. And I don't want to lose my subsistence food just because, you know, western civilization wants to have oil or gas.

I know there's still quite a bit here on land somewhere. But going out there, you know, rerouting our belugas because of -- you know, their migratory routes they have taken for thousands of years. I don't want -- I just don't want to see that happen to us. I've talked with people down there in Cook Inlet area that hunt belugas, used to hunt. You know, without
TransAlaska Pipeline. But, you know, it's -- you know I've started to be a victim of what's happened -- been going on with Cook Inlet. Kotzebue Sound and Kivalina.

You know, I don't want us to lose our way of life that we've been living for thousands of years. And, that's just me you know, I love this country. I love this state and I love this nation, but you know.

And you can find an alternative way of, you know, energy -- there's quite a bit out there. We've got smart scientists out there that can turn corn into fuel. You know, it's just -- it's just waying out of that and especially for this area here. Especially when Beaufort Sea -- I'd sure hate to see them lose their, you know, traditional way of whaling of bowhead, food that we need, each and every year, to sustain us during the winter.

As for us -- belugas, we harvest our belugas every year. And we need that to sustain us, you know, during the winter. It keeps us warm, fed, our families fed. You know, we just only spend like $20, $30 on shells. But then we try and buy alternate food like steaks or hamburgers or french fries, you know, they go over -- like five, six, $70c, maybe over $1,000 every year. And here it only takes us $2c, $30 worth of shells. You know, to sustain us with belugas. Or even banks that we need to harvest bowheads with this, you know. Just don't want to become a victim of western civilization because of oil.

I'm against, you know, offshore drilling. You know, if it goes to that, we get oil pipelines going underneath, you know, the ocean bottom. Then they come in on shore. Then we have, what, five, 600 miles of pipeline. That's going to affect the migrational caribou. I'm worried about the caribou, too.

Migratory birds, you know, they're going to have pump stations in between. I know that, as they do with the exploration and your drilling.

Because I'm sure I can see what's going to happen, you know, like what happened in the Gulf of Mexico. And with the Exxon Valdez, those people are losing a lot. Here we're going to be losing everything. We live off the ocean. We live off the land. And if an spill happens out there, we have no more belugas. We have no more bowheads. We have no more seals. We have no more fish. We have no more migratory birds. And also, you know, if they say they're going to come through and make harbors so the oil won't go into our lagoons, somewhere it might be too late. Then we'll lose everything on land. I'd just -- sure hate to see that in the future. That's just the worst case scenario that I might be thinking of, or what we should be thinking of. Because that -- that oil currents out there go all the way around Beaufort Sea, Arctic Ocean, Chukchi Sea, Bering Sea. It goes all up and down this coast, west coast of Alaska.

I know it might be small and I might be a small and insignificant person talking. But, you know, I just don't see what's going to happen, worst case scenario when you know it's going to happen. Because this affects not only me, not only my grandkids, but my great-grandkids, all our great-grandkids. Because I want them to enjoy what I enjoy today. I love my Native food. I love to fish, hunt. And I sure can't lose that because they, you know, haven't found ways of getting oil and gas to the market. Like I say, I love this State. I love this nation. But we're going to be the victims if something happens like what happened in the Gulf of Mexico and, you know.

Prince William Sound. Thank you.

MR. LOHAN: Thank you. Did anybody have any questions about the Draft Supplemental Environmental Impact Statement?

MS. TRACY: If they don't give their testimony, do they have another time to do that?

MR. LOHAN: Well we're taking comments.

MS. TRACY: Tonight.

MR. LOHAN: Yes ma'am. We're taking comments until November 29th.

MS. ANNISSEIT: I'd ready to give mine. I'm a skin sewer. I use the animals for fur. I make the (indiscernible) from Point Lay, a long time resident. I've gone to boarding school. I'm a Point Lay Corporation Shareholder, a Secretary. I'm a North Slope Borough Full Board Alternate. I'm a BAG, North Slope Borough School District Member, a Native Village of Point Lay member in the Council and a member of St. Eliz's Episcopal Church.

And I don't know where to start. I feel like there's not enough facts to approve sales for drilling. We have a whole -- again, I have -- repeat this about a hundred times -- migratory area, the whole area -- animals, bowhead, mammals, fish, walrus, polar bears. And if they do have an oil spill, the winds -- the
graying.
And, if there was ever an oil spill, it would really
damage our water area. I feel like our water, our water lake.
And from the caribou, we dry the meat for the winter and put it
away. So these are really important stuff. As a woman, we take
care of all these. And you have a hunter that goes out hunting.
The uroqak (pl: we use for covering skin boats and the caribou
to sew -- the skin).

Don't worry, I don't have lots, as much. And I want to
express our beluga annual hunting. It's a big thing for this
village. And we had just recently got a quota for whale. And
there is a procedure and a way that we do for beluga. We have a
meeting and we get all the captains and co-captains for each
boat, we sort of try to figure out how many boats we're going
to have and we all have -- we all elect. We have a meeting date
and a church blessing for our beluga hunt or walrus or bowhead.
And the Captain is picked by the residents. So it's very
important for us to listen to our Captain. We have to show
respect. We work with our Native Chief. We're informed --
someone's always watching out for the wild animals when they
come in. We collect gas for hunters. And there's a whole
procedure of how do we go out hunting. So it's not just what we
hunt out there. We try to show respect for our land. And we
have buoys with harpoons, which we have to take care of. And
the guns -- and there's rules of how we have to shoot and

harpoon the beluga.
And all this we teach our younger people and haul them
into the shallow water in the lagoon. There is a certain order
we give. And we listen to the Captain when he says to shoot.
And then we haul the belugas to cutting hill. Then, when it's
nighttime and they haven't slept for hours, they go howe and go
to sleep. And then we have the youth, which watches out for
belugas across there. And then next day we start cutting.
Everyone is responsible to go and help. And with -- to cut up
with our club and knives. And we divide all the belugas to how
many houses -- houses we have in the village. And this is all
the rules we have to follow. It's just not one big picnic.
It's a lot of hard work. You have to be permitted. And we
really respect this land. And we try to respect each other in
what we do.
I can't think of anything else. But I'm sure I'll think
about something. But this sewing is really important to me
because I'm a skin sewer. And we do need all these warm parkas
when we go out whaling. Very important for us to the wolverine
and wolves, the animals and the seal to make mukluks and muzzens
and parkas, jackets. And you have to know how to sew. Real
important where you don't have oneself or your family and you
have to pay someone to sew. So it's very important to know that
knowledge of how to make a boat, a skin boat and the outboard
and the gas and the ski-doo. And everybody have their own

little part in whaling. So the Captain is always the head of
each whaling crew. And it's really important that people listen
to him and how to respect. We have Inupiat values which are
very important to us. Thank you.

MR. LOMA: Thank you. Thank you and I have a question.
Lily. You talked a lot about communication that takes place
between the people who are involved in subsistence activities.
And so I have to believe, but I would ask you. The terms in the
Inupiat language that are exclusive to those activities, if you
weren't conducting those activities, that part of the language
wouldn't be used right? You have no other reason to say some
certain words about certain actions?

MR. ANNESEEN: In everything we do we use Inupiat values.
We have some up there and my dad's -- one of them when he was
younger was charity. I won't say what (indiscernible) was
changed to certain thing. We used to worry, worry night, day.
Deal with life, serious situations. We have -- we were taught
to respect the elders, very important. And if you don't teach
that it's a shameful thing to see.
And we have men that teach our younger generation which we
do a lot of with the beluga and whaling. But I think that we
can do more in taking out the youth in caribou and showing them
how to cut the caribou and not waste. The elders always remind
you, do not waste. We had Charlie Tuchulake (pl) who was always
taking a part to show people if he sees someone wasting
something that, you know. he scolded them on the CB or go to
then and tell them. Almost everything we do in life we have law
-- laws that we listen to under respect for the people.

UNIDENTIFIED MALE: There's over 100 words to explain
types of chukchi (ph). hundreds of good words in our language.

MS. ANISHEKT: It's easier for us to understand what is
happening in your family. It's more -- it's not -- the thing
is, you could only say certain words and it means just a little
handful of stuff. But Inupiat, it could mean a lot of stuff.

you know. All of our hunting we have back from generations to
generations and all sort of to take care of your neighbor and
share,

MR. REDFORD: Ice conditions in the oceans there's
hundreds of terms to use in what type of ice conditions.
There's hundreds of terms for the ocean of ice. Just like the
snowing -- we have hundreds of ways to interpret what type of
snow and the condition at sea. And how it connects to the sea
ice when the snow falls onto it. There's terms that we use.

MR. LOMAN: But you mentioned that young people learn to
respect certain and have -- and develop values for things, not
waste things. In your experiences, anyone, did subsistence
activities teach you things like being patient?

MR. REDFORD: Yea.

MS. ANISHEKT: If you don't get a duck bird, I could be


yesterday compared to all those tens of thousands of years
before we got to the telephone. And that was the one that
you dial it, you know. And since then, all of these things that
we have in our pockets and our hands that we look for this
information, but all of those things don't, at least for me, do
much for my welfare. Don't teach me patience, probably the
opposite. Don't teach me manners. Teaches me bad manners.

But, you know, part of this law NEPA requires us to take
public comment and be open about what we're doing. We talked
earlier about 40 pages of scientific uncertainty that was listed
in the old document. I think we'll always be learning about
what subsistence activities mean to the people and to their
well-being. You can learn it but you can't really understand it
and it can't be in a meaningful way without really, you know,
really talking to people and seeing what it really means to them
like this opportunity here today.

That means a lot more if and when I'm back in Washington
D.C. or any of us and some decision maker wants to make a big
decision like they did on the Chukchi Sea Sale. They don't have
the opportunity like we do, forced by this law to come up and
talk to you. And the other thing that NEPA does, it requires
you to analyze the effects on human health. And human health
now, by the international term, and we believe that it's true --
means well-being.

So, you know, I talk to people and I don't know exactly,
be allowed before the exclusion period begins? One operation at any time.
Are there any restrictions that need to be applied to vessel transits? They should be monitored through OW (Con Cen-
each Chukchi Sea Village, Point Hope, Point Lay, Wainwright, 
Sawar, well before going into the Beaufort, to Barrow, Nuiqsut, 
and Kaktovik. Are any other restrictions needed? Zero harpooning
discharged 100 mile buffer zone. Very (indiscriminable) activity 
and quiet period from April, May, June, July and July 20. And 
quite period in fall, September 16, was the area we had 
selected between Point Hope and Point Lay. But Wainwright was 
different.
Okay, going down to Item E. Point Lay, at the completion 
of the Point Lay beluga hunt, then seismic can begin. Hunt 
Coordinator will make a call to operators about start 
(indiscriminable) into the Chukchi Sea after the hunt or until 
July 20th, you know. The day of the hunt, beluga hunt day -- if 
we're done with the beluga hunt before the July 20, we just make 
a call to the operators, offshore operators, to say, we're done 
with our beluga hunt.
And when we presented this July 20 data back in '09, 
during the '09, to Shali Oil Company, they said they wouldn't 
sign the CAA with that date. And that they -- they threatened 
us with not opening our Town Center, which they didn't open it.

Nobody worked. We didn't mind. We didn't want their money 
anyway. And it didn't happen. So, they went through with their 
threat. They put -- three people were out of a job. So -- but 
they were open -- they had their Council to open this year.
Okay Point -- it says same as Wainwright.
Point Hope -- stop whaling in end of May. If ships conw 
by around July 20, that would be fine with Point Hope. Support 
other villages. Vessel should be required to transit well 
offshore, yes, 30 to 50 mile offshore.
Monitoring Needs. Should the AEMC require monitoring of 
additional subsistence resources? Yes. All of the other marine 
narwhals should be monitored. The bearded seal is used for the 
skin of the umiak. And the spotted seal blubber is used in oil 
the umiak frame.
Should the AEMC put the oil industry on notice that a 
comprehensive baseline study will be needed starting 
next year? These were written up in, I believe. '99.
Atwood and Wainwright. Barrow, Broughs to the northeast 
of Barrow, September 10 to end up whaling season, know as 
existing CAA, generally 30 miles away. Submit and follow a 
schedule of operations with the AEMC.
Same as four. Ensure that no unmitigable adverse impact 
-- language be included. Also need the safe harbor language 
from CAA. No Captain Halsewoods.
And, I don't know if you are familiar with how the CAA started with -- started back in, I don't know April 
(indiscriminable) I believe. And it was because of Hsiiput and 
Acu (ph) were the most impacted communities at the time. And 
CAA just -- it's been an agreement between the AEC and the oil 
industry, basically. So, you know, so that the whalers could have 
a safe hunt. And bountiful hunt to that harvest of whale for 
whales in the same manner. And the, in the, in the Beaufort 
Sea, there was drilling going on in Camden Bay. And my uncle 
lives in Nuiqsut. His name is Archie Aikinak (ph). He was 
former Commissioner for Hsiiput AEC (indiscriminable). And 
retired last year due to health problems. And he said, when 
they were drilling in Camden Bay and seismic going on in that 
area they were at, they took a whale. But they were 30 miles 
cut. And then the big winds came and they had to cut their 
lines and let the whale go -- to go, you know, for safety. For 
safety -- life, health and safety is more important than the 
whale.
And I've been in situations -- we're in fog whaling in 
Barrow where all 11 boats unhooked and we stayed hooked up on an 18 
foot boat. And 11 boats -- I mean these were the big boats that 
unhooked. Mr. Tom Brower, his whale we were towing and our boat 
started unhooking and going around the point while we were still 
towing. Seven boats were the only ones that towed the whale in. 
But we got -- when we got there, it was breaking waves on the
beach and (indiscernible) I don’t know how long to the beach.

2 We endured some, you know, it was the biggest year of the hump.

3 which we did. The hump was 52 feet and it was shared between

4 seven, eight, with the people that cut it up. So it was a

5 pretty good -- good sharing that day.

6 And I’m against offshore exploration and drilling, period.

7 I believe we have enough gas and oil on land to sustain our

8 needs and the United States for years to come. And that

9 drilling in our ocean is one of the biggest risks that the

10 United States is going to take.

11 And unknown conditions here can have hurricane form

12 winds. Some years we had winds up to 70, 75 miles an hour. And

13 these drill ships, they say they’re going to jack them up sixty

14 feet above the water. But, can they sustain heavier waters --

15 heavier salt waters from the wave action? I mean said the

16 salt salinity is higher above surface and in cold surface --

17 cold surface salt water and it’s heavier. And with the wave

18 action, it can move anything. And someone else should come too.

19 Thank you.

20 MS. ANNISSETT: Lilly Annissett. There was a death in

21 Point Hope where else our -- the whaling captain and his crew or

22 family would be here also. But they chartered -- elder that

23 passed away.

24 MR. LOMAN: I thank you.

25 MS. REXFORD: Thank you.

beats, and the whole village participates. And this is how our

young ones learn from us that we learned from our elders. And

we continue to teach our young ones how we do things, how our

ancestors do things, that they had been doing for thousands of

years.

And now, with the scarcity of ice in our ocean, the

changing of our weather and the changing of tides. I guess the

whole world had heard about our walrus hollow. People were

calling here on the phones. Our phones were ringing. People

were calling and saying we want the truck -- we would like to

take a truck when we get off the bluff in Point Lay. And we

would like to rent a boat. And we would like to take these

people and go to the walrus.

We want to -- and we want to come and take out the

tourists and come and fly over the walruses so that they could

take pictures. We’ve had polar bears down there while the

walrus was here. They’re stampeding, natural stampeding and we

don’t need the two-legged race racing down there to take

pictures, just to show what we have here. We’ve been trying to

protect the walrus here and try to keep them from stampeding.

But then, at the same time, we can’t keep the polar bears or

bears away from them. When the wind is right, we can smell

them. The stench is very strong. And if there is no ocean and

the wind is right you can smell them. If you can’t hear them,

and you could smell them, then you know they’re nearby.

MS. TRACKEY: These different oil companies that come to

our region, that come to the (indiscernible). They talk to us

about wanting to preserve our culture and preserve our

historical sites. And yet, at the same time, we believe that

the ocean is our culture and our historical sites.

For years now we come past -- we used to have our caribou

meat for our whole family, for our whole village -- feed the

village. That was our main meal dish. Now, with the scarcity

of the caribou not coming around to Point Lay, we depend heavily

on our sea mammals for food. And it scares us to death, almost

to death, that people that don’t live around our area, want to

come up here and drill and make rules for us and say, okay,

we’re going to drill in your ocean, whether you want us to or

not. And here we are we’re talking and asking you not to do

this against our wishes. But you’ll do it anyway.

We talk about wanting our grandparents and their kids to and

grandkids to hunt the next, what we are presently eating. We

work hard for our food like my sister said. We dry meat during

the summer. We make oil during the summer. And every season

it’s a different season of different types of food. And we

don’t have gardens to grow anything. The ocean is our garden.

It provides us food. And recently, after 73 years, we had

gotten a whale. We praise the Lord for that. And that day was

a lot of food for the winter.

But without beluga hunt, when we hard the beluga with

MR. REXFORD: If you’ve been near a big farm, that’s what

they smell like.

MS. TRACKEY: Anyway, we’ve had pregnant women walking

outside, they’re trying to vomit. That’s how bad it was. But

then, at the same time, it was good to have them here. We could

hear them. When you’re outside, they’re loud. They’re like a

real loud crosstown, you know, and I mean they don’t have anybody

doing this for them, like the orchestra or the bands, you know.

I mean, they’re like, wow. You know, and very harmonious. I mean

you know, each one of them wanted to be louder than the other.

But we go into our houses and we try to sleep, but we could hear

them.

It’s a beautiful song. But then the scarcity of ice down

there, it kind of scares us. I mean they were like ten and

thousands and thousands of walruses down there. And the

beach, and what they do, is that they crowd there next to each other.

And they’re crowding out each other and the beach would get

full. The sandy beach would get full of walruses. And there

you could see walruses out there in the ocean. And they’re

still coming up to the beach. And then once they’re on the

beach, they’re being pushed up to the grassy area. And then as

more come up to the beach, more walruses are getting pushed up

onto the grassy area. Boy, this is a sight to see.

It was beautiful. I -- you could see -- it’s like you

know when you see the ocean, you could see brown -- brown spots,
brown lines in the ocean. Just -- it's all walruses. You know, you could see their tracks when they come up and they're -- and the ones nearest land they're big. I mean, they're huge. You know, and they're moving and the ones that were tapped. The ones that we have seen, they have sent us the direction that they would travel, we've seen them go to that same area where there's lease sales out there. You know, like Shell Oil and ConocoPhillips and the other industries. And it's probably the only reason they go out there is probably to feed. And that's around the area -- the belugas too. They take belugas.

And recently for those years and that was the last year that the ice was gone. I mean, it's been gone for so many years. And Fairbanks. Via (ph) and his crew were here. Every summer for three months they were coming here and camping out there and taking pictures. You can see the one up there -- there's a new picture over here. You know, they -- satellite based on them and then they send us the migration or the -- it's amazing. Some of them go to Asia. I mean. And then there's -- you know, some of them go down south and (indiscernible). It's amazing. I mean. I'm glad these people come and take the walruses, the belugas, the loons, the seals, you know. What can I say but no, thank you? I have a lot of information. But now I'm kind of getting a little overwhelmed now.

But then all these things get passed down to us from our ancestors. And we learn from them and then we teach the young ones that they want to learn from us, you know. So we do our best to try and teach them. And every season is a different season for us. Different mammals, different animals, different kinds of birds, but the reasons are always here.

But I would like to thank you, guys, for coming here to, you know, get our input on our village, our village life and the animals and mammals and foods that we have here. I know this is such a strange place for you guys to be. But I see bears walking out there -- and the weather does get worse than this so, you know. It's just our way of life and we love it here.

I was born in the old village down there. Yeah. And I, as soon as I turned six I went to Wrangell to go to boarding school. And then I graduated from eighth grade from there. And then I went to Chelan (ph), Oregon for high school for four years. So I was away from my hometown, my parents, for nine months out of every year. So, that's the story of my life. But I really missed my parents, you know. I recently lost my Dad -- simply become sick. And he did a lot of hard work for us. You know, like hauling coal from up-river for our winter supply.

Getting ice from the pond, ice pond, and bringing it into the ice cellar for the spring, for springtime during breakup. And it's just, a lot of the stuff that happens here is very awesome. You know, if you don't live in a small village. And in a small village you have to help, you know, and that's just life here.

Thank you.

MR. LOGAN: Well, thank you.

MR. NERKOK: You know we talk about traditional knowledge and how you know how you talk about western civilization. But we talk about -- we tell you folks what we do -- how we live -- how we live during each season. We pass it on to you yet when you go back to Washington you know traditional knowledge couldn't (indiscernible) anywhere. That's how I see it because you know (indiscernible) and that kind of (indiscernible). Naugot they have their traditional knowledge. They told me it's why it's complicated -- this is where we get up -- this is where the migration of the caribou come. This is where the boxhead migrate to the ocean. These are where the ducks molt -- these are where the fish you know come every summer -- every fall -- every winter when Washington hears about it you know it seemed like you know kind of (indiscernible) our land. That's how it is.

And here Naugot you saw the (indiscernible) to what a company. They lost their fishing for some of them. They lost their caribou. They have to go out past the pipeline in order to hunt. In the past before the oil companies came they were able to go out there and shoot a caribou. Now they have rules -- regulations. Traditional knowledge for them went out the door. Why should (indiscernible) turn to hear about it. Or think what they hear about it. How they're surrounded by three sides and now they want to close their backdoor to them -- threw it out there in the ocean in the Bering Sea. I feel for those people that hard to go and pay eight or nine dollars a gallon -- you know what (indiscernible) whaling have 2.52 gallon here (indiscernible) -- even cheaper than they do in Fairbanks.

Again you know traditional knowledge seem like doesn't matter in Washington. Yet it matters for us because we live it. It was passed on from generation to generation. It's not even written -- passed by word of mouth. That's how we survived up here in the cold and the darkness with the bugs. All the mosquitoes. They try to (indiscernible) use different stuff to you know heal ourselves. The different plants that we need -- the different berries where to pick them. All passed down by word of mouth. You know we just (indiscernible) maybe Washington to see traditional knowledge in small letters.

You know I (indiscernible) just last month. It hasn't really (indiscernible) on the North Slope to be subjected to what's happening in (indiscernible) right now but now they want -- like I said earlier -- now they want to close them off
through the ocean. Just like the surrounded by western
civilization when they could be proud of Inupiat. You know they
got their dividends from the oil and gas land but
(indiscernible). You know their land that they lease every year
to the oil companies. Pretty hard to see that you know why
Inupiat values over there we talk to NOAA but yet they still
have it in their heart -- in their minds. This is how we do
things. This is how we seclude. They still have their hunting
-- their whaling -- their fishing yet they're limited because
why should they stay when they could go to A. The oil company
say zero tolerance on (indiscernible) yet in the newspaper we
hear Prudhoe Bay got oil spill -- explosions. You know people
give them (indiscernible) and yet they say zero tolerance when
they come to our village.

We will not have an oil spill (indiscernible) that paper.
Yet you know mechanical (indiscernible) you know it still
happening and yet they're still out there drilling. The people
let the oil companies go out there and drill and something like
that happens like I said earlier in the Gulf of Mexico and
Prince William sound. You know that's. You know they promised
us that there wouldn't be able to have an oil spill -- they
probably promised those people down there in Mexico too. We
will not have an oil spill but yet look what's happened. The
oil company would it took to cap that well. I was watching that
thing every day. Watching all that oil come up. Our people has
been affected by it and all the animals that are affected by it.

I don't want to see that up here or in Beaufort Sea.
Because all the coastal people live off the water. We
live off the land yet when you folks leave here and when
Washington hears about traditional knowledge it doesn't
necessarily. We might talk about it here but then when it
reaches Washington (indiscernible). That's why I'm so adamant
about you know finish what's on shore first -- drill wherever
and be but cut in the ocean that's the place I want to see in my
lifetime especially out here in Chukchi and Beaufort.

Traditional knowledge -- our kids are learning that by
word of mouth as it has been gradually been passed on to us.
Now with my kids and wish that kind of set on -- we learn from
everybody here. How we do things -- how we survive. You know
I'm on the Search and Rescue to and I (indiscernible) see
anybody stuck out there overnight especially this time of year.
While the summertime too. We're just like that and we're stuck
out there somewhere and yet something bad comes it happens to us
-- sort of like a worst case scenario (indiscernible). Pipeline
being filled all the way from -- maybe I should (indiscernible)
between Holmworth and (indiscernible) Trans Alaska Pipeline.

The Environmental Impact Statement on that
(indiscernible). I was just going to be -- maybe I ask pipeline
from platform to the shore how is that going to be
(indiscernible)? That's going to have to be a four or five or
six hundred pages long. Who has the time to read the EIS -- to
say yes, yee, yee -- looks good -- looks good. I know it would
probably take me a couple of years just to read the EIS form for
the whole packet.

People say EIS looks good. Somebody who's paid to have sit
don and read it. What (indiscernible) here trying to survive
in our small village. Every season -- fall -- (indiscernible)
and summer. Yet people come here and say yee EIS good to go.
We're going to fax it out to Congress so they can pass it. So
go out there and do it. In that case you'll have -- you'll find
lines that you know even enough to where oh yeah we can do this
-- we can do that because it's already by Congress.

You know I sure hate to see my grandkids lose the food
that we harvest each and every year. Traditional knowledge that
we have -- that we hold onto dearly each and every day. Even
during daily life when we talk to each other we're passing on
traditional knowledge. I ask the people how's the ice -- how's
the seal -- how's the river -- still passes traditional
knowledge to me because I want to know and if somebody's wants
to know from me I pass it on to them. I don't go to dinner and
gladly tell them and say here. I pass it on by word of mouth.
Yet when it goes to Washington it disappears.

People come -- Shell -- Conoco -- they hear about it yet
when they leave so does the traditional knowledge that they hear
from one goes out the window. They talk about it maybe briefly
yet they're talking about the EIS what they going to do -- how
they going to do -- how can our (indiscernible) this state --
the nation? Yet our traditional knowledge is at the bottom of
the (indiscernible) board. I just hope that something comes out
of this to where you know we can stop the drilling that's
happening out there. I don't (indiscernible) Chukchi Sea
(indiscernible). Beaufort Sea and say there are a lot of people
in the North Slope that are agree with Conoco or Shell but yet
about 90 percent are saying no. I seen it coming. We live here
-- people that come here don't -- they don't change the way we
live. We don't see how they live yet we see it on TV -- how
they do things. How they tell us you know we won't do this but
yet it happens. We live here -- we love it here -- we care for
each other each and every day.

When somebody sees a brown bear or a polar bear or fox
they get on the vhf and say hey something's coming to our
village -- everybody's on high alert. Yet in Anchorage
(indiscernible) you know when something happens to somebody you
know -- if they're a friend of mine (indiscernible). Didn't
happen to me -- I'm okay but yet -- we have family here. We
have friends here that grew up -- we care for each other. We
care for our land to put meat -- we hope that you know that we
can pass it on to our kids and grandkids and beyond. Hope that
like I say something good will come out of this rather than an
oil spill out there in the ocean and affect our way of life --
our way of subsistence.

You haven’t showed me how we going to clean up oil under
the ocean ice. It’s the (indiscernible) we have out there. Or
in broken ice yet they have boats registered to go out there in
the summertime. They show us that they can burn the oil on the
ice. Creating another problem with pollution that’s going out
to (indiscernible). That’s why (indiscernible) ice up here on
the North Slope. There’s a lot of the country you know don’t
care whether they’re polluting the air or not -- they’re just
trying to get (indiscernible). (Indiscernible) expecting less.
Our Arctic -- deep Arctic ice -- North Pole ice is shrinking
dramatically. Ice out there in the ocean is not as thick as it
used to be -- 15 years ago even maybe 10 years ago.

15 years ago the ice would be thicker than this
(Indiscernible). Now it’s only about only three feet thick in
the middle of winter. People don’t see this yet we do -- we
live it. People say no scientists -- say it’s not happening
-- they believe that. Yet they don’t come up here. We live it
every day. All the while it’s affecting us each and every year.
Just (indiscernible). I pray that we’re able to stop the
(Indiscernible). I hope someday we can get our lifestyle back
-- get those 10 to 20 feet of ice back out there in the ocean.
Spring time I’m afraid to go out there anymore. Hunt for
seals -- hunt for ducks -- hunt (indiscernible). I don’t know
if I’m going to go through the ice yet in those (indiscernible)
statement. Someone's always cutting in and it becomes a I
do commit. Nothing ever really gets said and then it's over.
It's different -- this happens here your timing is perfect
for us expressing our points of view and I really appreciate
that. And as Lily mentioned there's a whole group of values
that are lived by and practiced here every day. And as a group
we can record all those values and insert those values into SES if
you will. And it may work a little better.

We're talking about team work -- if we could all work
together we might come up with a plan that will work. Happiness
-- caring -- all these different values should be incorporated
and I think and we should work on that. We talked a little bit
about scientific uncertainties and possibly some of them have
been overcome like the bowhead whales. Not so fast the world's
changing and we're witnessing it here on a fast track.

Willard mentioned the ice disappearing or getting thinner
-- it won't be long before -- you know might not be any ice at
all or what? Or is it going to get cold again. The world has
been going through phases and cycles for billions of years --
we're just a rock hurtling through space for billions of years.
Nothing is really certain -- we don't know what tomorrow is. We
don't know what's going to happen on December 21, 2012 either do
we. I want to talk about.

With the walrus -- the last four years -- the walruses
have used the shores of the Chukchi Sea for refuge because there

mistakes because when they were stamped a couple of years ago
it was really ugly. And we believe that stamping was caused by
polar bear activity. So not much we can do about that but there
was something we can do about our involvement with them.
Another unique thing about Point Lay is that -- Willard
talked about Blighjut. Blighjut -- half the village -- the native
village are kind of an industry but the corporation is pro-
industry and they've embraced -- they're making money with it
and so got kind of a battle there in a single community. But
here the native village and Cully Corporation seem to be working
together really well. You know Wainwright is starting -- the
Wainwright Corporation is starting industry and what I have to
think is that even though the town is going to happen
regardless of any opposition up here but let it happen on our
terms.

And I think that's how some of these village corporations
are looking at it. It's going to happen -- we're going to
profit from it but it's also going to happen on our terms. And
we're starting to hear some of our terms now and then this was
here before and we spoke. And I haven't myself read the whole
EIS -- boy I'm going to read more and more of those
(indiscernible).

We've had studies here and we've had studies with
helicopters and I don't believe the helicopter is through
studying caribou what do you get. You get a bunch of nervous
caribou -- you're not getting the real animal -- you're not
getting the real behavior. We've had non-invasive studies --
we've had UAV was up here Marie mentioned for three years in a
row studyinghouse. Those folks were up -- they were in
(indiscernible) -- they studied the (indiscernible) -- the bird
was not nervous -- the bird was allowed to do it's every day
thing -- it was a beautiful study and I think that's what we
need to see more of.

We've got to stop using helicopters for everything. If
you want to study something that's distant go out there and
and spend time out there -- don't go back and forth every day back
to your camp and then come back out. We saw caribou -- we
didn't have an honest caribou study here because the helicopter
would bring the folks back and forth every day. We've had
fish studies and those are non-invasive -- go out in your boat
and not a bunch of fish and we get you know a true story there.

We've had local involvement with studies. If we want out
on a caribou hunt or a whale hunt or just out for a joyride --
we would come back and fill out a survey. And all that
information was pulled together and plugged in and no
helicopters. It was a really good study and the folks here
either made a little gas from it or a little bit of money. So
it worked out real nice.

You mentioned currents and yeah currents are being
studied. They've been studied for a couple of years in
1. Wainwright now and this year in Point Lay they just set up a
couple of antennas and they had the buoy going back and forth
out in our ocean and I’ve seen some live up to date of pictures
of currents. Off shore Point Lay and it shows some things we’ve
learned from charts but the charts weren’t complete but they’re
show us out there that kind of influence the currents. And
between the winds -- the shoals and the currents going by it
looks like if oil was spilled out here it’s going to be a mess.
It’s going to go out in multiple directions and also what I
learned from the currents is why and where the belugas are going
out there where the values are going out there because when
you’re boating out there and all of a sudden come across a
current -- there’s birds -- there’s fish to eat -- there’s the
(indiscernible). They’re all with these currents and
that’s where our food is -- that’s where the oil is going to be.

It would be a disaster.

So I mentioned that life begins here -- this is the top of
the world. We’ve got the polar bear here which is the top of
the food chain if you will. That’s one place where an animal is
and man is lesser than that animal there. A lot of respect
for every animal here and that’s another one of the virtues that
attracts us up here. Even though you’re hunting that animal and
living off that animal you’re respecting that animal. I’ve
watched year after year after year and I’ve learned to do it
myself when belugas are hunted. The need is slower to release

the states but it’s too late if you make a mistake. We’re 250
people here at best -- tonight we’ll be a few more with you
folks here.

Sometimes we feel like it’s 250 people versus everybody in
the lower 48. We don’t have a loud voice but look at us as you
would say New York. New York is a community -- sure there’s a
lot more people but it’s a thriving community and they do things
their way and if they were asked to change by golly there’s
going to be a lot of contention. There’s 250 people here that
makes this community -- that should be important. If you put
all of the people together that live on the slope and use the
slope and need the slope -- we don’t equal the amount of people
you’re going to find in a mall -- Merry Christmas -- a ninth
a fraction of that many people. You got to respect the fact
that these are communities -- they’re not big but they’re
communities and they’ve been here longer than any community down
in the lower 48.

DON has been up here. They made promises -- they set up
(indiscernible) lines (indiscernible). They had a treaty with
Point Lay -- the native village of Point Lay and when they were
done with that Air Force site it would be given back to the
native village community. We’re still waiting for that to happen
but since that treaty’s been kind of over written and now
instead of the Air Force land going back to the rightful owners
-- going back to a corporation that was with ANGCA. So ANGCA

Deals with the state entities -- the native villages’ boroughs --
and when the Air Force is done with that property it goes to
NAN and NAN turns it over to Cully Corporation -- a state
entity.

Cully Corporation wasn’t here in the 50s when the Air
Force made a deal with the native village of Point Lay. And I
think the point that I’m trying to make is that things are
forgotten -- things have changed -- promises are broken and
we’ve seen that throughout the history of the United States of
America. And it’s still happening. We can’t fool ourselves in
thinking it’s not -- it’s still happening. Changes are made and
not everybody is in agreement or even aware of the changes. I’m
not going to stop there because in our defense they polluted
these areas and yeah there’s some cleanup going on now --
there’s Operation Clean Sweep and other monies that are here. I
tell you though at one point when the war was at its peak over
in Iraq those (indiscernible).

There’s still some monies to clean up these sights but if
you look where they are most of them are coastal if not all of
them.

On some form of water way and there dumps include PCBs
and other carcinogens that are affecting animals. And it’s the
animals that we eat. An awful lot of cancer up here and there’s
even atomic wastes up here. Folks that got written about -- it
just goes on and on -- the pollutants are already here plus what
Rem: mentioned the pollutants from the world come (indiscernible) here. If you look at the way the magnetic spheres around the earth it follows here at the top of the world and it funnels into the bottom of the world. We’re getting pollutants from all of the world right here -- even space pollutants.

So it’s not the clean pristine place that some people like to think it is. Where it’s a daily battle to try to maintain with all this outside interference. We’re talking about billions of dollars of infrastructure the offshore goes into effect. Does any of that take into consideration that people in Point Lay -- Wainwright -- Point Hope -- Alaska are buying their fuels from Seattle. The oil is coming from here and the natural gas is going to be coming from here -- do we get to enjoy some of that profit or are we still going to have to buy it? We’re at the mercy of the barge -- if the barge can’t get in then we have to fly our fuel in and the price elevates. It’s already ridiculous anyway for what it costs for a gallon of oil so that might be something that we would bargain for. If it’s going to happen -- if off shore drilling is going to happen -- include everything we’re saying tonight and help us out with a small piece of that gas pipeline.

And that was going to be my final statement is that if off shore drilling are in fact going to happen it looks like they’re going to happen all over the world -- the whole world right now to us is the Arctic ocean. We’ve got Russian interest.
and there's rules and regulations from (indiscernible). There has to be some kind of (indiscernible) here. So our balance is
we feel like all the coastal villages -- our ambassadors -- our animals -- every village (indiscernible) or supplement their
village with their animals and their subsistence way of life.
Every village in that manner is unique -- their cultural.
We all share the ocean and the land -- we're all the same
people. I'm sure and I'm not sure I know how the villages feel
the same way we do. Too many stories from the oil companies
promising -- they won't be (indiscernible).
MR. REXFORD: We see their catastrophes -- they had
(indiscernible) mess. (Indiscernible).
MR. PEREIRA: Going to our waters and Canada and the
United States and by promising you guys can clean it up. I
don't appreciate you clean it up -- we can't even fish there.
The oil leaves a type of covering in the Gulf of Mexico and
that's why a (indiscernible) despite (indiscernible) water.
They still have to send divers down there to fix it.
(Indiscernible). It's a different process where they say
they're going to use (indiscernible). (Indiscernible). Water
(indiscernible). Still when we think about oil spills and
(indiscernible) know and see what that (indiscernible).
Industrial can't even clean up oil spill. It seems to me like
there needs to be more study on our wildlife and the ocean and
needs to taken into account.

MR. LOHAN: Thank you. And Mr. (indiscernible). I didn't
mention to you about the reorganization of what was called
Minerals Management Service. After the Deepwater Horizon spill
the President spoke to the country and the President said
basically: this agency known as MMS discharged its
regulatory authority with the state and we're showered by gifts
from oil executives and so they made the decision to reorganize
MMS. And what they have done so far is take one entity -- the
acronym is honored but these are the people that deal with
royalties and the money and they're reporting under another
assistant secretary now and everybody knows about some of their
issues long done by with the rest of us in MMS Alaska Bureau of
Ocean Energy Management Regulation and Enforcement. The plan is
not for long -- not for long -- because the vision for the
Secretary of the Interior is to very soon to create a Bureau of
Safety and Environmental Enforcement and they've got some point
people they've sent in from Washington D.C. but we really live
in Alaska here.
But these people and some are from -- just happen to be
from Alaska -- one of the gentleman that's a point person
working on this reorganization and a consultant firm called
McKenzie and we met with them. And so they said to us this new
agency -- this Bureau of Safety and Environmental Enforcement
will be the arm that regulates the industry and we want that new
organization -- we want to restore the public's trust in that
new organization and that’s our goal -- restore public trust.
And we said that we think that you put together that
regulatory agency that will be both feared and respected by the
industry. Feared and respected and I don’t mean feared in the
usual way. I mean these two words in my mind come together --
fear and respect. It can come together.

When I was in the Navy I feared and respected the
regulatory authority in diving and special warfare -- explosive
(indiscernible) disposal. Procedures and methods and the
equipment and the people and we were inspected on a routine
basis at a very high level and we maintained a very high level
of readiness and safety. If we didn’t I wouldn’t be here today.
But if you had an accident in any of these areas in the military
and people were killed or injured they would hand pick from the
Safety Center and send in the best in the world on those
particular things. Deep diving -- the best deep divers. If it
was explosive and diving so on and so forth.

And no matter how high your state of readiness was -- how
good your people were -- they came in with the experience and
knowledge and the expertise to basically end it for you. You
were going to survive that kind of rigorous analysis and so this
new agency that the President and the Secretary wants to develop
to restore public trust. What would it contain -- I said well
now our inspectors focus on drilling operations and we think it
should contain much more. It should contain all encompassing
worker safety -- environmental compliance -- all aspects of the
federal environmental regulatory framework.

Now you mentioned earlier that we as a government agency --
- a regulatory agency -- need to take into account the
protection of everything that’s important to you -- the Inupiat
and the community -- the subsistence activity -- the cultural
redefining aspects of subsistence activity and so forth. So I
think now I forgot about something but that’s okay because
they’re still learning on reorganizing but maybe we can work
together to communicate the importance of including in this new
regulatory agency an element -- a person who might be whaling
captain -- might have been a KNO -- maybe an expert on the
cultural aspects of subsistence activities and other culturally
self defining activities.

And the heart of that regulatory team and make it even
more encompassing in the Gulf of Mexico -- wouldn’t make any
sense but the Arctic it’s certainly starting to think in my mind
to make sense. And so I would ask that you now continue to
think about your statement that the regulatory agency needs to
protect these activities and consider and think about what you
would recommend to us and you can do it me if you want and I’ll
forward it to these people who ultimately will make the
recommendation to the Secretary of the Interior will make the
recommendation to the President on what this new regulatory
agency will look like.

So I think we can agree that maybe that new regulatory arm
needs to contain that kind of expertise in the Arctic to protect
and the regulations are there under Marine Mammal Protection
Act. These activities cannot interfere with the subsistence
whaling. That’s in the MMPA -- that’s part of National
Fisheries Services’ discharge to ensure with their permitting
authority (indiscernible). But I’m glad you mentioned it
because I think with your help we can make a recommendation to
fully encompass in full measure the kind of regulatory agency
that would exists in Alaska to oversee industrial activities in the
OCS. Thank you very much. And I hope we can talk more
about that and not just with you Mr. President but with the rest
of the folks in the community because I know you will consult
with them too.

MS. TRACY: You know what as subsistence hunters we are
now being forced to buy licenses to go hunting. We search
animals and.

MR. REIFORD: Jeffery right? And we have quarterly
meetings with Alaska’s Eskimo Whaling Commission and time and
time we always ask the industry to bring your KNO’s and give us
a recording. And they’re all set to bring their KNO’s -- any of
our (indiscernible) and they are not bringing the KNO’s of
northern mammal observers -- they’re not letting come for our
meetings when we ask then time and time again. Can these KNO’s
do a report at an annual meeting like this one well have to our
next one will be in February for the Alaska Eskimo Whaling
Commission and we want to hear what the Marine Mammal Observers
have seen under ships and we’ve never heard any report. The
scientists made the reports for them but the people that are out
observing the animals are they allowed making reports? Are they
manipulating the reports? We don’t know.

When it’s dark at night along the ocean we can’t see
nothing when they’re at with a ship.

MR. LOHMAN: Well I certainly would join you in supporting
the recommendation to the National Fisheries Service to make
that part of the agenda for the open water meeting. You need
those reports -- they have scientific nexus in my mind and
that’s what that’s about is they’re required under the Marine
Mammal Protection Act to appear be of science. I mean it’s a
regulatory thing but their observations are a part of science.
So I think it’s important to ask them to put that on the agenda
and get those reports and review them and discuss them during
the open water meeting.

MR. REIFORD: I mean after the end of their season you
know at least have (indiscernible) their KNO’s (indiscernible)
and that all these other commissions look up to Alaska Eskimo
Whaling Commission. When they have issues with the oil
industries like Willis the OAH under the beluga that’s a whole
community at the high school or the school that first see the
(indiscernible) we had. I was President for the native village
of Point Lay at the time and I signed off on it and we had set
July 20 date.

All it was was a date that we signed off on -- that was
it. No to interfere with our beluga hunt. There was a one page
CAA and then we came on board to AMC in 2008 of February or was
it (indicerrible). And we came a long way (indicerrible) a
real rush to we have to go. We came home -- built our ice
collars but we finished then in time before the hunt -- bowhead
whale hunt. And we didn't succeed the first year but the second
year we did succeed in that being a whale. You can see the
pictures up here and the celebration in June. On the Thursday I
cought -- we caught a whale -- the whole community. We came
together and cut it up and it took us some time to cut it up but
we did it.

I've done it time and time again. In Barrow I started out
(indicerrible) you know naming the boss to help them pull the
skin off the whale -- carve the meat and then I graduated to
butchering whales and that's how I learned how to know where the
(indicerrible) are. I indicerrible. Portraying the whale
and you look for the (indicerrible) where the kill spots are.
It took me about 15 years to become a harpoon from the start
I mean you just can't go in there and say hey I'm a harpooner --
can you put me on a harpoon boat. That's not the way it goes --
you get to -- like in the military you've got to start from the
bottom and go up -- ranking. And that's all I have.

of caribou -- we see certain things you know out of the
ordinary. We might see a coyote or a bear or something that we
know that's not suppose to be there and we report it.

We have scientist coming down from Barrow even way over to
Connecticut that comes every year of June to take samples --
tissue samples -- bird samples that they take back and report to
us you know how our stock is. Butchering after we've done
butchering you know we allow them to take samples. You know we
communicate with them -- they communicate with us. We help them
you know take belugas and we help you know take some of the
tissue samples that we have from. You know after our hunts
and it works both ways when we cooperate.

And you know that's what we -- you know like I said every
year we have commissioners on different wildlife here. And
might be able to get some information from those commissions to
hopefully get -- you know regulate more and/or stop any you know
oil drilling out there in the Chukchi and Beaufort sea. Because
each of our (indicerrible) have commissioners that attend these
meetings. You know that might be a helpful thing to maybe
attend to where you know we can learn something you know
provided that (indicerrible). I don't know if they will or not
but you know no harm in asking. Probably an open public meeting
anyway.

You know we go there you know certain months of the year
to give our report. As for myself I have to go to Anchorage
next month and do a report on the walrus (indicerrible) that we
have had here. How many animals that we've seen crushed
during or stampede. You know I have to give a full report --
I've even helped the State of Alaska to -- you know go out there
and take measurements of the walrus that were stampeded dead on
the beach. After see you know the size and general condition of
the walrus and I have to give that (indicerrible) in which you
know the state that turns around and gives a report to our
village on how you know and why it happened. You know even
(indicerrible) doing this too -- he goes to his quarterly
meeting -- he lets us know what's going on -- how many
(indicerrible) can get -- how many (indicerrible) you know
the AMC can get for the whole year.

But if that's another option and maybe we can use to
hopefully stop or slow down exploration -- drilling -- pipeline
that if we can put in the EIS that we -- use a tool. And the
tools that we use going to these meetings -- you know benefit us
-- benefit all seven villages. We let them know you know like
the beluga commission's report on the belugas we got this year
-- last year -- year before. And just like walrus too -- just
like bowhead -- migratory birds you know we (indicerrible).
We're deep into this like Marie said you know now we've been
hunting without permits or licenses for thousands of years now
people are coming in and saying you need a license to hunt this.
We've never had that before.
On the theme of commissions earlier I mentioned cumulative effects wouldn't be all inclusive. Sure we're talking about off shore drilling but all the other activities need to be considered. I sit on the Planning Commission -- Willard is the alternate and (indiscernible) this year but regardless 99 percent of the permits that are being applied for are -- I almost want to say after thoughts. The original permit you know brought industry in and they did their drilling -- okay they got their role established. Then their permit for a pipeline and permit for a road and permit for an ice road then a permit for a pad. I think we need to include a 20 year projection of what off shore we can expect from off shore (indiscernible).

If we knew that it'd be easier today to decide you know how to go about some of these points that they have. I'm sure a company that's spending billions of dollars pretty much knows what's going to happen in the next five -- 15 -- 20 years. They've got to know otherwise they wouldn't be doing business so I would think it would be relatively easy to include a future projection in what industry's activities are going to be in any applied for drilling activities. Thank you.

MR. LOGAN: I'm not so sure that they know for sure what's going to happen but you'd think that we'd be considering cumulative effects. Part of that effort is to develop an in so much as you can a reasonable scenario for development (indiscernible) colleagues do that. These models in Arctic

waters or near Arctic waters -- a few anyway to look at. (indiscernible) concepts that are in place there. What's a project that is no good (indiscernible)? If it was a sampling of a heavily subsidized project that reduces the footprint and popular -- there are not ways that you can get those who have many of the typical concerns of off shore oil and gas and the impacts. But you know there's I think -- industry has an obligation certainly when going into produce and development to do that. At this point in time we're (indiscernible) down. We've got companies with billions of dollars of leases they don't exactly where the oil is whether or not it is really there. It's only through exploration that they really know.

And as we've seen over the recent years -- four years now -- in efforts to explore -- these huge, huge hurdles of regulatory political hurdles -- economic in that hundreds of millions dollars are spent and still no exploration. So if we (indiscernible) forget the legal. I forget pretty easily -- it's just like breathing almost right. But I agree that certainly it would be easier for the communities in the Arctic to envision what the risk if they knew what was really going to take place -- how it will in detail hopefully that will come.

NR. PETERSON: Mike (indiscernible) point out but we're going to hear (indiscernible) envisioning what the impact of the
1 And hard to believe for us that are in this everyday but it is possible.

3 MR. REFORM: One comment that was made at our third quarterly meeting and this is just the beginning. Wait till they find the oil, I mean you're going to have hundreds of ships coming into the Arctic. After the whales are found the indiscernible. I mean the Murray Pilots Association came to one of our meetings and said -- hey (indiscernible). I'm an owner of a tug - barges -- we want to give a contract to (indiscernible) and bring it in and we're dead in the water there's no way to help us.

12 I mean I've been a seastorm on barges coming into our waters. I mean realizations and this (indiscernible) sea were what these Murray Pilots Association was talking about and one of our commissioners said gone to the (indiscernible) in Dutch Harbor and now he's no longer a commissioner. We don't have anyone that frequents to these meetings anymore and our children from ANC mentioned that you know (indiscernible) problem. The seismic and drilling is nothing compared to what's going to happen -- what's going to follow after the oil is (indiscernible). I (indiscernible) here.

22 Like Bill said you know it's going to go in stages. So I mean it's going to go on for what 20 years maybe more. But if a pipeline fails -- the well fails -- we get (indiscernible). And we don't know.

1 were a number of seismic companies coming in to talk about what they intended to do. And it was very interesting that one in particular -- quite frankly I even remember the name of that company -- but their representative was presenting what they intended to do.

6 MR. REFORM: (Indiscernible)?

7 MR. LOKAN: No. This was one of the speakers that the company had actually conducted seismic but many of my colleagues remember was (indiscernible). But the representative is presenting information what they intend to do and how they intend to do it and that's being questioned by whaling captains. So our regulatory agencies and literally within an hour you could see and I turned to (indiscernible) was sitting next to me at the time and I said.

13 MS. ANNEKREIT: He's too young to remember.

14 MR. LOKAN: I said they're not ready for prime time. And it became more and more obvious and so you know people from the Marine Association or can come from outside and say on watch that there's going to be a flood of activity once they do this kind of or the other thing. No going business in the Arctic is not going to be some cake walk for anybody just because they find oil. So it's not going to happen.

22 MS. ANNEKREIT: You don't know that.

26 MR. LOKAN: That's not -- I mean if there's one thing I know me 'em I do know that. Because there are a host of federal laws that they -- we'll make the difference.

2 MS. ANNEKREIT: The last oil company was.

3 MR. LOKAN: I don't work for the oil company. I don't work for an oil company and I never work for an oil company. I owe oil companies nothing.

6 MS. ANNEKREIT: You sure sound like it.

7 MR. LOKAN: And I'm not here to talk anybody into anything.

9 MS. ANNEKREIT: You won't (indiscernible).

10 MR. LOKAN: Yeah I don't work for oil companies.

11 MS. ANNEKREIT: That's why we're fighting...

12 MR. LOKAN: I understand that -- I'm sharing with you what I've seen and what I've learned in the time that I've seen it. There are and I think everybody could agree that oil companies (indiscernible) the Chukchi sea in 2008 and spent billions of dollars and have moved to explore. Hundreds of millions of dollars have been sent and have not accomplished any exploration.

19 MS. ANNEKREIT: And yet that's their change to them.

20 MR. LOKAN: I'm not going to discount that -- that they have a lot of money (indiscernible). The skirmish things that we hear and this is just my point not to talk you into not being concerned. Believe me I know enough about people in the communities -- everyone here included -- that's ridiculous.

25 I'm not going to talk you into agreeing to that. But the law...
the federal regulatory framework -- the agencies that are in place and enforce them -- the litigation when they don't enforce it appropriate is a very compelling hurt. For those kinds of activities to take what in every aspect should be -- seismic -- drilling is all regulated. Discharges to the air -- to the water -- so on and so forth. And you know my only desire is that the regulatory agencies get stronger not weaker. Stronger than the audience. That's all I'll say. I'm sorry that anybody thinks that I work for an oil company. I don't work for an oil company. I owe the 11 oil companies no more than I already (indiscernible) or anybody else in America.

MR. REYNOLDS: So in light of environmental justice is finally here?

MR. LOHMAN: I hope it's here to stay. One thing I will say about the administrations I've seen since I've worked for the federal government whether it was Republican Administration or Democratic Administration -- the political appointees that I've seen and come into contact with and gotten to know a little bit -- want to treat native people like a national treasure. Not the poster child for the national treasure (indiscernible). They really do. They really want to do it. The problem is the United States is a huge country with a huge, huge demand for oil. There is a lot of things that (indiscernible). But they -- I can see the the past that and then something good is supposed to happen. I'd like to see something good happen and then it's (indiscernible) divide and not only that with the subsistence (indiscernible) we have Inupiat values. And there is somewhat (indiscernible).

MR. REYNOLDS: I think if we stay any longer we're going to get more cranky people. Because I think it's (indiscernible). MR. LOHMAN: Yeah they did lock the lodge an hour ago... but... MR. REYNOLDS: Do you know how many cranky... MR. LOHMAN: There is a dynamic if you keep it on and then you start being Inupiat crank and you fight and then you get...
TRANSCRIBER'S CERTIFICATE

I, Judy Bradshaw, hereby certify that the foregoing pages numbered 2 through 92 are a true, accurate and complete transcript of the Bureau of Ocean Energy Management Regulation and Enforcement Public Hearing regarding the Environmental Impact Supplemental Statement Relating to Chukchi Sea Sale 191 held in Point Lay, Alaska on November 3, 2010, transcribed by me from a copy of the electronic sound recording to the best of my knowledge and ability.

Date: Dec 17, 2010

Judy Bradshaw
PROCEEDINGS

(On record at 7:26 p.m.)

MR. LOMAN: My name is Jeffery Loman, C-E-T-T-E-R-Y
E-O-H-A-M. I'm the Deputy Regional Director with the Bureau of
Ocean Energy Management Regulation and Enforcement, formerly
NOEA, in the Alaska Region. Thank you very much for coming. The
reason I spelled my first and last name is we have a Court
Reporter. Judy is going to be recording this.

This is a public hearing. It's a public hearing for the
purpose of complying with the National Environmental Policy Act
or NEPA. I'll -- we use that acronym NEPA frequently. National
Environmental Policy Act. Federal environmental law signed into
law by President Nixon requires a few things. Requires that the
Federal Agency analyze a major federal action to see if it has
the potential to affect the human environment. The major
federal action in the case of tonight was the Chukchi Sea Sale
that took place in February of 2008. An EIS, Environmental
Impact Statement, was prepared. And the Agency was -- decided
to hold the oil and gas lease sale.

The Agency was sued, sued by ICAS, Native Villages of Point
Hope, and a number of environmental advocacy groups. The case
went to Federal court in the Alaska District. It was stalled
for a while because there’s another lawsuit in the courts in
Washington D.C. I won't go into that very -- in detail, but the
Alaska District Court withheld their decision until that case
was resolved, so that the Court could decide. And they did
decide. And, for the most part, they decided that our Agency
complied with NEPA. But there was a few things the Court found
that the Agency needed to address. And we'll talk about that.

But before I go any further, other than to say thank you
for taking the time tonight to come here. We want to hear what
your comments on the draft EIS, Supplemental EIS, if you have
any comments about it. Want to hear your comments about
offshore oil and gas in any context, as well, just because we
want to communicate with you. And we want to become a better
Agency and learn from your comments and ideas and concerns about
offshore oil and gas.

Real quick, starting with Tim who’s -- we are now calling
flying Tim -- we're going to introduce ourselves. And then
we'll have you introduce yourselves. And we'll all spell our
names for Judy the Court Reporter. Tim.

MR. HOLDER: Yeah, I'm Tim Holder, H-O-L-D-E-R. And I'm
with BLM in our Washington D.C. offices, opposed to everybody
else who’s in the Anchorage office. And I keep track of what's
going on with the affairs of the Alaska office.

MR. ROUTHIER: My name is Routhier, that's R-O-U-
I-T-R-I-E. And I'm a NEP Coordinator for the Agency, which means I
work on these National Environmental Policy Act documents.

MS. COBY: Mary Coby, C-O-B-Y and I'm a Wildlife Biologist
with the Anchorage office.
UNIDENTIFIED MALE: You're a what?

MS. CODY: A Wildlife Biologist with the Anchorage office.

UNIDENTIFIED MALE: Okay.

MS. WARREN: Sharor Warren, W-A-R-R-E-N. I'm the Program Analysis Officer for the Agency in the Region.

MR. PETERSON: I'm Bob Peterson. I'm a Geologist and Chief of the Resource and Economic Analysis Section. And that's P-E-T-E-R-S-O-N.


I'm the Public Affairs Officer for the Alaska Region. And I'm taking a few photos tonight, if that's okay with you guys.

UNIDENTIFIED MALE: There's a $4,000 donation that needs to come to each of our pockets.

MR. CALLAHAN: Sure.

UNIDENTIFIED MALE: I'm kidding.

UNIDENTIFIED MALE: From you to him.

MR. LOMAN: We are the Bureau of Ocean Energy Management Regulation and Enforcement. And we will no longer be showered with any gifts. If we ever were.

UNIDENTIFIED MALE: They turned off the spigot.

MR. LOMAN: So we want to meet you folks.

UNIDENTIFIED MALE: Who's this?

UNIDENTIFIED MALE: Mike the Senior.

MR. LOMAN: Would you like to sit down?

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MR. LOMAN: Thank you.


MR. ORTOLINI: Enoch Ortolini, O-R-T-O-L-I-N-I.


MR. LOMAN: Thank you.

MR. AGNASAGA: Ranson Agnasaga.

MR. LOMAN: Spell your last name please.


MR. LOMAN: Thank you. Thank you very much.

UNIDENTIFIED FEMALE: Steve?

MR. SEGBEYAN: And I'm Steve Segbeyan, S-E-G-B-E-Y-A-N.

REPORTER: I'm sorry, could you say that again?


MR. LOMAN: Are there any other participants we may have missed? Yes sir.

UNIDENTIFIED MALE: Could you repeat what you said earlier, to the people that just came.

MR. LOMAN: For the new people? Sure, you bet. I'm Jeffrey Loman. I'm the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, formerly known as the Minerals Management Service or MMS. And the reason that we're here tonight is to hold a public hearing, because the...
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1. debating whether or not there were multiple populations.  
2. multiple stocks, of the bowhead whale, like a Beaufort stock or  
3. Bering stock. The IWC has concluded that there is only  
4. one stock.  
5. So our job in that -- using that example, is to determine  
6. whether or not there's any significance. Is there significance  
7. to the Bowhead Whaler, which many of you are. Does it make a  
8. difference if there's one or two or more stocks when you're  
9. subsistence whaling? We think not. Whaling has taken place for  
10. a long, long time, a lot longer than our Agency has existed, a  
11. lot longer then, even than the use of oil and gas.  
12. And the uncertainty regarding the stock, the population  
13. structure has made little or no difference to the hunter. And  
14. it makes little or no difference, we think, to the decision  
15. maker who's got to decide on how to approve or not approve or  
16. regulate offshore oil and gas activities. So, that's an  
17. example, one example of the exercise that we have to go to --  
18. through in this draft Supplemental Environmental Impact  
19. Statement. And we think we have.  
20. We're going to talk a little bit more about that, and  
21. explain the legal act that took place. Explain a little bit  
22. more about the document. And then we'll go to the important  
23. part of this meeting. And that's to hear from you. And take  
24. your comments on this draft document and talk together about  
25. your concerns, ideas, comments that you may have about any

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1. offshore oil and gas activity.  
2. Because our Agency, as you know, is going through a  
3. reorganization. And these are challenging times for us. And we  
4. feel that we share the same challenges as the people in the  
5. community of Wainwright.  
6. Our work is as important to you as it is to us, really.  
7. So we are facing together these uncertain times. And we need to  
8. work together and communicate and talk and put our thinking caps  
9. on and resolve conflicts and competing interests. And we look  
10. forward to this conversation tonight. Sharon is going to talk a  
11. little bit about this Court case before the Alaska District  
12. Court. Sharon, you really will have to come over here unless  
13. you can scream.

14. MR. OKTOOLLIK: Before you go on, I didn't bring a pen.  
15. MR. LOHAN: Need a pen? You probably need a hook to write  
16. on, too. But we have to return it. That paper's got my name  
17. and phone number on it, in case you don't like what I say  
18. tonight.

19. MR. OKTOOLLIK: All right.
20. MR. LOHAN: Thank you Sharon.
21. MS. WARREN: Okay, thank you. As you know, what Jeffery  
22. said, was that it went to the District Court in January of 2008.  
23. And the sale was held in February of 2008. Also, the fact that  
24. we have lease sales, based on a five year program. And the Sale  
25. 193 was in the five year program for 2007 through 2012. That

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1. five year program was sued by the environmental organizations in  
2. the D.C. Circuit Court. And so, that is why that case just  
3. kind of sat there in the District Court waiting to find out what  
4. was going to happen with the D.C. Court. Because the D.C. Court  
5. remanded back to the Secretary, his decision, on whether or not  
6. to keep the Arctic Sales in that five year program.  
7. So that was going back and forth with the D.C. Court. And  
8. the Secretary had to do the Environmental Sensitivity Analysis.  
9. In what it was called, part of the OCS Lands Act, the Outer  
10. Continental Shelf Lands Act. So they had to meet that  
11. requirement of the law. The Court, in that situation said  
12. Secretary, you didn't meet the requirement of the law. You need  
13. to go back and meet the requirement of the law. So, that's what  
14. happened to the sale. The sale was sitting in the District  
15. Court because we had the lease sale.  
16. So we had the five year program in the D.C. Circuit Court.  
17. We had the lease sale is the District Court. A lot of  
18. litigation going on during that time. So the D.C. -- so the  
19. Secretary -- they finally decided, you know, we're making  
20. progress on this. And let's start briefing again on this  
21. District Court case on sale 193. As you know, the Secretary  
22. case out with a preliminary advice (ph) Program in March 31st to  
23. keep Sale 193 in the five year program. But did not keep the  
24. remaining Arctic sales in the five year program. So there was  
25. two Beaufort Sea Sales planned and two of the Chukchi Sea Sales

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1. planned. And those were removed from the five year program. So  
2. we only have one Arctic Sale that was held in this five year  
3. program.  
4. So the District Court began looking at all the briefs that  
5. were filed. And there was a lot of allegations by the  
6. Plaintiffs saying how we didn't follow NEPA. You know, we  
7. failed to look at all these things that we should have been  
8. looking at. So when the District Court Judge, Batiste, issued  
9. his decision in July 21st of this summer. He said, I've looked at  
10. all this. And I've looked at everything that you've alleged  
11. that the Agency hasn't done. And for the most part, the Agency  
12. did take a hard look. They looked at all these things. But you  
13. need to go back, and like Jeffery had said earlier in his  
14. opening, is you need to look at these three things. And these  
15. were the only three concerns that the Judge had.

16. And that's why the document you'll see tonight, and Mike  
17. will explain further about it. It's focused because it's based on  
18. the Court remand, because everything else in that litigation has  
19. been decided by the Judge. So we're just left with these  
20. concerns that the Judge had on the environmental impacts  
21. concerning the natural gas and then the missing information and  
22. the cost to get that missing information. We need to look at  
23. that, as well.

24. What's going to happen next is that once the comment  
25. period is closed, the comments are taken, the public hearings
held, we'll be doing a final Environmental Impact Statement.

And that final Impact Statement, after it's completed, will go
to the Court, because the Judge has kept the case before him.
So he'll look at our final Impact Statement. He'll also look at
the documents and any other documentation that we use to make
that decision on the final EIS. That will be filed with the
court. The Plaintiffs who sued us will also have that before
them. And there'll be briefs between the legal representation.
Then the Judge will decide whether or not that we will --
whether or not we met our NEPA obligations in this court case.
The Judge also later issued an Order and set a timetable
of what he thought would be the time sufficient to do this. And
he gave a timeframe, six months from July 21st. So January 21st
of 2011 he thought that would be a reasonable time for the
government to make a reasonable effort to comply with his Order.
And so that's why you see what we have today, the focus of the
document and then the timeline that we're working from is from
what the Court has said in his order.

MR. LOMAN: Sharon, we have till January 21st to submit a
final EIS before this Court. How long do these folks have to
make comments on this draft?

MS. WARREN: You have until November 20th. There's a 45
day comment period. So your comments is -- it's open until the
29th of November.

MR. LOMAN: How can they submit comments?

MR. HALLER: Yeah.

MR. LOMAN: Mike did, so --

MS. WARREN: Okay we have another -- an extra one.

MR. LOMAN: We'll hold a (indiscernible).

MS. WARREN: Yeah.

MR. CALLAHAN: I think I have two back at our hotel room.

MS. WARREN: Okay.

MR. LOMAN: Yeah we don't need to take any to Barrow. We
know they arrived in Barrow in large numbers.

MS. WARREN: Okay.

MR. CALLAHAN: If you want one of mine please see me
afterwards.

MS. WARREN: Is there any other questions?

MR. MORISON: Your State, right, State of Alaska Court
you're talking about?

MS. WARREN: No, Federal.

MR. MORISON: Oh, Federal.

MS. WARREN: United States District Court for the District
of Alaska, Federal.

MR. MORISON: Oh -- okay.

MS. WARREN: We're in the Federal. Yeah, this is the
Federal. Yeah, the State has a lot of stuff going on as well.
But, no, we're the Federal and so it goes to Federal Court.

MR. LOMAN: Thank you Sharon. Any questions about this
MR. BOUTHEIER: Sure. I was actually on my third day of work with the Agency that we got the remand so --.

MR. LOWN: We put him right to work on this.

MR. BOUTHEIER: Yeah. So it was pretty interesting, but yeah. So we got the Judge’s remand. He was pretty specific about what he wanted. He didn’t give us very specific directions on how to do it, but we went with was a Supplemental EIS. It’s a pretty intensive amount of analysis. And it also allows us the opportunity to have public comments and to go out and meet the people that are going to be concerned about it. So we’re pretty happy with that process.

As to the analysis itself, as you probably remember, the first bit of that remand, the Judge told us to do analysis of the environmental impacts of natural gas development and production. So we needed -- our Environmental Analysis Section needed, like a scenario to analyze. We needed an idea of what the natural gas development and production could entail. What kind of development, what kind of production. So, for guidance on those issues, we consulted with our Resource and Economic Analysis Section. And Bob here leads that Section. So he can tell you in a little bit on how they developed this scenario.

MR. PETSON: So, we do the Resource and Economic Analysis. So Mike’s group, they needed something concrete to

And this is a little leap of faith. But we had to assume that either the Denali Pipeline or the AIGA Pipeline or some gas pipeline is going to be built from the North Slope. And this gas pipeline from the Chukchi would hook into that somewhere in the Prudhoe Bay area and take the gas somewhere south, wherever that may be. So now, Mike’s group would have a scenario of oil development to begin with, that oil infrastructure built and then a second pulse of activity which would be the gas development.

We also looked at some of the economics. As you know, the North Slope Borough gets almost $240, $250 million a year from the property tax of onshore facilities around the Prudhoe Bay area. We estimated that there could be $2 to $2.5 billion worth of onshore development that would be taxable, property taxable. Due to the onshore landing, oil infrastructure, pipelines, roads, oil compressors.

There would be, at a delayed time, because you’re going to produce the oil first and then later the gas. At a later time, you would then produce or have to build the gas facilities onshore and gas pipeline. And that could be worth another $1.5 billion investment onshore for the gas facilities. You might also think -- like to mention that this all is going to take time.

First oil production could be 12 to 15 years in the future. Of course nobody’s drilled the first well yet or made

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First discovery. But, from that date, you could expect 12 to 15 years before the first oil production. You could then, vary easily, look at another 10 years before the first gas production came. So you’d have 10 years of oil production, roughly another 10 years of both oil and gas production with the oil production headed down. And then the oil production would halt. And then there’d be another period of time where you would only have gas production.

So that was pretty much the scenario and the timeline that we left Mike with. And again, we looked at some of the economic infrastructure that would be built onshore and realized there would be the pulse of spending for oil. And then a second pulse later on, spending for the gas facilities.

Any questions on how we envision this working? Sir.

UNIDENTIFIED MALE: On this lots of oil and gas you’re seeing out there, you’re talking about 20 years. And yet I can’t follow you because alternative energy there’s -- our world is coming when they look at the alternative energy.

MR. PETSON: Yes.

UNIDENTIFIED MALE: Do you feel that we just get to rely on oil and gas up here, all of us here or whatever, (indiscernible) stuff like that? What will become of it -- if it’s not utilized and you find other source of alternative energy.

MR. LOWN: I think it’s safe to say that with the most
needs. And yet, at the same time, you know, the companies and
its -- money that they're investing, are continuing to believe
that we are going to need more oil and gas and more coal. So I
don't think 15 or 20 years from now there's going to be any
reduced demand for oil and gas. And I guess, again, the only
support of that is, that many people are still very willing to
spend the amount of money it takes to find additional quantities
of oil and gas anywhere in the world and, certainly in the
Arctic.

UNIDENTIFIED MALE: Some of us, (indiscernible) would
probably be (indiscernible). I know they have done studies of
exploration of oil and gas probably. I didn't know what date
you all would go back. But, they have done studies before and
probably around the Bering Sea and along the Chukchi Sea
and the Beaufort Sea. And I always want to try to see the broad
picture because most of our bodies of waters are the Outer
Continental Shelf, also?

MR. PETERSON: Yes.

UNIDENTIFIED MALE: How far has this research gone with
the whole Bering Sea, the Chukchi Sea and the Bering Sea -- how much is
that potential of oil and gas?

MR. PETERSON: That's a very interesting -- intriguing
question. There's been a lot of work at different levels.
Currently, as we speak, every 10 years -- I'm sorry -- yeah
about every 10 years we do an updated oil and gas assessment for

the offshore. And in our case, for all of Alaska's offshore.
Some areas we know a little bit more about, because we have
seismic and -- two primary things -- are seismic and wells.

In the Arctic we have 35 wells. 39 offshore in the
Beaufort or the Beaufort Sea and five in the Chukchi. That's
not very many at all. So we have a very small amount of
wells that say the key components for
oil and gas is there. That's what we base our estimate on.

Something we haven't, or I haven't mentioned yet today,
we're assuming in our scenario a success. We have basins like
St. George and Norton Sound where we have gone out -- or
companies have gone out and drilled where we had some very
optimistic estimates of oil and gas. They drilled them and
found nothing and the geology was bad. Reservoirs were missing
or there was no indication that oil was in the system at all.
So the result could be that after companies go out and drill
some wells, they'll all be negative. And they'll decide there
is no potential in Alaska.

So that's also, you know, a possibility. But the impacts
of that, of course, are very minimal. And we're looking for the
large impacts that could occur, or any impacts that could occur
given a successful case where you go to development. Did I sort
of answer your question?

UNIDENTIFIED MALE: Didn't our (indiscernible) you sort
estimates? When you say estimates you do -- we don't really

know what's out there even from past oil and gas tests?

MR. PETERSON: I can tell you a little more in detail how
we do our estimates. We have seismic data. I don't know how
familiar you are with seismic data. But it allows us to map the
subsurface. What the surface of the earth looks like 5,000,
10,000, 15,000 feet deep.

We know to have an oilfield you have to have three things.
You have to have oil that's generated in the area. You have to
have a reservoir rock. Yukon Bay is the (indiscernible)
sandstone so you have to have a rock where the oil can be stored
and you have to have a trap. Oil is lighter than water. So if
you can see a -- those structures in the earth, oil could
potentially be trapped there. To have an oilfield you have to
have all three at the same place. You have it has to have a trap. You
have to have oil generated. And you have to have the reservoir.

We don't really know what we don't know. One of the
elements we do know is the trap. When the companies go out and
shoot the seismic data, they're now able to map traps in the
subsurface and they've mapped many traps in the Chukchi Sea. So
that's very -- that's one good potential that they have. The
five wells that they have drilled say that there are sandstone
reservoirs there. So they know those, at least, exist out there.
And a number of them have oil and gas in them, not
even good to economic but it indicates that there oil and gas
in the area. That's what we base our estimates on.
1. We can look at the number of traps and we can kind of just add them up and, you know, in some areas maybe we see 10 traps every few hundred square miles. And we can assume it’s like that in places where we don’t know as much. That’s an estimate of that potential. We can then say, well, we think the sands will be there. It’s a risk that they’re there, but we think maybe two out of 10 will have the sands there. And that’s how we kind of filled up our estimates. They’re based on knowledge you know, the baseline knowledge that we know. And then we estimate, you know, further up the lines to try and think how much oil and gas is reasonably to be there.

2. We also make estimates of most optimistic, the most pessimistic, to give our — an idea of how big a range that our estimates are. But we kind of work in the middle that we think it’s the most likely. Again, has that addressed?

3. UNIDENTIFIED NME: Yeah, I think yes.

4. MR. HOLMER: Another way to answer your question is that in the ’75 to ’85 period in the last OCS, industry spent about $11 billion in the winning of bids. And, after that, in ’86 the price of oil crashed. And so, just about everybody went away and the amount that industry spent on leases subsequently was much smaller. It was like in the $100 or $200 million. And they backed away.

5. NME: Has a process where industry can express interest in lease sales in any of the Outer Continental Shelf. And until

1. IRS in collecting money, money from lease sales, money from royalties from oil and gas.

2. MR. POSTER: I’ll just finish up saying we do have these estimates. But they remain estimates. That’s why you now — someone needs to prove it up. And that’s why you drill the well. It will always remain an estimate until someone actually drills the structure out there, penetrates it and finds out what’s actually there.

3. UNIDENTIFIED NME: And we -- if we find out the major players, all the major players, if they all come out together we will find out also that something’s out there, have a large amount?

4. MR. POSTER: Well just the players that are out there. And, you know, at this point there’s really just a handful of players out there. But, there are not a lot of people that can spend that kind of money. So it’s a pretty exclusive group of companies. But, they would be the ones to go out and drill those exploratory wells.

5. MR. LOMAN: Thank you Bob. Now, Mike is going to finish up talking about the draft Supplemental Environmental Impact Statement. Mike, Bob and his staff gave you this scenario. And I read the document. Some of these folks might have too, or they will. So, if you could answer the question, this scenario, natural gas scenario, how much different is it, really, from the effects of the oil production scenario? And how much more

1. 2005, industry -- well Shell had been interested in about 1993 and did some exploration. They backed away till 2005. They said they're interested. And then, as Jeff pointed out, in 2008 there was about $1.6 billion put down on those leases. So that’s kind of in a snapshot of — they have been full of industry interest.

2. UNIDENTIFIED NME: Maybe I might ask you a question, all right (indiscernible). They stated that Shell Oil spent $2.1 billion?

3. MR. PORTER: Yes, Right.

4. NME: About a (indiscernible) of a shelf?

5. And there’s some $2.7 billion from -- a lot of lease sales? To myself -- maybe the others would know -- how is this money spent? I mean, where does it go?

6. MR. LOMAN: To the Treasury, to the U.S. Treasury.

7. UNIDENTIFIED NME: U.S. Treasury?

8. MR. LOMAN: Yes.

9. MR. HALLER: We don’t get any of it.

10. MR. LOMAN: Yeah, you could say, I guess, because it influenced the Coastal Impact Assessment Program funding about $35 million. In the Chukchi Sea Sale increased the amount of Coastal Impact Assessment Program funding that went to Alaska, $35 million after that Chukchi Sea Sale. But right to the U.S. Treasury it goes.

11. It’s a federal resource. The Agency is second only to the

1. analysis needed to be done? Kind of start there and then continue on.

2. MR. POSTER: Sure. It’s -- the effects are pretty similar. In fact, but, in a way they are a little bit less. In fact, you might be able to view as a subset.

3. One important point was that no additional exploration would be needed to find the gas. Because, if the gas is going to piggyback off the existing oil infrastructure -- well, all the stuff's already there. We won't need to go exploring for more. We've already got the wells in place. We're getting into the oil. We're using the gas to keep the pressure up. So, I mean, we know where the gas is. We don't need to explore. So all those impacts are not going to be duplicated.

4. What impacts there will be are basically from development of an offshore pipeline. You know, we're not going to have a pipeline in place to get the gas from the platform to shore. So we'll need a gas pipeline. But we could use the same corridor that the oil pipeline is currently using.

5. We need an onshore facility to help process the gas. And then we'll need an onland pipeline. But, again, use the same corridor that the pre-existing oil pipeline could, at that point in time, be in. So, the effects were pretty similar to the effects that we had already analyzed for the oil. And we tried to organize it pretty logically in the document where we first summarized the impacts from the oil. And then we summarized the
projected impacts from the gas development. And then summarized
the projected impacts from the gas production. So we tried to
organize it pretty logically in that manner.
And that was about it. We had our whole team of analysts
working on it, scientists like Mary here. A variety of
disciplines looked at Bob's scenario and gave their analysis on
it. So, and that takes care of that first part, the Judge's
remand.
The second and third concerns of the Judge's remand, both
pertain to that 1502.22 regulatory process. Basically, there's
provisions in the Federal regulations that say, when you have
incomplete or missing information in a NEPA document like this,
there's a certain process that you have to follow. And the
Judge found that the Agency did not do a good enough job the
first time around. He said, do it again. So we did it again.
We developed a more logical and sequential process to keep
everything objective and keep our analysis focused on the right
things. And we ran it through our analysts. They came out with
their conclusions. And we memorandumized the conclusions for
every item of missing or incomplete information in Appendix A
here.
Basically, the Plaintiffs in the lawsuit we talked about
before submitted a large exhibit that included a variety of
statements pulled from our documents where it referred to
information that was incomplete or missing, stuff like that. A
lot of it was background information. So we cataloged all
these, plus we went back, reviewed our own documents, and just
to try to ensure that we had captured all the references that
the Plaintiffs may have missed some. So we reviewed it again
ourselves and tried to look for more. We found a few more,
maybe like 30. And we included those in this analysis, where a
few of our analysts used a sequential process and memorialized
all the analysis from Appendix A, which is there for your review
in this document. And that was it.
MR. LOMAX: Any questions about the draft Supplemental
Environmental Impact Statement?
UNIDENTIFIED MALE: I have a question. You said that a
lot of people had filed an (indiscernible) 2008 and the court
(indiscernible) the Court doesn't need to address three
concerns, right?
MR. LOMAX: Uh-huh, affirmative.
UNIDENTIFIED MALE: How close are you in addressing those
concerns before the Ninth Circuit Court can accept your EIS?
MR. LOMAX: Well, we're not in the Ninth Circuit Court
yet. We're still in the -- before the Alaska District Court.
UNIDENTIFIED MALE: Okay.
MR. LOMAX: We've got the draft Supplemental Environmental
Impact Statement. We're using the standard, pretty much
standard, NEPA guidelines to move that document along. Taking
public comments now. That will end on November 29th. Then we'll
move to address those comments, which is required under NEPA and
answer then, answer questions, explain changes. Finalize the
draft Supplemental EIS, after taking these comments into
consideration. And then the next step is, file it with the
court and look for a record of decision.
Record of decision could be, reaffirm the sale. And the
Secretary would reaffirm the sale. Or the Secretary would not
reaffirm the sale. Given the draft Supplemental Environmental
Impact Statement, the document we have today, we're talking
about today, my recommendation to the Secretary of the Interior
would be to reaffirm the sale.
This exercise of analyzing natural gas, was it necessary
under NEPA? Yeah. And like Mike just explained, no extra
seismic activity, none -- no exploration activity. These are
all the activities that are right before us. And the
development activities, the effects from development are many.
Many years away. In fact the effects of development of natural
gas are so far off into the future, this young man may be in
charge of that. I'll be dead. That's how long. I will be. I'm going
to be dead. I don't mean to be morbid. We're talking
many, many, many years down the road.
And so, not that, you know, we didn't have a requirement
to do it under NEPA, and now we have. And the 1502.22 analysis
speaks for itself. The methodical evaluation of each and every
one of those items has been done. So, given that, I'm ready to
way right now. Not that I can't be, you know, persuaded that we
need to do additional things, during the middle of a public
comment period. We certainly can. We're hearing lots of good
ideas. And we're only about half way through our meeting with
the communities and the government to government consultations.
But none of them pertain to this particular issue, necessarily.
But we could do more. But right now -- if the Secretary
of the Interior walked through that door and said, where are we
headed with this, I would say reaffirm the sale. Don't think
that will change, but that's just a guessmate at this point in
time.
By January 21st which is in our time lifetime, extremely
fast, because it's just right around the corner, the Secretary
will have some decisions to make.
UNIDENTIFIED MALE: Now, you made a good point of that.
You're going to be dead when this all takes, you know, in the
future too. You know we got our grandkids that's going to grow
up, up here. I don't know where your family's from but, you
know, that's -- that's our backyard. Do not act dumb, but we
just ask, like you say. The future is going to be affected.
MR. LOMAX: I don't have any children. I don't have any
grandchildren so I have to worry about yours. I guess.
UNIDENTIFIED MALE: Well, I do, you know.
MR. LOMAX: Yeah and that's part of our job. That's part
of our job is to worry about you, your children and your
1. UNIDENTIFIED MALE: You guys say, yeah, we get the taxes.
2. MR. LOMAN: I don't work for the oil and gas company. I
3. work for the government. I serve you.
4. UNIDENTIFIED MALE: Yeah.
5. MR. LOMAN: But do the oil and gas companies -- and I
6. think your point sir, is well taken. The oil and gas companies
7. make a lot of money, a lot of money, a lot of money. That's
8. your point.
9. UNIDENTIFIED MALE: The market is shot.
10. MR. LOMAN: Go ahead. I'm sorry. I didn't mean to
11. interrupt.
12. UNIDENTIFIED MALE: But we're expected to take care of our
13. -- with that $250 million, run everything up here with the costs
14. so high. And on top of that, try to create jobs and everything.
15. It's -- I don't know what it's like in the Borough but it's got
to be hard.
16. Just like with the federal government, you know. You're
17. running our government, leaving it without any money. That's
18. the truth. Leaving a deficit. No China money you know -- we're
19. a slave to China for real.
20. UNIDENTIFIED MALE: The North Slope Borough gets its money
21. from tax and property tax and that is declining because of the
22. aging infrastructure. And creating a pipeline and creating
23. onshore infrastructure, the property tax will increase. And the
24. North Slope Borough will have more money to sustain itself. The

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1. Borough is not running on a deficit. It's running at a break
2. even, with some funds being put away for future use. Not like
3. the Federal government, where there is so many trillion in the
4. hole and who knows what will happen.
5. UNIDENTIFIED MALE: The federal government is the one that
6. (indiscernible), you know. Would it (indiscernible).
7. UNIDENTIFIED MALE: I don't know it's a lot deeper.
8. MR. LOMAN: What is your biggest concern? If there is one
9. thing that is -- bothers you the most with respect to offshore
10. oil and gas?
11. UNIDENTIFIED MALE: I notice (indiscernible) done correct.
12. MR. LOMAN: Safety?
13. UNIDENTIFIED MALE: If there is a correct way.
14. MR. BLAIR PARENTAKI: I feel like, I guess, for the
15. welfare and well being of our community like, no discussion of
16. natural gas heating their homes and there's a -- lot cheaper
17. than transporting diesel, what they're doing right now to heat
18. our homes. Our businesses are burned by diesel. And it's
19. transported to the barge. I read somewhere that -- looking to
20. the gas, analyze the gas, whatever to -- -- if it's feasible,
21. for Weinwright to get that. You guys have no -- anything to do
22. with that except the oil companies who drill for that, right?
23. MR. LOMAN: You're talking about Alpine and the natural
24. gas?
25. MR. HOPCION: You're right, Blair. That gas issue in the

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1. book that you're reading, would be between Weinwright and the
2. producer. It wouldn't -- the Federal government couldn't
3. mandate the oil companies to give us free gas or flat gas, or
4. whatever it would be, between the community and the development
5. -- the developer.
6. MR. BLAIR PARENTAKI: We'd have to talk to them too, to
7. see if we can go about that, getting heat to producing oil and
8. gas, right?
9. MR. LOMAN: That's -- it's a business deal where an
10. arrangement, a legal agreement or agreement between the
11. community, and the case in Nuiqsut, and the producer, yes. I
12. think what you're talking about, and John is certainly right --
13. we can't make a company give a community gas or anything else
14. really.
15. Even the Conflict Avoidance Agreement in a recent court
16. decision which kind of exemplifies what I learned after working
17. for the Bureau of Indian Affairs for 10 years, a lot of times
18. you sue and you win, but you lose. And the lawsuit involving
19. the conflict avoidance -- it was actually challenging
20. exploration. But the issue of the Conflict Avoidance Agreement
21. -- the court found that neither NMS, our Agency, or
22. National Marine Fisheries Service, is a party to the Conflict
23. Avoidance Agreement -- couldn't do anything to force anybody to
24. come to it if it wasn't reached. Couldn't do anything if it was
25. breached by either party. And so, in other words, the Federal
government. Just two Agencies standing on the sidelines putting
up their chest and walking around powerlessly.

And so that essentially means the Court found, and that
was the Ninth Circuit, that this agreement is between the Alaska
Entire Whale Commission and the industry alone. Last night,
however, when we were talking about -- a little bit about the
reorganization of our Agency. I mentioned earlier. Everybody
may not have been here then. We're not doing reorganizing.
We're going to change our name again. The Regulation and
Enforcement will go to a new Agency that's about to be created
called the Bureau of Safety and Environmental Enforcement. Our
inspection arm of the Agency will become a stand alone Agency.
The Bureau of Ocean Energy Management will move forward
and do environmental reviews, interface with the public.
Probably do everything but those enforcement activities. And
they don't know exactly yet, because they're working on how to
create an Agency that regulates the industry that will do thing.
One thing. You might be the most interested in this, since your
concern is safety -- most interested.

UNIDENTIFIED MALE: Thank you. (indiscernible) you're
already talking, the government's trying to expand, you know.
MR. LOMAN: Not necessarily expand. Do something right for
a change. They want to create an Agency that restores public
credit, restores public trust.

UNIDENTIFIED MALE: Another thing I wanted -- just ask

MR. LOMAN: Well when I see somebody that thinks that, you
know, that I don't serve you. I'll come back pretty strong and
say, I serve you. I serve you just as much as I serve any oil
company. I serve them too, a part of my job.

But -- so this new Agency that they're going to create,
that they want to restore the public's trust, including yours --
they've asked for recommendations from us. And we've said,
well, we think you need to create an Agency that is feared and
respected by the industry. Feared and respected by the
industry. That doesn't mean the industry is afraid of them like
in the context. Feared because of their capability to regulate
then -- their respect and fear together that industry, in a real
strong way.

Last night, with the leaders in Point Lay, it was brought
up that the Agency's regulatory arm needs to have a component
that protects the Inupiat culture, protects subsistence whaling.
Protects other subsistence activities. Protects the culture,
the Inupiat culture, from all kinds of other activities that be
-- come from integration into the community, et cetera, et
cetera, inasmuch as the law allows.

And I had recommended, already, a much broader set of
expertise than just drilling operations. And so, I'm going to
recommend, and I think other leaders from communities in the
Arctic will also recommend, that the Agency include a component
that has a person. It'll be a person, probably a person who has
experience like all leadership comes here -- comes first from
whaling. I have to believe it'll be leaders here, our leaders
in the whaling context first. Whaling first, and possibly
somebody who was also an MMO worked in the industry, the oil
and gas industry. Regulated the oil and gas industry for the
Borough, or some other massive expertise that adds to this new
regulatory component that will restore public trust.

Restoring public trust in the Arctic is going to mean
doing those kinds of things that I can't do. I didn't grow up
here. I don't know about whaling. I can read about it. I can
talk to you about it. But I've never done it and I won't do it.
You do it. I'm not allowed. So it will have to be somebody
with that kind of expertise. And that might restore public
trust. Who knows, it might even restore your trust, I don't
know. We can hope. I can recommend, hard, as hard as I can to
these people who are in Washington D.C. Their lawyers, they
know nothing about this. So they'll listen to us. And a lot of
what I have to say comes from people in meetings like this. The
Lord knows all of my good ideas just get me out of the good
schools.

So that's where we're going as an Agency. And I think
this new regulatory Agency will be created as soon as -- just in
a few months, there'll be an announcement of a new Bureau of
Safety and Environmental Enforcement.

We want to take public comments this evening, comments
1 you have to encourage. Help me with this if you can. Encourage
2 people to come forward and say what's on their mind.
3 UNIDENTIFIED MALE: I don't even know the times that we
4 got.
5 MR. LOMAX: The draft Supplemental EIS? Well given all of
6 our environmental documents that we've produced, it's two
7 things. Easy to read because it's written in plain English.
8 And it's short, probably the smallest environmental
9 document we've produce just about, you know. Yes sir?
10 UNIDENTIFIED MALE: Are those the three, there's only 46
11 max (indiscernible). I believe in your EIS?
12 REPORTER: Can we get his name?
13 MR. LOMAX: I'm sorry?
14 UNIDENTIFIED MALE: The three concerns the Court gave you
15 -- are those the only three that you're looking at?
16 MR. LOMAX: Yes.
17 UNIDENTIFIED MALE: To fulfill your EIS?
18 MR. LOMAX: Yes. The impetus for preparing this
19 Supplemental Environmental Impact Statement is the Court demand.
20 and those three things that the Court said we needed to address.
21 UNIDENTIFIED MALE: Okay. (indiscernible).
22 MR. LOMAX: Hasn't been -- hasn't been submitted to the
23 court yet. Because the National Environmental Policy Act, in
24 addition to saying you must address the affects to the human
25 environment when you're taking a major Federal action like in
1. Issues with the Director Michael Bromwich, Tom Beaupreau and John Groll here in Wainwright on October 27th. At that time, I told him that the City supports a balanced approach of exploration in the Chukchi Sea. That support is shown in a Resolution we passed, adopted this year. I have a copy of the Resolution for you that we would like put into the record.

2. By a balanced approach, we mean one that provides jobs and business opportunities, but does not impact our subsistence lifestyle. This balance is important to us because, while much of our traditional food comes from the sea, in today's economy we must also rely on jobs to pay the bills for the modern services we have here.

3. One of those modern services is electric power. Today our electricity is provided by diesel generators. The potential of natural gas from our offshore field to power these generators would be beneficial to us in two ways. It would provide us with a consistent and less costly fuel. And it would help reduce the greenhouse emissions burning diesel fuel products. This is an advantage our neighbors in the village of Nuiqsut enjoys, thanks to gas produced in the Alpine Oil Fields.

4. In a remote village like Wainwright, the number of jobs is limited. This is why we support careful exploration in the Chukchi. Because our community is so close to the exploration area, we have an opportunity to create long-term jobs. That is why we join the Olgoonik Corporation in support of exploration.

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1. Resolution to us. And we'll make it part of the record.

2. MR. O'CONNELL: All right. And, I'll leave you a copy in here and I never write a copy to the City of Wainwright. Maybe I could write it down first before I turn it over to you?

3. MR. LOMAN: Sure.

4. MR. O'CONNELL: We got the copy in Wainwright.

5. MR. LOMAN: Thank you very much for your comments and the Resolution Mr. Mayor. We appreciate that.

6. MR. O'CONNELL: Thank you for the opportunity to testify tonight.

7. MR. LOMAN: Thank you Mr. Mayor. We need that note for the record.

8. MS. MAIER: Good evening. For the record, Lucille Mayer. Thank you for coming to Wainwright to hear our testimonies this evening. And I'm sure there'll be others that will submit testimonies or their comments to you by the 27th of this month.

9. My name is Lucille Mayer. I am a member of the Board of Directors of Olgoonik Corporation. The Village Corporation of Wainwright, Alaska. The Olgoonik Corporation was formed in 1973 by the Alaska Native Claims Settlement Act. In 1999 we formed Olgoonik Development to create and manage for profit, subsidiaries in government contracting.

10. During the past nine years, Olgoonik Development and its growing number of successful subsidiaries have assembled a record of proven performance in the area of construction management, facility operation support services, design/build services, logistics support, environmental remediation services and technical security. While this growth has brought financial and educational benefits to the community, the great majority of the jobs created are outside of Alaska.

11. However, the Federal government's focus on reducing reliance on contractors makes it necessary for the Olgoonik Corporation to seek opportunities outside of the Federal market place. For that reason, we made the strategic decision several years ago to diversify into commercial operations. One of our key business targets was the oil industry in Alaska. In advance of potential exploration in the Chukchi Sea, we began investing in the infrastructure and technology needed to support oil company operations on the North Slope.

12. Our working relationship with the industry in the Chukchi started in 2007. This was the year we began providing Marine Enthal Observers, as well as crew change and supply support for companies conducting science studies in the Region. This support has grown over the past two seasons and made it possible, train and hire local residents for several seasonal jobs. During the past four years Olgoonik has invested in excess of $5.5 million developing and upgrading infrastructure - purchasing equipment and preparing residents for working with the oil industry.

13. We have built good relationships with the companies who
have leases in the Chukchi. We have worked together to develop
the groundwork for important economic growth. In the forefront
of these efforts is our focus on what Mayor Oktilik described
as balanced growth between economic and subsistence issues. The
jobs and economic development that will come from exploration in
the Chukchi Sea is important to the Oloponik Corporation and the
people of Wainwright. We are confident that exploration can be
done in a manner that protects our subsistence traditions. Our
Board has passed a resolution in this regard. And we present a
copy for inclusion in the public record. Thank you for your
time. And I will be happy to answer any questions you may have.

MR. LOHAN: Thank you very much.

MR. MAYER: Un-huh (affirmative).

MR. TERRY TAGAROOG: Good evening. And before I start, my
cell phone accidentally pressed a number. And do you know who
that person was?

UNIDENTIFIED Male: Your mom?

MR. TAGAROOG: No, Marie Tracey. And she send her
greetings to all of you. I know she -- you met with them
yesterday. Anyway, I'm glad you guys are here and speaking to
us about this, even though it might be on a short notice.

My name is Terry Tagarock. I am speaking today as a
member of the Wainwright Tribal Council. The Council also
believes we can achieve a balanced approach between our
traditional subsistence lifestyle. This is important because we

1. drilling in the Chukchi.
2. Like the City of Wainwright and the Oloponik Corporation,
3. the Council has passed a Resolution supporting exploration in
4. the Chukchi. And I request that this document be added to the
5. record of this public hearing. Respectfully, Terry Tagarock,
7. And I believe you have that copy of the Resolution.
8. MR. LOHAN: Thank you.
9. MR. TAGAROOG: Thank you.
10. MR. HOPSON: My turn?
11. MR. LOHAN: Always.
13. Good evening. I'm going to speak on behalf of the Whaling
14. Captains because our President is not here today.
15. My name is John Hopkins, Jr. As one of the Whaling
16. Captains in Wainwright, I would like to thank your Agency for
17. this opportunity for us to express our opinion regarding oil and
gas in the Chukchi Sea.
18. Every whaler in our group is committed to support the
19. subsistence lifestyle in Wainwright. That is why we have paid
20. close attention the plans to explore for oil off our coast. We
21. understand that those activities can bring new jobs to
22. Wainwright. Those jobs are important, because every Captain
23. knows that it takes money to support subsistence whaling. We
24. need to pay for gas, supplies and equipment. That money comes

1. no longer function in an isolated barter economy or rely totally
2. on subsistence as our ancestors did.
3. But subsistence remains an important part of our way of
4. life. The Arctic Ocean subsistence resources not only feed us,
5. but are fundamental to our identities as Native Alaskans. While
6. those waters provide many of our basic food, it is important to
7. consider the fact that we also must rely on local jobs in
8. addition to subsistence.
9. Our households are caught in a changing world. We hold
10. strongly to traditional Inupiaq values, but must also adapt to
11. the reality of living in a cash based society. The limited
12. number of jobs available in the Village is found in public
13. services provided by the North Slope Borough, the City and the
14. Oloponik Corporation. In the past, this has meant that many of
15. our young people have had to leave the Village to find work.
16. For that reason, we see oil operations in the Arctic Ocean
17. as one of the most important opportunities we have for
18. developing a local economy that could grow and support future
19. generations. We understand that exploration and development
20. activities in the area will bring challenges. By speaking with
21. us about our concerns and taking advantage of our traditional
22. knowledge, these challenges can be overcome.
23. We believe that our traditional way of life can be
24. balanced with responsible and environmentally safe oil and gas
development. We urge you to move forward with approval for

1. from local jobs.
2. For some time now, the Whaling Captains have supported
3. Oloponik Corporation's effort in the oil industry. They have
4. been active in making certain the oil industry understands the
5. importance of whaling and other subsistence hunts. They have
6. led the discussion of what can be done to balance exploration
7. with our traditional lifestyles, our concern for the environment
8. and our need for local jobs.
9. As an example of this effort, Oloponik runs a
10. Communication Center during the summer season to make certain
11. offshore science operations do not interfere with whaling. The
12. company also operates a small boat that supports the Science
13. Program. This fall they've used that vessel to help tow in that
14. whale, which was Wainwright's first fall whale.
15. We appreciate this leadership and join the Oloponik
16. Corporation, the City of Wainwright and the Tribal Council in
17. their support for the Chukchi oil exploration that is done in a
18. safe and respectful manner. Thank you.
19. I've also got a copy of a letter dated January 7, 2010,
20. addressed to June Children, our President of Oloponik
21. Corporation from Walter Nayakik, Jr. our president of the
23. MR. LOHAN: Thank you very much.
24. MR. HOPSON: Thank you. I just want to ask this question.
25. It's probably the only community that has statements of this
sort, that pretty much supports the working relationship with oil companies and the Federal government. One, because we understand whether we fight you or not, oil exploration will continue. So we've taken a proactive stance to work with the industry and the Federal government to help balance the issues and not fight in court.

What questions does the Federal government have of us in that sort, or the State government for that matter?

MR. LONG: Well I don't know if I can speak for all of the Federal government, but you are correct that -- and there is a subtle difference. Wainwright and the statements that are being presented tonight aren't the only statements that are supportive of responsible exploration and subsequent development. There's a fear. And it's understandable to me, and I think to everyone in the Federal government, of a major oil spill.

This spill that occurred in the Gulf of Mexico on April 20th -- because I work in Alaska. I've never worked in the Gulf region. I've only worked for this Agency in Alaska. I will only work for this Agency in Alaska. I come to this Agency because, one, I wanted to live in Alaska first. And, so I said to myself, what would I do and what would my colleagues do had that occurred in the Arctic? But for that spill, Shell may have conducted exploration activities in the Arctic. It was likely that they would have. And I think that -- I know I would have.

and other culturally self-defining activities. It has to be done and it can be done. We know it can be done. The Despater Horizon spill, Exxon Valdez -- these are incidents that didn't have to happen. They shouldn't have happened. And they didn't have to happen.

One man could have made a turn and avoided. On time or even close to on time, and avoided the Exxon-Valdez spill. One turn, one course change, and it didn't happen. That's how simple it is to avoid it. Given that, I say it doesn't have to happen. The reason it happens, in my mind, and this is just me, it's not about the Federal government, my Agency. It's because people get too comfortable, too comfortable they don't get enough sleep or don't stay awake when they have to. That comfort comes through a lot of things. It comes through an industry that says, we've got a wonderful safety record. It comes from a regulatory Agency that says, we've got a wonderful safety record. And they put themselves on the back. And they get more comfortable. Pretty soon they're asleep when they need to turn.

Safety environmental responsibility is accomplished through endless demonstration. You don't need to talk about it and brag about it. And, hopefully, the industry -- hopefully the industry will start realizing that. In the frontier areas, they won't make a dime unless they realize it. Despite what they write in the magazines and say on TV, and even our highest elected official and the person I ultimately serve, say -- we have told industry that loud and clear. We had a conference in March. Oil platforms on posters that the Coast Guard put up.

Great, clear, sunny days and they're on fire and toppling over in calm waters. And we've said, this industry has to avoid that or you will never have a production platform in these frontier areas like the Arctic.

And the room gets silent. I don't mean to rain on people's parade. If there wasn't any exploration after the Despater Horizon incident, it's not going to make it any easier. One thing it will do, is it will make it safer because the regulatory Agency will do a better job. And hopefully industry will at least get one huge giant step forward to endless demonstration of safety and environmental responsibility. It can be done safely. It can be done responsibly. And it can be done in a way that treats what every political appointee and elected official that I've seen in my entire Federal service wants. They want to treat Native people like our national treasure instead of the poster child for the National Trash Campaign. They want to do it. And that's a good starting point. And when you really want to do it, you'll probably do the right thing. Probably. I'm with them on that.

MR. AGNASAGGA: For the record, Ransom Agnasagga, Alternate Commissioner Alaska Eskimo Whaling Commission. Yeah, I was not made aware of this meeting, you know, and I'm on the AWC. I'm an Alternate Commissioner. I don't see Moose in...
here, you know, he's our Commissioner, you know. I don't know what kind of information he got if he's ever seen this, you know, because I haven't seen it, you know.

Just listening to what everybody said, our Directors, you know -- our guess our corporate leaders, you know, they said it all. You know, even in the Bible it says all traditions will come to pass, you know. Eventually everything that we do now, you know, it's not going to be done 30 years from now, 40 years from now. We understand that. And I guess even really reading it, I'm going to have to stand behind them too and support it. But I was not made aware of this meeting until I saw it on the billboards around town. And I didn't know what to expect, you know. But I'm glad John stood up for the Whaling Captains Association, you know, and I hope that the OQ will continue to support -- I hope, you know, this fall whaling season.

I mean when I was for a discount on gas, you know, because I didn't want to be considered a special interest group, you know. What I heard first one of the meetings -- that kind of hurt, you know, so that just shows where our traditions are going, you know. It's corporate -- it's all about money.

I just want to make the comment that I hope it's done like they say, responsibly and safely with the future in mind, you know. Because when the oil and gas is gone, there's the money with it. And what's left is what we're going to leave our grandchildren, you know. And I just hope that it's done reasonably and safely. I guess I have to stand behind everybody else here in Wainwright or else I'll be the black sheep. Go do it.

ER. LOGAN: Thank you.

ER. ANNASAGAGA: I wasn't able to draft a letter to you, know. I wasn't made aware of it until --

UNIDENTIFIED MALE: You still got time.

ER. LOGAN: Thank you.

ER. HONOR PATTsoon: For the record, I'm Howard Patsokak.

I'm the Cully Corporation Chairman. To me, as a whole, I've got to think about not just me, not just my neighbor, but the whole community. You know, I grew up watching our traditional whaling subsistence, before all the electric stuff came around. You know, I got to see part of that. I share Hanson's uncertainty of these fears.

I have the same fears, you know, but I go out hunting out there too. At the same time, you know, we're all dependent on the oil that directly benefiting us for the past -- since the 70s, right?

MR. ANNASAGAGA: (Indiscernible) They ain't going to come out.

MR. PATTsoon: Yeah, I share your fears. At the same time I don't believe in living in fear. We as Native people, we're strong willed. But at the same time, we have to deal with...
That's where I see this helping us in a positive manner.

The potential for an oil spill, I believe, and I'm not an expert, is low. Based on the knowledge we've learned, and the education we've gotten from the industry over the past five years. I was probably the most vocal person against oil and gas in Shell first came up here again in '05 to tell us they were going to go develop. It's because of the education that I've received from them and the trips that I've taken around the world -- polluting Norway and seeing operations of not just Shell but Conoco and Standard Oil, made me believe we can do this.

Our oceans are no more than 170 feet deep where they plan on developing or exploring. The Deepwater Horizon was in a mile of water, 5,000 feet of water, which is very hard to get to when there's a catastrophe below. Ours is just a matter of hours before we can get to it, not days or weeks or months like they had. So I think we can get this done in a positive manner. But that fear of an oil spill is still there.

But I have to find a way to buy these items so I can continue our subsistence. We take kids out to our cabin that when -- some kids that don't have family that goes up the river -- we get to expose them to our traditions over a time period. So I get that opportunity because of the job that I have. Now it provides me money to buy this stuff. So it's a positive move forward if we can get then to explore and develop.

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1. Our schools are top notch. Our water and sewer is top notch. Our Fire Departments are top notch. Our Public Works is becoming top notch because the North Slope Borough has the taxing authority to provide that. But because of the aging facilities in Prudhoe, the money is at a status quo practically, the taxation. So we can't build anything more than what we already have.

2. Yet our populations throughout the North Slope is growing. It's not declining. So we got to think where are we going to build our next school when we become over-populated? Where are we going to build our next hospital? If we need one in a larger community? We're going to need more fire trucks. We're going to need another ambulance. We're going to need more police departments. We're going to need more teachers. There is the way that the taxing is going, the properties at -- decline the property tax by the status quo.

3. So we can't provide that unless we create more infrastructure, building a pipeline, building infrastructure, hotels. You know, support facilities for offshore oil. Is our -- basically our only hope for the next 20 to 30 years what you look at what is going to happen to us, if everybody just walks away and does nothing. If the oil companies decide not to develop, we have nothing. We're going to be stuck with what we have today and try to come up with new ideas on how the world will be able to provide the services that it's mandated.

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1. So it is a positive move forward. You know I just -- I've said this in numerous meetings. And you've heard me over and over. We need this to happen because of this reason. ICAS.

2. Native Village of Point Hope, ANC, communities. Don't come to these communities and tell us why they're doing this or when they're going to do their lawsuits. You know, they don't get our blessings. We may have members in some of those organizations, but it's just one member on a Board. And they don't come down here and ask us for our opinions or to whether we want to do this or not, whether we should get into a lawsuit or not over oil and gas.

3. So they're not really representing, like ICAS says -- they represent all of the Inupiat. I don't see that happening. I don't see it working. It's an organization that just has a mindset of no oil and gas whatsoever. And we have a problem with that. I have a personal problem with that. And I've expressed my concerns to George Edwardson. He is the President of ICAS. But he won't listen to me. He won't even look at me when I want to talk about oil and gas with him. He's a -- in my opinion, a one eyed jerk. He's my uncle, for crying out loud. But I have to call him that because he won't listen to me. He won't reason with me. He just does not want to reason. And he's the Executive CEO of ICAS. Yet he's supposed to represent us all, 10,000 people. But he won't. Thank you.

4. MR. LORMAN: Thank you. It's the other question I have.

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1. Oh, go ahead sir.

2. MR. AGNASAPGA: For the record, Ransan Agnasapga. I just wanted to comment (indiscernible) ICAS, ANC. The reason ANC is included in the lawsuit is because it was formed under ICAS and that's what I -- if I remember right, we were the leading support of trying to get behind that lawsuit during the meetings in February.

3. MR. LORMAN: The other question I have for everybody here is -- at least in some as what has happened, and these are offshore activities -- offshore activities that we are responsible for overseeing, facilitating, promoting, facilitating. Here in Wainwright, there's been some activities that demonstrate that maybe there's the desire for integration of the industry -- outside workers.

4. Prudhoe Bay has segregation. Is integration of outside workers a concern for people in Wainwright?

5. UNIDENTIFIED NGL: I don't know, look at me.

6. MR. MARENO: I think in my opinion we -- if I have local trained people to do the job safely, ready to go, which we don't have, because we haven't really gotten the population out there. But if I had it in my hands here, saying we have these people that can do the jobs, and the oil companies are not hiring us, then we have a problem. But the way things are going, I think integration is happening and I think it's working well. In my opinion.
MR. LORAN: Mr. Mayor.

MR. OONTOLIK: Knook Oontolik again, for the record. Oil and gas development in the Chukchi and the Beaufort Sea I see that as a place that we could benefit ourselves in our community. So I heard it along the lines that, from reading history books and whatnot of our United States and our Federal government, about mistakes in there when it could benefit the Federal, when it could benefit the State, when it could benefit private sectors and benefit most everybody, when it's essential.

That is, where over the impact is, it could benefit us here in this small community in Wainwright. I believe it could be beneficial to us all -- of what is happening now in -- close to Wainwright. These are by the ocean or by the land, we are getting to be impacted. And we haven't seen the full impact of it yet.

We're going to be impacted whether into the future as probably Northwest Fisheries Service will probably come to the Arctic. And we'll probably see the northwest manifestation of routes opening to the future in offshore tourism. We can see this as a little, even though it's oil and gas -- pocket. There's other things that we're going to see that will impact our Arctic Ocean.

We're going to see -- we haven't seen the impacts of what's going to be happening through the Bering Sea and through the Chukchi Sea of ship trafficking. How are we going -- how

some way for our own community, use over here and try to develop relief -- oil spill relief fund from the oil company before it starts its production. I think it would be essential, even though the Eelkino Whaling Commission -- I've heard they asked for $20 million aside for our subsistence way of living or what you call it (indiscernible) village, kind of a funding. We need that kind of funding for our own community. Wainwright would be very impacted and most of our, probably 30 percent of our community relies of subsistence food. Some rely on store bought food. Thank you very much.

MR. LORAN: Thank you.

MR. AGNASAGA: I just want to say, Hanson Agnasaga, was saying something like mitigation matters for the -- mainly the Wainwright community. I don't know what we can do for that -- a bend-aid over it, but you said you can't tell them what to do.

That's kind of like what I understand.

MR. LORAN: Well there is a huge issue of -- it's one of Mayor Itta's -- a Ocean Claims Initiatives and it involves revenue sharing rather than sharing to the local level. That can mean different things to different people. The biggest to the local level to the ground zero level. Certainly Wainwright community and The Native Village of Wainwright are at ground zero. Ground zero, as in one of the communities that would be most affected because of the proximity to the Chukchi Sea.

Revenue sharing is a very difficult one for us bureaucrats that work for a Federal agency. Because it's going to require legislation. We don't have the authority to mandate it. But it does exist in the Gulf of Mexico.

MR. HOPSON: You say that in a manner like, my opinion, the Federal government doesn't want to deal with revenue sharing yet. The amount of money and royalties that the Federal government gets from the leases, the amount of money that the Federal government will get from the sales and royalties, why can't that be used as part of the revenue sharing for the impacted communities? I mean, you know, it's just common sense, that's where it should come from. We all know the oil companies are in it for the money. The Federal government is in it for the money, as well. But if we -- it would make more sense if the revenue sharing came from the Federal government's part of its royalties. Or the State of Alaska, for that matter, when it gets its royalties, you know. That might be the route to debate rather than trying to find a way to make the oil companies come up with a revenue sharing plan, which you can't even recommend.

MR. LORAN: Well, in the case of the States in the Gulf of Mexico it's the law and it goes to the State level. Senator Begich has introduced some legislation. I know there's been other legislation introduced that has gone nowhere.

MR. HOPSON: Because it was a bogus legislation.

MR. LORAN: Well there's -- there are other people in bodies such as the Senate, Senators. And their position is, the
1. Royalties from these resources should go to all the people because they belong to all the people. So the other counter argument is, is all the people don’t suffer the kinds of affects.

2. I come from the Upper Peninsula of Michigan on Lake Superior. It’s pretty safe to say that my culturally self-defining practices on the Lonto (ph) Indian Reservation will not be affected by offshore oil and gas activities in the Arctic. So it’s easy for me to understand why communities in the Arctic are most affected and others are not. So he logic is easy.

3. As far as an agency goes, we can give administrative support to certain legislation. We can say certain things. It would be pretty safe to say that the Administration, no matter which Administration, can support that kind of legislation.

4. Revenue sharing, because it will resolve conflicts and competing interests that are stumbling blocks to getting anything done so that the nation can sell and benefit from its resources. It’s a stumbling block.

5. And we’ll see what happens there. It’s going to require legislation to get any kind of thing that resembles revenue sharing over and above the Coastal Impact Assistance program funding. Yes sir.

6. MR. PATKOTAK: I am Blair Patkotak for the record. Do I have to go up there to the mic to speak?

7. MR. LOMAN: It’s easier for the Reporter to hear you.

8. Afraid of oil spill, will come to pass. You will always have oil spills, plane crashes, car crashes, what kind of disasters that are out there. But we can minimize that. We are learning right? But I’m sure that if we do our part in lifting them up, it can be done successfully. And I hope that our grandchildren will reap the benefits.

9. Hopefully, if I ever get married and have kids, then I become a grandfather. But I’d say thank you very much and may God bless you and all those that came and attended. I speak this from my dad’s heart. From a couple of years ago. I heard a lot of no, no, no development and whatsoever. To come to a meeting like this is kind of -- brings to mind my dad what he wanted in a way. And I thank you very much for taking the time to come here and come back again.

10. MR. LOMAN: Thank you very much.

11. MR. PATKOTAK: Thank you.

12. MR. LOMAN: We appreciate it. I think. Yes sir.

13. MR. AGHASSAGHA: One more comment. Ramsam Aghassagha. This is just like the -- there ain’t going to be no socio-economic, what you call it?

14. MR. LOMAN: Socio-economic study?

15. MR. AGHASSAGHA: Yeah, like impact like that?

16. MR. LOMAN: We have socio-economic studies specific to the Chukchi Sea under way.

17. MR. AGHASSAGHA: You do?
MR. KALLER: Right. Yeah, those are -- I'm not sure of the exact status of those, but I know those are --

MR. ORTOLLIK: And how could we get those studies?

MR. KALLER: Well, Sharon --

MR. HOPSON: We were a part of that. Our company was a part of that study.

MR. KALLER: Yeah -- Sharon has a list of the studies and then there's -- we have a website that has studies that are ongoing, as well as completed studies. And then, if you want more information there's about eight or, what, ten people in our Study Section. Hugh Williams is the Chief of it. You know, if you need more.

MR. HOPSON: Would these studies --

MR. ORTOLLIK: Got a lot of group of them -- many of them like Shell and them. Shell, Conoco and those others that's been leading them -- studying on them.

MR. KALLER: Yes and this --

UNIDENTIFIED MALE: Their focus would be the bowhead whale and it's slowly starting to go out into, like, other animals.

MR. HOPSON: We have copies of the studies. And they talk about walrus and whale and seal and fish and krill, plankton, the bottom, the shrimp, worms. We have all of that. They're just trying to make it in plain English because about 80 percent of the book I cannot understand and read it.

MR. KALLER: Yeah, way to --

MR. HOPSON: So I read it based on the pictures until we get the down to earth type -- summary out of it. And that's what we're waiting for. But we do have this -- the book is about yes thick just on one season's project.

MR. KALLER: Yeah one.

MR. LOMAN: Mr. Mayor, our new Community Liaison, Michael, will be coming to the community soon. And, in addition to working with the school, to kind of have some interaction between our scientists and the students, expose them to some outside -- positive outside influence that is part and parcel to their environment here.

Our environmental studies people can come with that effort and present information, especially those studies in the Chukchi Sea that are being finalized or where data's coming up and provide information to you by talking, oral communication, in some pretty substantial detail. It is not true when you read that the government knows more about the planet Venus than the Chukchi Sea, no matter how many times they say it.

MR. ORTOLLIK: What about the sea collection data from the bottom floor and the offshore studies of the bottom sediments of the (indiscernible).

MR. LOMAN: What we do know is that the Arctic Ocean, and the Chukchi Sea certainly included, has a breathtaking amount of diverse living organisms that support a complex ecosystem that is beyond the imagination of most. From one respect, I know that every whale knows it, because it's the same ocean that supports those whales, an extremely complex and sophisticated animal, some of which are swimming -- or are swimming out there now and were swimming when Abraham Lincoln was President.

MR. ORTOLLIK: Most of us were (indiscernible) many have two, North Slope Borough, Fish and Wildlife. How many numbers?

MR. AGGASIBAGA: No, I don't.

MR. ORTOLLIK: Offshore. Walrus becomes a member and Whaling Commission and certain, the Borough Commission. And sometimes, when you understand it in the Arctic Ocean, we've got so many endangered species. There would be a number of endangered species out there. As we're talking right now, how many -- some of them need to be added on to the Endangered Species list into the Arctic.

What, versus Endangered Species and the ones that are coming into the listing, versus oil industry -- what does it mean? Maybe somebody --

MR. LOMAN: Mary can answer that question better than I can.

MS. CODY: Once they're listed under the Endangered Species Act, any action that the oil company wants to take, they have to consult with the Agency that's responsible for that species. So, like for the polar bear, that's Fish & Wildlife Service. And when they give us a plan for what they plan on doing, the oil companies also have to give that plan to Fish & Wildlife Service. And Fish & Wildlife Service reviews it. And for bowhead it's NIMES (ph).

And if there are things in that plan that Fish & Wildlife Service or NIMES (ph) think are incompatible with maintaining these species, they have the option to just say, no you can't do it. You can do it this way instead. Usually it's an iterative (ph) process that goes back and forth, sometimes for months.

And companies having a specific plan and the agency that's responsible for that species, helping them come up with a plan that they can do what it is they want to do without additional harm to a species that may already be in decline. It's a very strong law.

MR. HOPSON: Leads to another question and it's going to affect oil and gas. Why is it that the Federal government doesn't go consult with the people who live with these animals before they're listed? We don't see our comments in -- when they say they come and they say they're going to consider our comments and concerns and listen to them, we don’t see those in the Register. We don’t see our comments.

We all opposed the Federal government in listing the polar bears as a threatened species. But nobody took that serious consideration. And it was a move to screw up oil and gas, in my consideration. And it was a move to screw up oil and gas, in my opinion by the Democratic people of America. No right.
1. Republicans in their right mind would do that thing. We're not that dumb. But the Federal government never did come
2. and seriously take our consideration and why we were telling them.
3. It's not a threatened species. We've seen these animals die of
4. drowning. We've seen these animals die from themselves. When
5. they fight each other, they kill each other. They eat each
6. other. The only reason that it became a national political
7. issue is because Shell was out there exploring, doing seismic
8. activity and some guy took one picture of a dead polar bear and
9. we see it every year all the time.
10. Take for instance, the walrus, the last year's instance
11. where the Federal government said we had four hundred dead
12. walruses on our beach. And there was only ten. And they blamed
13. the oil companies. The oil companies are 70 miles offshore and
14. those walruses died on the beach. They come here and they
15. Cape. You know, it's crazy. Now they want to list -- now
16. they're thinking of listing the walrus as a threatened or
17. endangered species because there's no ice, you know.
18. The animals move. Go to the Russian side and count them.
19. They're thousands of them. You. Watch their pictures.
20. It's just crazy that the Federal government can come here and
21. tell us, this is going to happen whether you like it or not.
22. And then come back to us and say, oh we made a mistake. We're
23. sorry. It's not right, you know. It's just not right. And our
24. taxpayers pay for that, you know.

MR. TAGAOKA: Before I go, one last comment. I want to
25. make it. I'm Terry Tagaoka, for the record. You know we have
26. to listen to the pros and cons of all -- what is happening with
27. the Federal, the oil company and our people. To our people
28. before White man came, we were taught to respect our elders, our
29. land, our sea, ourselves. Respect other people's property. And
30. we didn't have no police doing that, going after people that
31. were doing something wrong. That was up to the Council and the
32. Council had that power. But in the long run, the respect is
33. what we have always been shown to do to our environment, the
34. land, the sea, our animals.
35. If the government will listen to us, then please learn to
36. show respect to our environment. In this Arctic, animals, the
37. mammals we depended on before all companies came up. We showed
38. -- they showed us respect, to show respect to our animals. It
39. took government and the oil companies and whoever it is, to show
40. respect to our environment. Things will go smoothly.
41. And that is one thing that everybody's got to learn.
42. respect. Trust and show others what is right and what is wrong.
43. I know that I was raised to show respect. And I'm looking at
44. the kids that are running around in the library. We weren't
45. even allowed to run around in a meeting or at the church, and
46. that's respect. And all the parents would reprimand us and we'd
47. quiet down and settle down. It's something that has changed.
48. And we know that change is coming. We cannot stop it. Progress
49. -- that's what's happening. And whether we like it or not, it's
50. going to happen. No matter what the outcome will be at the end.
51. But in the end, we'll be impacted. Thank you.
52. MR. GUTNEWER: Terry, before you go, you addressed one
53. race and it was a White person. I would be happy if you say
54. that immigrants' children's, children's children. Probably be
55. the proper words to say -- and you not put him into one category
56. when it's around 300 and some nationality.
57. MR. TAGAOKA: Whatever we do, I want Eskimo support on
58. the North Slope.
59. MR. AGNASOGOA: Nagem (ph) said we are the endangered
60. Species.
61. MR. MONCAYO: Yeah we will be.
62. MR. ZAMAN: Well, I thank you for chewing everything with
63. us tonight. And we learned a lot. Hopefully, you learned a
64. little bit from us. And we appreciate your comments and your
65. time and effort and look forward to meeting you again soon to
66. provide information and to provide assistance.
67. So, barring any other comments, we'll close this record.
68. And say a quick prayer for some good weather tomorrow so we can
69. go to Barrow and continue on with this mission. Thank you again.
very much.

(Off record: 9:30 p.m.)

REPORTER: Off the record 9:30.
Bureau of Ocean Energy Management
Regulation and Enforcement

Public Hearing
Environmental Impact Supplemental Statement
Relating to Chukchi Sea Sale 191

November 5, 2010
Imiqiat Heritage Center
Barrow, Alaska

VOICE CHECKED/CORRECTED

BORN TEAM MEMBERS:

Jeffery Loman, Deputy Regional Director
Michael Haller, Community Liaison
Michael Routhier, NEPA Coordinator
Bob Peterson, Senior Geologist
John Callahan, Public Affairs Officer
Mary Cody, Wildlife Biologist
Sharon Warren, Program Analysis Officer

1

PROCEEDINGS

(On record at 7:10 p.m.)

JEFFERY LOMAN: My name is Jeffery Loman. I'm the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, formerly the Minerals Management Service, probably more commonly known as MMS. They changed our name. And they are going through a major ongoing reorganization of the Agency with the goal to restore the public's trust. So that's who I am. We've got some other members of our team, some folks that have come to Barrow for the -- in the communities that we've traveled in for the first time, so I'm going to let them introduce themselves starting with Mike.

MR. ROUThIER: Okay -- hi my name is Mike Routhier. I've worked on National Environmental Policy Act documents for the Agency.

MR. HALLER: I'm Mike Haller. And I'm the Community Liaison for the Bureau.

MS. COOT: Mary Cody, and I'm a Wildlife Biologist with the Agency.

MR. HOLDER: Tim Holder. I'm with the Agency and I'm based in Washington and (indiscernible). Based in Washington D.C. and I keep track of the Agency's activities are (indiscernible).

MR. LOMAN: Thank you. And thank you again for taking the time out of your Friday evening to attend this public hearing.
1 Section 1502.22 of NEPA, an evaluation analysis of what the Plan
tiffs had submitted in their Exhibit 129, about 40 pages of
excepts from their -- from the Agency's final Environmental
Impact Statement, statements regarding uncertainty or missing or
lack of information or data. And so that was the demand to the
Agency. And when litigation is filed in a NEPA lawsuit,
typically when the Agency doesn't fully comply with those
provisions in the National Environmental Policy Act, the Agency
is compelled to do NEPA where it didn't do NEPA, do more NEPA,
do NEPA right. Follow the provisions in full measure.

2 So to do that, and address this Court's demand we've
prepared a draft Supplemental Environmental Impact Statement.

3 Hopefully, you've had a chance to take a look at it. If not, we
have some copies here. It's available online. It's in the
libraries in all of the communities from Barrow, all the way
to Krosewak. And it's probably going to be one of the
shortest, if not the shortest environmental document, that this
Agency produces. Usually our Environmental Impact Statements
are much larger and oneous and complex. This document is
shorter and very straightforward.

4 So, we're here to take comments that you may have about
this draft Supplemental Environmental Impact Statement. But we
can talk about anything else. Talk about anything else you want
talk to about. But especially, we're interested in talking
about your concerns about our Agency. An Agency that is going

5 person to come (indiscernible).

6 MR. LOMAN: Okay. It's an open floor -- open to anyone
that would like to provide comments. Does anybody have any
questions while we build up a little courage -- questions about the
National Environmental Policy Act? Questions about the
Bureau of Ocean Energy Management: Regulation and Enforcement?

7 UNIDENTIFIED MALE: I have one right now -- just for my --
in terms, I guess in terms of just getting to learn and time,
not hearing a timeframe in terms of when you started your
Supplemental and when do you -- are what timeframe are thinking
to end the comment period?

8 MR. LOMAN: That's a good question. When did we start the
Supplemental? Well this is a little inside view to how
government works. The Court issued their decision July 21st. We
read the decision that same day, at least I know I did. And I
read the decision and I said, we've got to prepare a
Supplemental Environmental Impact Statement to address this
remand.

9 Well then the Agency consulted with its colleagues at
headquarters and its attorneys. And a whole week or a week and
a half went by before they decided that we have to prepare a
Supplemental Environmental Impact Statement so I would say by
that time we were into August. And we probably -- I didn't let
the people like Mike know that they had to take the working over
until mid-August or maybe even late August. Something like

10 through a major reorganization with the President of the United
States' goal to create several Agencies, actually that will
restore the public's trust. And I think for us, at least for
me, being part of the Senior Management Team in Alaska, the
public trust in the communities of the Arctic are the most
important to us. They come first, that portion of the public.
And I would submit that, if we can restore the trust of the
communities in the Arctic, the rest of the United States will
follow.

11 So we probably have a lot to talk about. And we'll start.
I think, with just those who have comments that they came
prepared to present tonight. We have a Court Reporter. She
knows how to spell my name because she's been doing this and
listening to me for days and days now. But she doesn't know how
to spell your name. And so, if you would, if you have comments
to present, you can present them from the chair. You can come
up and use the podium. You can kick me out from in front of the
podium. And I'll sit down and let you stand wherever you want.

12 But she needs to hear you and she needs to know how to
spell your name. So we typically start with -- I like to start
with elders. Haring no comments from elders, I usually go to
Whaling Captains. And so, in that order. I would like to hear
your comments or anything else that you have to say. I bet
Harry has a comment.

13 UNIDENTIFIED MALE: I'll make it so the elders can get a

14 that?

15 MR. ROUPHEER: Yeah.

16 MR. LOMAN: Yeah. So mid to late August is when we
started -- and a couple of important dates. The first, I guess,
and most important dates for those that want to comment to the
Agency on this particular document, is the deadline for taking
comments which is November the 29th. So there's still quite a
bit of time, but not a lot of time left to take your written
comments. You can send them by email, regular mail or hand
write them tonight if you would like, and we'll carry them back
with us.

17 UNIDENTIFIED FEMALE: I have a quick point on that.

18 Something I saw that were sent out by the Agency saying November
30th including the case that was sent to the Borough, the Mayor's
office, along with the draft of the Supplemental.

19 MR. LOMAN: I'll make a command decision and move that
comment date to November 30th. And I don't doubt for a minute
that there was some confusion there. The EPA announced -- they
set the comment date and deadline date automatically. And
theirs was the 29th. But we'll go right into the 30th, no problem.
And, from a practical standpoint, we take them until we really,

20 you know, have to get things moving.

21 But, yeah, the 30th could have been put out. People count
how many days -- I mean count -- the EPA counts one way,

22 everybody else counts another. So that's an important date.
The other important date, which is more important for us, is the Court said, when some of the parties in this litigation said to the Court, this shouldn't take a long time. The Agency can do this in about 50 days or less. That was Shell. Shell, as you can well imagine, after spending over $2 billion on leases has an interest in this case. And the Court said, well, six months from my initial ruling, January 21st, the Agency should have that done.

It's unknown what the Court really means by, done, because the way NEPA works, in addition to requiring the Agency to analyze the effects of a major Federal action, in addition to being a Sunshine Law and having everything that we do, like this draft document — this draft document, open and available for your review to take your comments. Hold public hearings like this one, answer those comments, try to address any concerns that come out in these public hearings. NEPA requires that we issue a final EIS — allow for review before a record of decision comes. There's a time period there. Remember, it's 45 days.

And then, issue a Record of Decision. In this case, the Record of Decision is probably going to be pretty simple in that the Secretary can either reaffirm the Sale, let the Sale stand as it is, or not. Not would be some work for us because we took $2.6 billion into the U.S. Treasury from these companies and issued these leases. So we would have to back away from our

MR. LOGAN: Oh, okay.

MS. LEAVITT: The one I got was four volumes.

IDENTIFIED FEMALE: You have any more of those?

MR. LOGAN: I think we have a few more here. They're available online.

MS. LEAVITT: And how are we supposed to know when they're available online when you know, we're not bigwigs. But I consider myself a bigwig being a Captain's wife.

MR. LOGAN: Un-huh (affirmative).

MS. LEAVITT: You know this stuff is important to me, along with my family and what we do. And I want to know about what this stuff is doing too, you know. Because I'm the one hunting and I go hunting with my husband. I butcher his catches. And I've got words to say too, but I can't say them if I don't know what you already -- it's like you already got all these things figured out. And you haven't even heard me.

MR. LOGAN: Un-huh (affirmative).

MS. LEAVITT: I'm like, this is your first meeting here under a new name, but I know I've seen you before.

MR. LOGAN: I remember you.

MS. LEAVITT: So you see what I mean? How do I know?

MR. LOGAN: Well ---

MS. LEAVITT: I'm not in a position -- I'm not in a Director's position. You know, I have internet on my own -- at my own home.
telephone every day if you want. That’s easy to do. And I talk
to a lot of people. And I talk to a lot more people that are
just like you and me then I talk to bigwigs, that’s for sure.
And I’m glad to do that.

MS. LEAVITT: Can you say that number again?

MR. LOMAN: 907-314-5200. And if you get a recording
because it’s after hours or they’re tied up and they can’t get
to the call, the urgency number is my cell phone number that I
carry 24 hours a day. And now, thanks to improvements, it works
in all the communities in the Arctic, as it’s worked all week
this week traveling through Kotzebue, Point Hope, Point Lay and
Wilnawiak and here. So, you can get a hold of me 24/7.

Yeah, and we’d be happy to put you on that list. Mike,
you can make a note and get her on that list that you guys
maintain. Don’t blame me though, when they busy you in
paperwork.

MS. LEAVITT: It’s important. You know even just an email
--.

MR. LOMAN: Sure.

MS. LEAVITT: -- to say there’s an update or, you know. I
know how much it is to send this out, especially the one I got
before, four volumes.

MR. LOMAN: We have to FedEx it to get it to people quick
enough to --.

MS. LEAVITT: Right, so even just an email might even be
cheaper for you. But still having that Notice sent to other
people that are in big positions you know. I’m sorry, but I do
consider myself in a big position.

MR. LOMAN: I do too.

UNIDENTIFIED MALE: I feel the same way as her. I just
got that little piece of paper that was a notification about the
meeting. And I don’t know how you guys send them out. It takes
-- you said something about Fairbanks. It used to take about
two weeks to get it.

MR. LOMAN: Anchorage.

UNIDENTIFIED MALE: And so we have this by-pass mail that
takes forever to reach up here. So, this notification -- my
daughter’s at home. My daughter reminded me that there’s a lot
of vehicles over here, so I came over here. There’s no
notification at all.

MR. LOMAN: Uh-huh (affirmative). Okay -- noted on there.

Somebody in the back?

MR. SAN: My name is San (ph). I was just going to
suggest for these important documents, your meeting is right
next door to the library. And it might be worth talking to a
Library Director and seeing if he would receive a set for the
community.

MR. LOMAN: Yeah, they’re sent -- the libraries are sent
automatically. And there’s a copy over there. Yeah, that’s
another source in the local library. I don’t know -- we

physically looked and found them in the, even in like Point
Hope, Kotzebue, the libraries. We had our meetings in some of
the libraries in the villages and they did arrive there. But,
you know, a library puts them on the shelf and doesn’t get a
blinking light on them. Yes sir.

MR. OLSON: My name is Donald Olson. I’m the State
Senator from the area and one of the -- I’m not that familiar
with the new NEPA. I know that’s what you’re trying to do is
get comments on it. But the concern that we have in the last
six months is that a lot has happened as far as dealing with
offshore drilling and those kinds of things.

Obviously, in April, we had the blowout down in Gulf of
Mexico. In June you had the Baistline -- Judge Baistline’s
decision related to that. Then you had the moratorium put on.

And a number of developments have happened. And with President
Obama in place and his mental framework, and then now we’ve just
gone through an election where it looks like the Republicans
have taken control of at least, one of the bodies. And
we’re going into this time now and it’s all over-shadowed by the
fact that, during the last session down in Juneau for the State
Legislative session, we couldn’t get a Coastal Zone Management
Plan through, that CNSM is always very familiar with.

With that in mind, how is this new NEPA law going to
protect the people that are along the coast. If you’re
prioritizing against something that may -- we’ll have disasters
(indiscernible) declares another mishap, especially if ice is in
place. And, what kind of protection can you assure the
constituents, myself included, that we’ll have something to hang
our hat on?

MR. LOMAN: NEPA isn’t new. Signed into law by President
G. I think it’s probably one of the premier Federal environmental
laws. It’s definitely the most litigated Federal environmental
law (indiscernible). And the -- in the beginning Federal
agencies were slow to comply. And people who challenged Federal
agencies prevailed, in the beginning. That changed as the
Federal government, all these different Agencies taking every
careful Federal action imaginable.

Just to let you know, I’ve worked for -- on NEPA projects,
starting with Hazardous Waste Facility. When I worked for the
Navy, the EIS for that. I’ve worked on NEPA projects that
involved large hog farms, hydro power re-licensing. So there’s
just a huge variation of things that the Federal government
might have to comply with NEPA on. But it’s a planning
document. And it’s designed to inform the public, get public
participation. And then inform the ultimate decision maker of
the effects to the human environment.

And when you do an Environmental Impact Statement, there
might be negative effects, there might be significant risks to
the human environment. And then it’s going to be up to the
Secretary of Interior, or whatever he or she delegates, to make
a decision whether or not that risk is acceptable.

And in the case of the Chukchi Sea sale 193, I had just
come to work for, then, MBS. Happened to be in Washington D.C.
for some meetings when they briefed the Assistant Secretary of
Land and Minerals Management on this upcoming lease sale. It
was his decision, Steve Alford (ph) was his name. I actually
knew him when he was a State -- the State head of Idaho's DMC.
I was a Federal employee. He was running the State of Idaho's
Department of Environmental Conservation. Now he's the
Assistant Secretary of land and Minerals. He's delegated the
Secretary's authority to make the decision to go ahead with the
Chukchi Sea sale or not.

He asked the question -- he said, there's a roomful of
people. I'm just a little guy sitting there from Alaska. And he
said, well now that the Secretary's been up there on the
North Slope and talked to those folks, are they still worried
that the oil companies can't clean up a major oil spill? Oh,
don't you know, that's one of those questions where they're asking
and the real answer is something they might not want to hear.
So one of those questions where they're asking
and the real answer is something they might not want to hear.
These communities managing, scouting meetings for the Arctic
multi-sale EIS that we were working on. And so, I knew, no,
people were not confident in industry's ability to clean up a
major oil spill. And I said, no, they're not. They don't
believe it.

And so his next question was, well, can they? And I said,
in the worst weather day in the Arctic, they'd be lucky just to
stay alive, much less clean anything up. So, you know, I bet my
money on prevention -- better not have a major oil spill. And,
you know, he thought about it for a minute and he said, what
does it say in our documents? I said, there's a risk but the
risk is remote. And that, if there's a major spill, that they
might clean up a 12 percent of what's spilled.

MS. LEAVITT: Now when you say remote, though, whose
decision is that?

MR. LOMAN: Well, remote --

MS. LEAVITT: Remote on their end -- it's real high on our
end.

MR. LOMAN: Statistically -- I'm using remote from a
statistical percent. Is one in ten thousand or greater?

Somebody might say that's remote. You might say it's not remote
enough, you know. That's -- and I -- that's totally acceptable.
But he said, I'm going to go ahead and approve it anyway. But I
want the lawyers to look at it. He looked around the room
and said, you guys aren't like BLM. You don't bring your lawyers
here for this. And let the (indiscernible) guys look at it --
be made the decision (indiscernible) have to say. So there, now
you've got the inside look at how it works. Because that's
exactly what happened.

But at least he asked the question. At least he asked the
the uncontrolled release was occurring. Shell now intends to have a containment dome right there on site. But instead of the mile depth, Shell's is 150 feet deep. The oil will come in the event of an uncontrolled release, will come to the surface right there. It won't travel because it doesn't have to travel far - - 150 feet has a pressure of -- do the math now, three, four, five, about five times the pressure we're under now. We're under atmospheric pressure of 14.7 pounds per square inch. The pressure at a mile depth is over 200 and, about 2,300 pounds per square inch. It's like being -- it would be like being inside a scuba bottle fully charged, tremendous pressure and tremendous depth. That's not the case in the Arctic.

So, Shell's proposed response is about at the place where, if you start adding more, just to be sure, then more means more impacts. The more ships, the more chance for bird strikes into ships, the more chance for ships to run over marine mammals. the more chance of more ships disrupting activities, other activities, including some subsistence activities, in my mind.

UNIDENTIFIED FEMALE: I guess my biggest worry is the ice.

What if there's a leak under the ice?

MR. LOMAN: Well, under the ice -- and ice comes in, as the Whaling Captains. That's in the room, know ice a lot better than I do. But ice comes in different forms. Right now, I think we're looking at -- out here now that's typically

affected -- 20 years later.

--- I'm bad at this --udy, just remind me.

MS. LEAVITT: Where's the microphone.

MR. LOMAN: She would like...

MS. LEAVITT: They can hear people in the back.

MR. LOMAN: Can you tell us your name and spell your last name for the Reporter?

MR. HARCHAREK: Mr. I'm Art Harcharek. Last name is H-A-

R-C-H-A-R-K.

MR. LOMAN: Thank you. Yes?

MR. HARCHAREK: Twenty years later, the people of that area are still affected by Exxon Valdez. They say you don't have to dig very deep into the soil and oil still comes to the surface. To put all that on one person's judgment, whether he's tired? It mean, that had a whale community, a whole population's risks. I don't, you know, see how anybody has the power to even make that decision. Thank you.

MR. LOMAN: Thank you. So -- for some folks that come in after we started, we're taking comments on a draft Supplemental Environmental Impact Statement. But we're also talking about many other offshore oil and gas activities, issues, concerns. And including the organization we are with, the Bureau of Ocean Energy Management Regulation and Enforcement, formerly NOS. An organization that is going through a major restructuring and

reorganisation -- so.

UNIDENTIFIED FEMALE: You guys are going through a major restructuring organization right now?

MR. LOMAN: Yes.

UNIDENTIFIED FEMALE: Okay. So you're supposed to depend on a corporation that's -- doesn't have a very good past history of oil spills. And then they guys are restructuring the plane and --?

MR. LOMAN: The reorganisation is the impetus for it. The reason that the President has directed it is because the public, including you obviously, they lost confidence in the Agency's ability to regulate. And to quote the President, what the President said was, it's an Agency who discharger their regulatory authority with disdain. We're showered with gifts from big oil executives. That's the Agency that I work for. I worked for it then. I've worked for this Agency for over three years.

I can tell you this. I don't work for oil companies. I don't take any gifts from oil companies or anybody else. I serve the Administration with pride, without prejudice. And I serve the people of the United States. Shell Oil Company is no more important -- more important to me than you are, or anybody else. And the goal is to create -- and it will be announced, we think, in a few more months, a new Agency that's the part of our current Agency, our Inspectors, the regulatory arm. And the new
name for that Agency will be the Bureau of Safety and
Environmental Enforcement. And that Agency, the goal is to
restore the public's trust.

Some people in Washington D.C. have been given the charge
to put that together, that new Agency, new name. And design it
in a way that will restore the public's trust. They've talked
to us. They said, what's your recommendations? Our
recommendations are, in short, the Agency must be feared and
respected by industry. Feared and respected by industry. And
so, how do you do that? Well, it should be very experienced in
the full spectrum of regulatory activities, all the Federal
environmental regulatory framework, every environmental law.
This new regulatory Agency should be able to enforce. Worker
safety, so the inspectors would have experience as industrial
hygienists, or safety -- workplace safety expertise.

In Point Hope the other night, talking to the President of
the Native Village of Point Hope, the President, said we think
that your Agency should start to regulate industry to prevent
disruptions to subsistence activities. Which, I went, you're
right. In the Arctic, this new Agency should have an expertise
that would come from being an MMO, Marine Mammal Observer.

Being a Whaling Captain, or at least a whaling -- a
seasoned whaling crew member. An expert on all of those things
of the Inupiat culture that are self-defining practices. All of
the subsistence activities and other activities. Part of a
working with those people to help them put those claims
together.

The difference, I think, between what's happening now to
address the harm, the injury, the damages to natural resources,
the lost use of resources, caused by this disaster that BP and
others possibly are responsible for in the Gulf of Mexico,
should set a distinct difference between what we know, and you
correctly articulated to be the case of the Exxon Valdez. We
all live in and under and subject to laws. And the Exxon Valdez
created some powerful new laws. And, so, companies have to
behave differently because of it. And funds were created that
are managed by the Coast Guard and so on and so forth.

It's not a perfect world, and I understand the
frustration and fear that people feel because of the misgivings
of shortfalls of government Agencies and the laws of the past.
I feel the same way.

MR. BROWER: In common (indiscernible). Harry Brower, for
the record. (Indiscernible) In regard to this discussion here
in terms of the oil pollution happening in 1989, that Act is
subject to address -- to compensate the commercial enterprises.
And it doesn't so much address the subsistence -- to -- how do
you compensate for the loss of subsistence resources? It
doesn't identify anything of that sort of thing, in that Act.
I've asked and tried to look with folks that were working on
that Act before. There's different Agencies in there, between
the Coast Guard that worked on the oil pollution at Valdez. And
they say, they've been trying to define or putting the means for
compensating the loss of subsistence resources. And, it's not
been addressed to date. And somebody should have, you all have
been involved what the pollution Act is structured. It needs to
be very well understood in terms of how it's supposed to be
compensating commercial uses. The losses (indiscernible). If
you have (indiscernible) comes (indiscernible) compensated for
(indiscernible).

MS. WILLIAMS: I am Vera Williams for the record. I want
to comment on NEPA. You mentioned Shell Oil and about their
prevention program. If the drill rig was to be that close to
collect all that oil, where were they going to take it? Are
they going to take on land? You know, what's the options? And
I, I know, if there's stipulations there, what are they going
be stipulating -- do with all that oil that's coming out? Or
to take it to somewhere -- what, they going to dispose of it or
put it down the pipeline that is going down from Prudhoe or --
what's the big plan for that, if that was ever occur? I mean, I haven't heard. What would happen once they collected
all the oil at their spill?

And, another thing also about a compensation for the
substance families. I just (indiscernible) about 20, 25 years
ago. Or are you guys going to compensate the Native people? I
know beef doesn't go a long way for us because, we don't eat
MR. JEFFERY: Hi, my name is Mike Jeffery, J-E-F-F-E-Y.

I've lived in Barrow for 33 years. Question is this, you're saying that this meeting is to comment on the Environmental Impact Statement. I would like to see -- because I'm not going to raise my hand because I haven't seen it. Has anybody here seen it? That we're supposed to comment on?

UNIDENTIFIED FEMALE: I've seen it, just now.

MR. JEFFERY: Well where is it?

UNIDENTIFIED MALE: In the computer.

MR. JEFFERY: One copy -- couple of copies?

UNIDENTIFIED FEMALE: Because I haven't seen it until tonight.

MR. JEFFERY: Well, I mean, it's not a very meaningful -- if none of us know exactly what the -- what the recommendations are. I mean, sometimes when -- I mean it's great that you guys are making the effort to do outreach to the various villages and come to Barrow. But, you know, in different hearings there's at
We'll lose our lives, subsistence -- all our fish
(indiscernible). I was there. I saw it all.

Mr. Juma (ph): My name is Patrick Juma (ph). And you
guys talk about the Exxon Valdez and the rig that blew up.
Valdez had just had the oil in it. But the rig that blew up had
chemicals on that platform. And the same things going to be
around those platforms on -- if they start drilling out here.
And don't know much of that chemical -- it's dangerous for
the animals or even for humans. So, and they say it's a lot
safer. And it'd be a lot easier because it's not as deep.

But the shallower it gets, the waves get closer to each
other and it's going to be hard trying to keep them boats in the
water. Because the waves are closer to each other than --
anyplace where it's deep.

Mr. Logan: Thanks.

Ms. Kepa: My name is Tegulik Kepa, H-B-D-A. I just
wanted to make one comment here about -- seeing like you're --.
I've been attending these meetings. This is my 19th year. And I
just want to say that, in the 90's, when I came to these
meetings, there would be a 100 of Whaling Captains
(indiscernible). I just want to thank all the people for coming
today to speak on the issue.

But you are correct that there is a lack of trust with
your old organization and your reorganization of your new --
your new BOGDEE -- I think that's the name on it. That it's
dangerous. The conditions are very extreme. We have a lot of
respect for the ice and the oceans out there. And we understand
the force they have. Thank you.

Mr. Logan: Thank you.

Ms. Leavitt: Roberta Leavitt again. I got two questions.
One goes towards the question of what Vera was saying. When
you have the production flowing, what is the process? Like she
was asking, is it going to go through Prudhoe Bay? And we all
know that Prudhoe Bay was only lifetime expectancy was going to
be 25 years. And it's already starting to break down. There's
even now people who are supposed to be Inspectors or even
qualified to be Inspectors. And we can't -- we don't, you know
-- how can it be stronger so that the Natives even have a word --
-- a say in those inspections? You know, you didn't even hear us
when we were telling you that the whales go through that
migration route is right there where the sales happened.

And we say -- we say -- we say and still it's not being
heard. We're gonna still come and say, you know, that's because
our trust is still not there. I read about it. I heard through
PBS that Shell, not Shell but BP's had all these other extra
problems on land. Now you harvested in the water bringing to
land -- where is it going to go? Is it going down that same
pipeline that's deteriorating? Are they going to make a new
one? Have they even decided any of that yet?

We see all of that because it's a long term thing for us
going to take a lot of work because you need to come to the
community not to talk about a Supplemental EIS, but to talk to
the people of the North Slope how you can regain our trust.

Because we've been coming to these meetings for over 25
years. You've heard our hunters, our whalers say the same
things over and over. We are very concerned about OCS
activities. We've always been strongly opposed to it. We
understand that we can't stop it. So the people of the North
Slope need to have a meaningful role. And we need to have that
type of open dialogue and how can we be at the table to make
sure that the right decisions are going to be made to protect
the interests of the North Slope, the interests of our people?

And, so regarding the trust, you know, it going to be a
lot of work. So please come back. Meet with the whalers
because I want to see more Whaling Captains come back to these
meetings. There's too much going on. I think people are tired
of talking about the same things over and over. And as the
other gentleman had said here, and Michael, that I don't have
faith that it's going to be easier to clean up an oil spill in
ice conditions. You know, the weather factor today, if there
was an oil spill eight miles out where the lease sales are -- I
have very little confidence that you'd even be able to get out
down there to evaluate the situation. I don't think no helicopters
could go out there. I don't think that a big ship could go out
down there, you know, to go see what's going on. It's just way too
up here, with our subsistence. I get sick animals from the
ocean and I know that they don't smoke. I have seals that come
back with cancer. And we still can't -- -- how are they getting
it? You know we weren't getting any answers of how it's getting
into the ocean. But we tell them and tell them and tell them
over and over again that we're harvesting sick animals. I get
it at least three, two, maybe three a year that I cannot use or
eat.

And it's not what we're doing. You know, that's our
respect for the land, our respect for the water. And we still
have to voice it, because people that do not live here are
making decisions of our lives, what we live off of. And there's
-- how many times of patients now. You know, how do you know
that they're not getting it from what they're eating?

Mr. Logan: People start off -- it happens all the time --
they start off I've got a couple of questions but.

Mr. Logan: Petrolatum. Or --

Mr. Logan: Yeah, that. I'm glad you said that because
that is relevant to the Supplemental EIS. sort of. I mentioned
earlier that the Court said, analyze the effects of natural gas
because the lesser have incentives connected with natural gas in them. Chukchi is thought to believe to contain a vast amount of natural gas. So natural gas analysis by the Agency in this draft supplemental EIS occurred this way.

Our resource evaluation people came up with a reasonable scenario. The reasonable scenario has a couple of basic components to it. First, it’s not going to happen for a long time. Gas is maintained in these wells because gas has -- the gas is the pressure that buoys the oil to the surface. Oil is more valuable than gas, so it’s going to be somewhat between 15 and 30 years before gas would be ready to go to market. And that's if they explored next year and they found a viable resource.

I would just point out, in Alaska's OCS, it's most likely, or it has been the case, that they would explore in the Chukchi and they would explore in the Beaufort. And like the rest of Alaska's OCS, they found no viable -- economically viable resources and they walk away. And all of these meetings and all this fear and all of this discussion would really be for nothing in that case.

The natural gas then, in 15 to 30 years, if it want to market would be pipelined to shore, cross NPA, connect to a pipeline. And we don't exactly whether it would be the AGIA version or some kind of natural gas pipeline that we think would travel in the same direction at least initially, as TAPS. And

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has an Open Water meeting where the science that is in place to monitor seismic activities and other activities is discussed. These meetings are open to the public. There have attended more than I have. And on behalf of representatives from the North Slope Borough. And they're heavily involved in the peer review of that scientific monitoring and data gathering work. And so the answer is yes. Some parties think that more should be done. Some parties think that enough is being done. So there's some debate that ongoing involving that activity, but it does occur.

Ms. ANGOALAK: I'd like to say about the seismic -- the seismic (indistinguishable). This is Heidi ANGOALAK. A-H-E-D-A-K. I was working for Top of the World at the time, two years ago that they were doing testing. B -- employees from BP were staying next to some of the Kamall Observers. Some of the Kamall Observers told the housekeepers that BP was trying to pay those people to count more than they were counting. Do you guys have anybody regulating, you know -- do not to say it. There were people paying other people to say there's more mammals out there than there actually are.

Ms. LOMAN: Paying people to lie?

Ms. ANGOALAK: Paying people to lie.

Ms. LOMAN: Paying people not to tell the truth and --

Ms. ANGOALAK: Correct.

Mr. LOMAN: First I've heard that. Have you heard it before? No.

Ms. ANGOALAK: And also --

Mr. LOMAN: But, yes, there's a written --

Ms. ANGOALAK: And, also I don't work --

Mr. LOMAN: There are regulatory agencies that are interested in -- keep my phone number handy because, at least as long as I work for the government, you know, I mean, you know how the law works. That's kind of hearsay and whatnot, but these things are best, always best, investigated right away.

Ms. ANGOALAK: Another suggestion is maybe -- keep the oil companies (indistinguishable) at hotels than the people counting. That's one suggestion from me.

Mr. LOMAN: Well--

Ms. ANGOALAK: Another comment that I do have is, you know, if you guys could publicize those meetings more. Because I don't work -- I don't get emails from you know, the North Slope Borough, saying there is a meeting. You know, I found out through Facebook.

Mr. LOMAN: Facebook?

Ms. ANGOALAK: I found out through Facebook.

Mr. LOMAN: You mean a friend's page?

Ms. ANGOALAK: No, I found out from -- people had publicized. People had got emails about it. And I found out about it and was letting everybody else know.

Mr. LOMAN: But one of your Facebook friends?
MS. ANGELO: Yes. But I shouldn't find out from Facebook. I should find out from the news. I should find out from KBAA.

I should find out from the (indiscernible). I should not be finding out -- you know, people should be finding out from you, we, valid --.

MR. LOMAN: We did use KBAA -- did use the Arctic Sounder, we did use some obviously --.

MS. ANGELO: I mean, obviously, I mean not many people heard about it. Because I was telling people about it all week.

I just found out -- what's today Friday. I found out Wednesday.

MR. LOMAN: There's a phenomenon here and it happens all the time, no matter what the subject is. And not just in the Arctic, everywhere that at every meeting that I've ever managed.

That's always a complaint, and you can never do enough. People are at the meeting but didn't know about it. There's a conflict that's inherent there. We're going to do more. But we know, even no matter how much we do, it's still not going to be enough. I guess, you know, just in addition to collecting email addresses on sign-in sheets at these meetings, and then continually informing people of meetings in the future, which we're trying to do, incorporate that, keep sending the information until people say, I'm not interested anymore.

MS. ANGELO: Yeah, I'd like to be on the email list.

MR. LOMAN: Yeah. If you give us your email address. And everyone who gives us their email address will get on our list.

the big possibilities and the great danger of what you're doing way out there where our livelihood just runs.

Do you know, I worked briefly for Alaska's Bowhead Whaling Commission when they first started to take the bowhead whales. And it was just amazing, the traffic of those whales right there where you're going to be. And I can almost cry just to think that they're going to be bunging across aliens, you know, on their turf. And, you know, we really respect the animals there.

I want you to know that my heart hurts to even think of something like this happening, which causes me to go to this one other area of getting away from fossil fuels and stuff.

I really wish the government would just spend a great amount to get some wind power, solar power and all this to heat our homes, you know, other than using oil and gas. I don't see any big efforts happening and I wish somebody would do so.

The other thing is, I don't know if you can talk about it, but I'm sort of curious on our brothers and sisters over in Point Hope and what came up from your meetings with them, because they're the ones that are really going to be touched the most, being right there at the Chukchi when, you know -- where it's right there with Chukchi and Beaufort. Thank you.

MR. LOMAN: I sure can talk about what happened in Point Hope, because I was there just the other day. And here's my short assessment.

The people continue to share the same fears that you have about activities that may take place. The Native Village of Point Hope was a litigant in the case that is the impetus for this draft Supplemental Environmental Impact Statement. And I guess you could take the position that they sued along with others. The Court found at least some of their assertions to be correct. And so they made the Federal Agency, my Agency, behave according to the Court's directions. So I guess maybe you might want to congratulate those folks in Point Hope. I did, because I work for a government Agency, it's not my job to get ornery because people sue us. It's my job to do -- to obey the Federal environmental laws appropriately.

And so they share concerns related to uncontrolled releases of oil, like the Deepwater Horizon. They share the same concerns about the industry's ability to clean up oil in the event of a spill, manage ice, the horrendous weather conditions of the Arctic. That was discussed. Some folks that had received and read the document and talked about it -- it was evident to me that they understood the document pretty well.

Jack Schaefer -- I think people know Jack. Jack had read it and he understood the exercise of analysing the statements of missing information. He expressed concern about the fact that it was limited to just those activities that the Court had mentioned in their remand.

And then we talked about other things that kind of related to what we talked about -- that I mentioned earlier with respect
to the reorganization of our Agency. And the creation of a new Agency that will be respected by the public. There were 3 people in attendance at Point Hope. And there were other things happening simultaneous to the meeting. For example, it was Election Day. I voted in Point Hope. In the Community Center they were taking in big thousand pound pieces of oil for a ceremony that was starting at 6:00 that night, so people sacrificed not being able to participate in the beginning of that ceremony to talk with us. It was fair, frank, understandable, open communication and valuable, I think, for both sides, for the government officials, us, me, and for them to some extent.

But, you know, you mentioned, how you feel when you said you people come. I understand that. I come from an Indian reservation in the Upper Peninsula of Michigan. And I realize what it's like to have your community invaded by, in my case, mining activity and other activities that have a horrendous effect on the environment. But, like I mentioned earlier, my job is to serve you -- serve the Administration, no matter what administration it is, and try to obey federal environmental law.

To be honest about informing the decision maker, no matter what, I think I've done that job and I'll continue to do it until I stop down, which won't be that much longer, and retire and go back to the Reservation where I come from, after 35 years of Federal service and 20 years of military service. And I'm just

I worry about subsistence. The decisions have already been made. This is just an exercise.

You talk about all of the industrial activities that are coming and all of the impacts that are going to be happening - to happen out in the ocean in the migratory paths of resources that we depend on. On caribou and in our communities. And then you say that there is no need for concern because of impacts - will be mitigated. But you never say how they will be mitigated. In the alternative, you say that none of the impacts will be significant. But you never say why the impacts won't be significant. I guess because the impacts won't happen to you.

They'll happen to us.

The reasons behind this Supplemental Environmental Impact Statement is the Court telling the Department of Interior that you left out a lot of important scientific information when you did the first EIS. So you were supposed to go back and identify that important information and decide how to use it before you reach your final conclusions on the EIS. But you don't actually consider any new information in this Supplemental EIS. You just say that you have already considered all of the important information and that anything else is not important.

Basiclly, you conclude, that you don't need to worry about what the Court told you to do. You are trying to just cover it all over the words. You say there is no important -- no information for how many -- all of our subsistence species

use the lease sale area. But then you say that information is not important. No need to worry.

You try to get around the Court Order by saying that there will be -- what adverse impacts no matter what the development scenario is and no matter what the scientific information is.

But that doesn't work.

Federal regulations require you to prepare an Environmental Impact Statement that is supported by evidence that you have made the necessary environmental analysis. And there's a quote in here in regard to this 40 CFR 1500.2. This document does not meet the requirement. You are supposed to provide full and fair discussions of significant environmental impacts. And inform decision makers and the public of the reasonable alternatives, which would avoid or minimize adverse impacts or enhance the quality of the human environment. Again, 40 CFR 1500.2. This document does not meet the requirement either.

There are going to be lots of adverse impacts from the proposed development. You give long lists of impacts, but you conclude that there is no need to worry. What do you base your conclusions on? Where is your analysis? There isn't any. Just like always, from your shop.

In terms of what your alternatives, given the many unknowns and the heavy reliance of our villages on marine mammal resources, it would make sense to go with alternative
three. This would give us a greater buffer between the
industrial operations and our hunting areas. This makes a lot
more sense than the proposed action, because you have no idea of
what all of the impacts are going to be, since you don’t even
know how the resources use the habitat. On top of that, you
have no clear means of mitigating the impacts that do occur.
So it makes sense to put as much distance as possible
between the industrial activities and our hunting areas. You
need to provide a good justification for not to do that.
You don’t tell anyone how you are going to gather the
baseline data you need and you ignore the data that you have.
Federal law requires you to use the best available information.
In July NMFS put out a new biological opinion for oil and gas
activities in the Beaufort and Chukchi Seas. You don’t even
make a reference to that. In July you published the final
report for satellite tracking on the Western Arctic bowhead
whales for 2005 through 2009. The study shows that the whales
all migrating through the lease sale area. This tagging study
is funded by the Alaska Region published on your website. and
you don’t even mention it.
You also have the report of the 2010 Tagging Study also
funded by the regional office and you don’t even mention that.
The Chukchi Sea development will disrupt our marine mammal
species and their prey species. And you talk about onshore
infrastructure disrupting the rest of the hunting opportunities

1 can’t get their subsistence resources?

Shell likes to come to our villages and tell everyone
about the jobs that are going to be accompanying all of this
development. Jobs for whom? Jobs for people whose main skill
is as a subsistence hunter? I don’t think so. I think the jobs
they are talking about are going to go to union workers in the
Lower 48. That is what I see happening already.

When the development involves our subsistence resources away
and the jobs that pay enough for people to live on are all taken
by shift workers from the Lower 48. How do we survive? Where is
your analysis of that? What is your mitigation for that?
You are supposed to provide a cumulative effects analysis.
Instead you just conclude, without any support, that oil and gas
can be developed in the Chukchi Sea without any cumulative
impacts to the whales and other animals. But in your cumulative
impact discussions, you don’t even mention the development work
in the Beaufort Sea, ship traffic, all of the research work
your development is based on, or fishing in the Bering Sea. All of these things are
already affecting our migratory species. And they need to be
part of your cumulative effects analysis.
You say that there is no need to worry about impacts,
because they will be mitigated by National Marine Fishery
Service or by another Agency. But you don’t say how that will
work. I pulled a couple of quotes. “While the complexity
of how marine mammal species react to underwater and above water

1 sound renders an exact determination of potential adverse
2 impacts difficult, abundant regulatory review and careful design
3 of mitigation measures are expected to preclude instances of
4 level A or harm take of a marine mammal and to reduce the
5 potential for level B or harassment take.” Really? How is that
6 going to happen? We don’t know because you don’t say how.
Another quote is “No population-level impacts are
7 anticipated as a result from natural gas development and/or
8 production.” Again, all I can say, really. There is nothing in
9 this document that tells me how you reach that conclusion.

My family depends on these animals for food. How am I
supposed to sleep at night knowing that you are going to get
ready to permit all these activities without any actual
mitigation in place and without any actual understanding of what
potential consequences of your actions? Would you be able to
sleep at night if it was your family’s food supply that we were
talking about?
You also say impacts will be mitigated by conflict
avoidance mechanisms. But Shell and Conoco are not signing the
CAA and you are providing no support to help us get them to
sign. Instead, they are using their so-called Plan of
Cooperation. But those PCs are nothing but a slide show and a
bunch of sign-up sheets. That is not mitigation.
Federal law requires you to provide an Environmental
Justice Analysis. In this part of the document you say that we
1. will suffer a lot of health impacts, including loss of food.
2. degraded air and water quality, stress and increases in negative
3. social impacts. But then you say that there are no
4. environmental justice problems because you have decided that
5. none of these impacts are important. That is not an
6. Environmental Justice Analysis. That's just you telling the
7. decision makers in our federal government that we don't matter.
8. I think the main take-home message from your Supplemental
9. EIS is that it doesn't matter to your Office what the impacts
10. are to our subsistence resources or to our families or our
11. communities. You have already decided to give the companies a
12. green light. To you that's all that matters.
13. These are comments that were generated through the Alaska
14. Eskimo Whaling staff and working through the reading of the
15. document and learning of what wants to, needs to occur. These
16. are very serious matters to us. I hope you learn and take these
17. comments seriously. Thank you.
18. Jeff I'm going to give this to you.
19. MR. LOGAN: Thank you. Do we have another commenter?
20. UNIDENTIFIED FEMALE: Sir, I have one more please.
21. MR. LOGAN: Yes ma'am.
22. UNIDENTIFIED FEMALE: Maybe I'm loud enough.
23. MR. LOGAN: I hear you loud and clear. Judy do you hear?
24. UNIDENTIFIED FEMALE: Thank you.
25. MR. LOGAN: Thank you.

1. cut down trees and you know, drill and so forth.
2. If you can just spend more time with our people, your
3. Agency can spend more time with our people and build a
4. partnership, you know. I like, I know some people say maybe we
5. can't do without it -- it's got to happen. But if it's going to
6. happen, then extend your hand more to our people and say, okay,
7. what can we do? Can we work together, you know, more and
8. communicate with us? Maybe there needs to be a Regional
9. or an offshore -- this offshore drilling and exploration. But, 10.
11. so far it's very scattered. Our lands are vast, you know, and
12. it's scattered. But, we just want you to respect us a little
13. more. Thank you.
14. MR. LOGAN: Thank you. We are trying to extend our
15. actions to form partnerships. For example, I think probably
16. everybody knows Mayor Itta developed eight Ocean Claims
17. Initiatives. And I sure don't mean to speak for the Mayor, but
18. I have read and heard Mayor Itta speak on a number of occasions.
19. And, essentially, his position is, is that although we are
20. against offshore development, if it's inevitable, we think that
21. the government should do these eight things, Eight Ocean Claims
22. Initiatives. So, we drafted a informal Partnership Agreement
23. and we're working, or going to be working with the Borough to
24. try to enter into that Agreement and it's an Agreement just to
25. basically get some, you know, guidelines, some actions on how we
26. are going to communicate to try to address these Eight

1. Initiatives. We talked about it today. Ben and I talked about
2. it and others at a meeting today. Harry was there. The
3. progress is pretty slow. I wish I could wave a magic wand and
4. address some of these communication problems. And respect comes
5. from, at least for me, and I don't think I'm too much different.
6. You get respect when you deserve it, you know, through your
7. actions, through what you say and then, you know, how it turns
8. out in the end.
9. Harry, for example, got up and said that we failed
10. miserably to address the Court remand. We're going to see about
11. that because the Judge is going to decide. Now you heard what
12. Harry said. So it should be pretty simple. If Harry's right,
13. that Judge will kick us to the curb. I'm using terms that I
14. think everybody can understand that aren't legal terms, because
15. I'm not a lawyer. But we'll see, you know, we'll see.
16. I said earlier that, at least the draft Supplemental
17. Environmental Impact Statement. We think it is a good step forward
18. at addressing the remand, although we've got comments to
19. address. And there have been some suggestions that I think will
20. add to the document. And then we go before this Judge and he
21. makes a decision.
22. So you gain respect by that proof that's in the pudding.
23. And it comes slow, and it takes patience. I know Inupiat people
24. learn patience through the subsistence activities that are
25. culturally self-defining. We had that conversation in all of
the villages. What does subsistence activities do besides put food to the people? It teaches you how to be patient. It teaches you how to deal with loneliness, sadness, and on and on and on. These are really important things to people on a very personal and individual basis. And I understand that, and I appreciate it. Part of my job is to make people who can’t easily understand those things understand them.

UNIDENTIFIED FEMALE: Who chose this time and location advertised for this meeting? I heard about it in Facebook through one person. I didn’t see flyers up. I didn’t see anything. While the oil companies tried to butter up our community through pancakes and door prizes, but when it comes to the actual impact, the environmental impact on land, where’s the flyer? Why is there no advertisement like I had -- there’s -- if people knew about it, more people would be here. This is not a reflection of how the town feels, with the dozen people that are here. If more people knew about it, they would be here.

Only one person at Kotzebue showed up, I heard. In fact -- I mean -- talk about lack of respect and you want to know -- for me it looks like the bank taking your house, and then three weeks later they’re going, well, how do you feel about that?

MR. LOMAN: Yeah, the announcement for the meeting was announced on KBBN, for example. It was put in the Arctic Sounder, and other media. We notified organizations, agencies.

and high blood pressure, with the food that we harvested from the land. And here it’s been proven that you are drilling on land that is manageable.

I know there’s people out there from the Loon 40 say that we’ve got all this oil underground. That we’re only a spark on the map. And, you know, we voice and voice -- even I was once in the 76s, and we had over 100 people here compared to what’s here now. And we didn’t have the media the way we have -- the way we have now. We had no internet back then. We had no Facebook back then. We had barely KBBN. The North Slope Borough didn’t have all those internet capabilities, but that word still got out.

I know that’s a sore subject. But still, I can remember when we did have over 100 people here testifying. And they had to close it down because they got tired of repetitious things. How it’s our turn to be repetitious, and still say the same things, and still say the same things, and yet our voices are still lowered. I feel that they’re lowered. Because it’s still going to happen.

People are saying that there is less oil in Prudhoe Bay, so they got to look elsewhere, and they’re going into a place where I eat from. And you’re not going into the store to get oil. You’re going into my refrigerator, my garden where I eat. Where my muktuk -- we had no muktuk -- what are you doing to.

You know that warms our bodies in the cold, that -- the blubber.

stakeholders. And we maintain an email list like -- that’s why we ask for emails when people sign in, and notify people that way. There is another person that learned about it through Facebook. I guess through your Facebook friends, who told you about it as well. The Secretary of Interior has a Facebook page. Maybe we should put it on there too. If you like him, then you can get his notices.

But, I said this earlier, and I’ll just say it again.

We’ll keep doing more. But trust me, if you’re at these meetings with me we’ll never do enough to satisfy everybody in that regard. But we will do more.

MR. LEAVITT: I kind of get a question about -- the history of Prudhoe Bay has done real well on land. Why is it that we can’t do more on land stuff? And why is it that your -- not you -- I know you’re in a position, but why is that people cannot hear that it’s a whole lot safer to do this exploration on the land compared to in the ocean? In the wintertime.

Cleaning up a spill during the winter time it still can be done. But there is no proof -- what proof do you have that will satisfy our hearts, saying that our food will not be destroyed?

There’s been studies out there that say that our Native food is considerably more healthier than the store bought foods because of their preservatives that are added into the food, the sugars that are added, the diabetic part of it? You know, long ago we didn’t have diabetes because of those carbohydrates.
revision of the -- additionally it required by the courts, but
there were no impacts. And that's repeated over and over again
as Larry mentioned it. There is no transparency on how they got
to those conclusions. And I'm not sure what this is on the
legal matter -- how transparent those needs have to be.
But, there should be the date there saying, well, this is
what we have (indiscernible) these are how many cases and this
is what we are basing our conclusions on. And, that information
doesn't seem to be there, so if that information would be
included it is a (indiscernible). That should be in the
document to explain officially to the community and to the other
people who what -- what this will be mainly based on.
It's not transparent. It makes it very difficult because
we have to believe how far on what you're hearing. And I
can see that being a problem. Do you see what I mean?

MR. LOMAN: Yeah, like I said earlier, I know that people
would like to debate with me, but I'm not here to debate you.
With respect to --

MS. DE SOUSSA: I'm not debating -- I'm just --

MR. LOMAN: With respect to the issue that you brought up,
let me give you an example. In that document it says one of
these excerpts of missing information or uncertainty. There's a
statement in the original final RIR for Chukchi Sea Sale and it
says this. I can almost quote it verbatim, pretty close, close
enough. There is uncertainty concerning the structure of the

recognized Tribe from the North Slope, with IUCAs and the Native
Village of Barrow and all the other Tribes within the North
Slope area, would this partnership -- will to be formulated?

MR. LOMAN: I'd like to think that we already have through
the mandates Executive Order 13175 that requires government to
government consultation. As you know, better than anybody else,
we had a meeting today. So that requires us to communicate.
But we'd like to do more so the answer is, yes. If we need to
include others in that agreement, or have separate agreements
with Federally recognized Tribes that want to establish a
partnership to address things and it's productive, the Federal
government likes to use the term effective and efficient. If
it effective and efficient, we certainly are going to do that,
and partner with effective Federally recognized tribes.

UNIDENTIFIED MALE: Could you tell me what kind of impact
has it had on the wildlife in Valdez ever since the oil spill?

MR. LOMAN: On the Exxon Valdez?

UNIDENTIFIED MALE: Yes, what impact has it had on the
wildlife?

MR. LOMAN: I really -- I'm not qualified to discuss it.

It's not relevant to this meeting other than that was an oil
spill.

UNIDENTIFIED MALE: It certainly was an oil spill. It's
relevant.

MR. LOMAN: Yeah, and you know I would just mention that
the Exxon Valdez didn’t have to happen. It was one person who, for whatever reason, didn’t make a turn.

MR. LOMAN: There’s an abundant amount of information that’s been collected through the Natural Resource Damage Assessment activities that all of the Trustees Agencies have collected on that spill and the damages that have occurred and are ongoing. And, if you leave your email address or contact information, will help the people that are responsible for serving you along those lines, give you that information.

PATRICK SULU: I’ve got one. My name is Patrick Sulu, that’s S-U-L-U. On the purchase of Alaska, how many acres did the United States buy from the Russians for purchase of Alaska?

MR. LOMAN: Yeah -- it’s not --.

MR. SULU: And have they done any survey of natural resources of what they bought for -- is the United States trespassing -- what if they didn’t pay for? Are we included in that acreage when they bought?

MR. LOMAN: I have no comment about that subject sir.

MR. SULU: Maybe that’s what they need to find out.

MR. LOMAN: Yes sir.

MR. SULU: If the United States own the North Slope.

---

jurisdiction domain where the (indiscernible) are.

And they’ve never been over St. Michaels at the time of the sale. So let’s get real. Don’t play games with us. This is a real life thing. Said there a while ago, you mentioned elaborating IWC about the populations of the bowhead whale. IWC came up here with the Scientific Committee in 1977 and said they’re there was only 47 whales. That was the first time they ever been to the North slope region.

On a hearsay basis, they got people to talk about it and then a bullshit Scientific Study Agreement, worthless to avoid where you’re going (indiscernible) and then kick them out if necessary. Just to prove a point. You going to put out something to my people and my tribe. You’re not going to respect and honor what’s given to them. Some of the stuff I look at here -- I want to see same results from the scientific exploration that were being conducted out there. You have a medicores -- what kind of impact they did to the crustaceans from the surface of the water to the sea floor?

And you know where to fight. Would you like to go out there and swim and have to be blasted with 287 decibels of noise? When a 47 decibel at 17 mile range, disrupt the bowhead whale and cause him to pop up, straight up and down. Instead of like this. Forty-seven decibels is - in the water it doesn’t subside to 46 or 45 decibels at 200 yards. When you shooting 290 plus decibels in the water, they don’t subside down to 245 unless it’s past out there to ten miles or so.

So let’s get real. You want to destroy and damage everything that we stood for, based on our way of life and the way we use arctic in the sea, that is our garden and resource for livelihood. Long before anyone even noticed there was a North American continent. Some of these Ilichen Tribes down in the Lower 48 where Asiatic League or Indians at the time when they first crossed, 12,835 years ago. How you call them American Indians. You forgot the government gave them the recognition and productive life to them. The fact is, you doing all these things to get into an area to do seismic exploration and after that, the informations you gather, okay. Maybe right there back where that chair is sitting is a good spot. We’ll drill there. And a lot of people buy stocks from that company that’s drilling.

Or let’s say 30 or 30 separate families own 75 million shares and they get (indiscernible) and much richer over what they done. And they strike oil. We haven’t senators -- or you only have one with the United States but they trample on us. Worse then cockroaches in some sense. A way of respecting a human, you’re supposed to honor people for who they are and what they are. For what country you are -- we understand and know that. But what country of people we are, you got to learn to understand and deal with that. That -- face reality, instead of living in mental insanity 99503 (indiscernible).
Just how badly are you willing to go for, to the people that push you into these things, to conduct meetings? When you're doing Environmental Impact Statements, we donate a lot of information and stuff and have it printed. But it just gets stored in catalogue and never been used. Nobody uses it for testimony in Congress or one State, another don't even bother to look at it.

So people who are indigenous by themselves at the rare human in the culture. Disrupted, destroyed with, and forced to change their ways of the way they're living 99 different ways. How many more ways are you going to expect us to (indiscernible) and deal with something that we don't want to see, for no (indiscernible). That's going to happen if that 75 reversing and then we start changing you people 99 different ways? Do you know the magnitude of (indiscernible) reality? That the bumpus (pb) is forcing you people to do, to erase Korean (pb) culture in the Arctic? Or is it that it's so many of the people that have migrated from the European side, they went more of this, they want more of that. And they don't care who they destroy and hurt just so they could get to that resource? Is it said that (indiscernible) got the United States government and (indiscernible) life into a Tribe? That's being blamed by the United States Department of Defense against the Indians?

At the same time there wasn't an Indian, you know, we existed up here at the time when they thought. Alaska. You got...
to obtain the missing information to make a reasoned decision now.

BOGNER: must analyze the new information related to the Deepwater Horizon spill. Under NEPA, Agencies have an ongoing duty to supplement Environmental Impact Statements whenever new information renders the original statement inadequate. The Deepwater Horizon spill has rendered inadequate the Agency’s

to, oil spill analysis, two conclusions that an exploratory drilling oil spill is unlikely and third, the requirements for an oil spill response plan. Thus, the Agency must conduct a new oil spill analysis in a separate EIS. On behalf of the Inupiat Community Arctic Slope.

MR. LOGAN: Thank you Rosemary. Rosemary, could you let me have that written comment?

MS. AKTUVANGARIAK: I can get it with the statement of the original county (ph) of ICAC and that’s what they usually like it handled, so I’d have it ready.

MR. LOGAN: Okay sure. Thank you very much.

MS. AKTUVANGARIAK: I’d like to give a statement now on behalf of myself.

MR. LOGAN: Okay.

MS. AKTUVANGARIAK: We’ve commented for decades in these processes. We’ve brought out decades of concerns. Our grandparents started these processes. They worked with us in trying to build ways that we migtn’t discernible. Some these

use them the same ways. So our families don’t hunt in these same areas the way the stories were told for generations.

3. disrupts the learning curve for the future generations.

4. It affects our lives. It affects our whole being. And we continue to share these things. But we have cultures that were never recognized in the Gulf area. Tribes that were never recognized, and yet their livelihoods have changed forever.

5. Watching those people down there pulling out boats in the opening of fishing season because they knew there was not going to be something to harvest. Having the tribal members say that the government has said their food is safe, when they take the shrimp from the water and they break the head off and there’s oil inside of it. And they can wipe it on a tissue to show.

6. And yet our government is saying that food is safe.

7. They did the same thing in our state with the previous spill. The learning curve was not there. And you talked earlier about how the Exxon Valdez created that law. But you forgot there were two other devastations that occurred with that. With the (indiscernible) event in India with their chemical spill, there were three devastating events. Before, we learned from that process. We didn’t learn from Exxon. We’d better learn from the Deepwater Horizon.

And don’t get out here and try again because, just in a short period of time, we had the GSE spill and you said to us — not one drop would be spilled in Exxon. And yet, 200,000 gallons still was spilled. And then at Prudhoe Bay, with alarms going off for four days that were ignored.

That’s not reassuring to us that anything you have put in your documents has any credence (ph) of being implemented. And then we had the fire in our own refinery in Fairbanks. And you had still the explosion in Texas and still the Deepwater Horizon.

There is many changes that must occur. You still have many of these same people authorizing documents in these processes that were authorizing these same processes that led to the devastations that happened to those loss of lives. We still have many, many problems. You don’t have the personnel to enforce existing regulations. And you have exemptions to air and water quality standards in our states still occurring as part of the continued comments of health effects affecting the breathing of people. Twenty babies being Medi-vac’d out, ten of them put on ventilators was not enough. A cost for our Village but yet we endured that cost. We still have a better job there.

That’s not acceptable to take and promote development at the cost of tradition and culture and the health of our people. These are not acceptable. They won’t be tolerated. We have many more cultures that are going through the devastation and are asking for our help in Alaska because we have learned some things. And they have so much more to learn in their process.

Having to tell people how to try and heal their communities because they’re going through loss that they were
told would never happen. And yet, every day of their
traditional and cultural lives or not to be seen for decades to
come and generations to become. In those spill plans, they say
in (indiscernible) burning. But, yet when they burned in our
State they didn’t even inform the nearest community. And all of
the people got sick. And you put regulations to limit some of
those things out there, but it’s different in our environment.

These emissions in these air, in our environment. In our
times, when we’re breathing them, with our cold environment, the
impacts are much more damaging to us. When you study this
impacts at 70 degrees, we don’t have any days at 70 degrees.
You need to study it at our impacts, at our temperatures, at our
currents. They studied air quality currents with a goal. But,
yet still, the concerns from the communities down there were
still expressing. There’s real concern here, the odor is really
strong, people are getting sick. And yet, the effort of our
government to monitor this process was not adequate to get the
notification in the documentation to prevent the worst
exposures.

Where’s the respite for their pregnant women and children?
They’re continually being exposed to the generations of growth
that is being affected. How can we help them in this process
because they have continued exposures? Using the dispersants to
put peoples into a toxic chemical spill at the benefit of
industry, reduce the way that those communities could observe

MR. LOGAN: Thank you. Yes.

MR. ITTA: I have a few comments. My name is Natasha
Itta, I-T-T-A. My question is, if we went into your house, you
drink a certain kind of coffee or you drink a specific soda and
that’s all you drank. If there was a specific food, if you’re a
vegetarian, if you had any allergies. You couldn’t eat gluten.
You couldn’t eat sugar. You needed something for you to sustain
yourself due to the life. If someone went into your house and
took that and told you that you could never have it again. what
would you do? You would fight the fight until you were not able

and try to build protections, to put the boom out in areas.

because when you mix the oil into the water column, you can’t
see it coming in with the tide. And the waves come in it’s

below a few feet of levels and the oil is still coming ashore.

There’s no protection. There was no enforcement to maintaining
the boom that was laid out. There was no real good way of looking
at how the boom was being placed.

You could call that some areas had good support to get
booms placed. Other areas had absolutely no support to get any
booms placed. But there wasn’t even maintaining up there. Boom
that was placed, just from flowing. You’re not doing any
protection. That important critical habitat site for the
pelicans, then was boomed out there, but the same issue, no
maintenance, no protections. The adequacy of that boom was
non-existent. Those pelicans still got impacted with the oil
from that.

We watched the dolphins come up through the sheen, the
birds diving into the oily water, fish jumping out gasping for
air. We can’t watch that happen down there and take those
discussions up here. That’s so devastating for us to be damaged
from the efforts from the Exxon Valdez to have it re happen
with it and there’s more information with the Korean spill.

They studied health impacts from day one. Where’s our studies
from all these different things? We don’t have that data.

Nothing was done to help us get some of these health impacts.

If anything, it helped to hide what the health effects
were from that spill. All those workers that went out there to
respond. All those workers that got so sick from working the
dispersants. They died so fast and are no longer here to
comment, but their children are. We’re a whaling culture. We’re important to live in the
water and do the life of the lifestyle there. We need it for
our bodies. We need it for the health and longevity of our
communities and our region as a whole. That’s what we -- what
we are. Dollars per barrels are not worth those costs.

MR. LOGAN: Thank you. Yes.

MR. ITTA: I have a few comments. My name is Natasha
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drink a certain kind of coffee or you drink a specific soda and
that’s all you drank. If there was a specific food, if you’re a
vegetarian, if you had any allergies. You couldn’t eat gluten.
You couldn’t eat sugar. You needed something for you to sustain
yourself due to the life. If someone went into your house and
took that and told you that you could never have it again. what
would you do? You would fight the fight until you were not able

to fight anymore, so that you can have what it takes to survive.

If I went into your house and told you, that cup of
coffee, you were never allowed to have it. You will never have
a cup of coffee ever again and if anybody else around you sees
you having that, they’ll take it away. That affects your day-
to-day life. If that’s how you survive, with that cup of coffee
or that caffeine or whatever, if someone eliminated that from
your way of life, you would die.

Seriously, if someone said, you can’t have water. That’s
how we are. This is our place where we survive. We go out. It
not only affects the ocean, it affects the land. The land -- we
grow milo. We get rain that feeds the berries, the caribou, the
ducks, the geese, everything. So if you’re saying that we can’t
hunt, and you’re going to exploit oil in our waters, that
affects the way of life and the way we live. And for you to
say, you can’t go out and go hunting whales, but I could still
have my cup of coffee everyday. I don’t think so. That’s not
acceptable.

That’s not something that I would -- I just had a son --
he may never get to go whaling because you might affect the
water that he’s going to be able to go whaling in. That’s
outrage. I want to know that my children are going to grow up
in a community where they can go out and do the things that
their ancestors did from day to day. I grew up -- I got
relatives that -- I for one go whaling. I don’t go out in the
1. water, but I go out and I help harvest the whale. I cook it.
2. I cut it. I disperse to everybody that comes and wants some.
3. And for you to tell me that you are going out into the water and
4. tell me that you're going to go drilling, and go exploring and
5. all of this, but you can sit in your lofty offices with your
6. $600 chairs, your $5,000 computers and taking your private jets
7. and chartering planes to the little villages that you never tell
8. anybody that you're meeting with, and telling them they're not
9. going to be able to do that. That's not acceptable. That is
10. not something that I want to see. I want to know that, from
11. this generation to the next to the next, that we will still be
12. the people that our people were before us, hunting, camping,
13. boating, fishing every day.
14. If there's a spill, tell me that someone is not going to
15. go out in the dead of February when it's 50 below where there's
16. 85 miles an hour winds and the wind chill is a 100 below and
17. you're going to tell me that someone is going out and go scoop
18. this oil up? We live in this weather. There's some days we
19. avoid this weather. We sit inside and pray that it gets nice
20. the next day. But for you to reassure us and tell us that
21. someone's going to go outside in this weather. This is how
22. bright it gets in December. And if you're telling me that
23. someone is standing outside watching the oil and telling me that
24. someone is going to be there to capture it, to fill it all up
25. and put it somewhere -- put it somewhere in a container and ship

And we're still getting money appropriated for clean-up in
Unarit for something that was once (indicisernle) like anti-
corrosion. But the United States Congress passed a law in 1970
declaring transfen fluid very cavity to human health. Just
last May a DEC report that they found open containers up here
PCB and 12 (indicisernle) by six inch. And some of those
containers leaked out into a slough, a lagoon that drains into
the Noval (gh) River drainage. And they uncovered and removed
another 32 containers of the same thing that had been sitting
there for a very, very long, long time. Considering what the
United Congress does in 1970. thinking it as a very cautious to
human health. And they're taking their time removing or
locating dangerous carcinogenic chemicals that they had left up
here.

And it gives my mind, the impression that we are offshore
drilling and they suddenly start to look like cities out there.
There's no telling how much contaminant you're going to leave
out there and say we depleted the oil. Well with all the oil
rigs that are sitting out on the water. In the late 70's and
early 80's there were some carious that were tagged for
satellite tracking. The next number of them would break the
caribou and much -- many of them were not very far from the
Alaska Pipeline. The pregnant caribou would not get -- they
would stay over a mile away from the pipeline. The corrosion
inhibitor that they using to prevent rust and corrosion inside
the pipeline was so carcinogenic to human health that an animal
can detect it by smelling it over a mile away from the pipeline.
And the pipeline is from all the way from Prudhoe Bay to Valdez
and that's a big costing with corrosion inhibitor material.
And the only way you can remove that carcinogenic
corrosion inhibitor -- that pasting into the inside well of the
pipeline needs to be removed section by section and replace it
with a new one. And then use an alternative corrosion inhibitor
that's not carcinogenic to human health. But the oil companies
don't keep us in the inside stories. They keep it to
themselves.

The reason why the gentleman asked about the Valdes oil
spill, because all the oil comes from the North Slope. And we
want to know if that oil that was that was in a danger had
certain percentage of that carcinogenic material. That would be
one of the main reasons for asking a question on how did it
affect. What kind of impact did it have to that oil and the
substance that they used for corrosion inhibitor? Those things
-- those two separate things are not talked about or mentioned
by either -- all parties. I worked in Prudhoe Bay. I've done a
lot of oil injections. I have to know how to approach an
inhibitor injections from the wellhead to the gathering place
and then it flows from gathering place to a pump house.
Pump station number one, pump station number two, pump
station number two, pump station number three until it reaches
Values. And they are allowed to pump a number of fluids with corrosion inhibitors. And that’s something that oil companies got to do with that. And that raises a big question on the back of my mind. If they had a large volume container stored in that platform that blew up in the Gulf of Mexico district, what happened to all that corrosion inhibitor material that was there? That they reduced to prevent rust from the pipelines that they used to pour it into if they’re going to be pumping into an oil saver.

So, we ask questions because it affects people in the way they live. And if they’re harvesting food from the ocean, they want to know what goes into the water. The same way we would not rather see that kind of stuff up here. Thank you.

MR. LOGAN: Thank you sir. Thank you very much for coming this evening. We appreciate your comments. And if you leave your email or mailing address, we will include you to the list to get you information about this project and any other projects that we have authority or responsibility over in Alaska’s OCS.

Again, thank you for taking your time on a Friday night and providing comments. And have a good weekend. Bye-bye.

UNIDENTIFIED FEMALE: Thank you for coming and hearing our voices. But still come again. But we’d like to see you more. [off record 9:30 p.m.]

...
Public Hearing
Environmental Impact Supplemental Statement
Relating to Chukchi Sea Sale 193
November 9, 2010
Bureau of Ocean Management Regulation and Enforcement

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PROCEEDINGS

(On record at 7:06 p.m.)

Mr. Logan: My good friend from Point Hope has entered the room, so we can get started. Hi, Earl.

Good evening and thank you very much for taking your time to come attend this Public Hearing. This is the sixth and final Public Hearing that we've held.

My name is Jeffery Loman. I am the Deputy Regional Director for the Bureau of Ocean Energy Management Regulation and Enforcement, formerly known as BSEE.

The purpose of this hearing is pretty straightforward. As most of you know, our Agency prepared an Environmental Impact Statement in 2007. And the purpose of this Environmental Impact Statement was to analyze the effects to the human environment under the National Environmental Policy Act for an oil and gas lease sale in the Chukchi Sea. Sale 193. This map describes the results of that sale, because the Agency held that sale in February of 2008. And a total of 487 leases were issued for almost $2.7 billion. Can you hear me back there? Okay, good. Somebody was trying to send me a message.

We were challenged by a number of parties. And the case went to the Alaska District Court. And the Court, in July of this year, issued an Order and remanded the Agency to do a couple of things. Analyze the effects of natural gas production, because the Agency did not do that. And these
MR. ROUTHIER: Sure thing. The Judge's remand was specific in what he wanted us to do, a little bit more NEPA.

UNIDENTIFIED MALE: Could you speak a little bit louder?

MR. ROUTHIER: Uh, I'm sorry. The Judge's remand was fairly specific in what he wanted us to do. He wanted a little bit more NEPA and there were bits that he wanted done correctly.

He found deficiencies in some of the parts. In order to accomplish what the remand required, we elected to do a Supplemental Environmental Impact Statement, which allowed us to do a pretty thorough analysis of the issues. And also incorporate some public process. It lets us go out to visit the communities on the North Slope. It lets us have this meeting here tonight.

As Jeffery stated, there were a couple different components of the Judge's remand. The first component was the requirement to analyze the potential environmental impacts of natural gas development and production.

Now, in asking the analysts who work with us, the scientists who do our analysis, we couldn't just ask them to analyze development and production generally. We needed some more specific information from them to analyze. Well, they did about what we needed to have done correctly.

What we needed was a feasible scenario, a reasonable scenario that talked about what kind of developments would be necessary. How things would actually work. So, to get guidance on what the natural gas development and production would entail, we consulted with our

MR. PETTINSON: Thanks. Hi, I'm Bob Peterson, Chief of the Resource and Economic Analysis Section. As Mike pointed out, one of the key things that their group needed was something specific -- can you hear me okay?

AUDIENCE: Yes.

MR. PETTITON: What they needed was something specific to analyze. And, again, when the Judge came back, he said, we hadn't analyzed. But keep in mind, this was put together in 2006-2007. At that time, we didn't see gas as reasonably foreseeable. But in our leasing, we did see an incentive in barrels of oil equivalent, which could be either oil or gas. And so the Judge wanted to see an analysis of gas.

In our final Environmental Impact Statement that we had completed, we looked at a scenario of an oilfield of approximately a billion barrels in size. Well, what we did is, added to that accumulation, we certainly see possibilities of this in the Chukchi Sea of a billion barrels of oil and an associated accumulation with that of two and one-half trillion cubic feet of gas.

We thought that was the most reasonable scenario to begin
our development. Oil is a much more valuable commodity than
gas. We did not feel it was reasonable for a gas only
accumulation to be economically viable. But in the case where
you had oil that could be developed, and that provide a lot of
the infrastructure in place then for gas, you could develop, we
thought that was the most reasonable scenario to have both -- to
analyze both an oil and a gas case on the environment.

So the first stage in our first EIS, we looked at an oil
development of a billion barrels in the Chukchi Sea, a bottom
grounded -- sea floor grounded structure, a oil pipeline to the
shore. From that point at the shore, taking off across NPSA on
an onshore oil pipeline to the Trans-Alaska Pipeline over near
Prudhoe Bay.

It's important to note that this oil would probably begin
about 12 to 15 years from today, assuming drilling would take
place tomorrow. This would be, still, a number of years out
before oil production began. Sometime during that period of
time, the infrastructure for gas production would begin to be
developed. And that would include the gas pipeline to the
shore, gas facilities at the shoreline. And then along the same
right-of-ways as the oil pipeline, a parallel gas pipeline
across NPSA that then would connect to, well, maybe Delta,
maybe NOIA. We don't really know. But it would be something
coming from the Prudhoe Bay area to the south. This would take
place after about 15 years of oil development. So there would
summarized what the original EIS said about the oil development
and production, just to give people context. Then we
specifically addressed the natural gas development, so
installation of pipelines and things of that nature. And then
in a separate section we had analysis of production activities.
And we just organized that for clarity, basically. But that
basically took care of the first item of the Judge's demand.
And that brings us to the second and third concerns in the
remand which, both, basically pertaining to his holding that we
were deficient in our dealing with incomplete information.

Within NEPA and its implementing regulations, there's
certain protocol that Agencies must follow if incomplete
information exists or is identified. We didn't do a good enough
job of that the first time. So, we do it again and we try to do
it the right way. To ensure that we did it the right way, we
developed a pretty systematic logically progressing analytical
tool that, basically focused our analysis on the precise words
of the regulations.

For instance, the first step was asked whether the missing
-- or the incomplete information was relevant to reasonably
foreseeable significant adverse affects on human environment.
So, we worked with our analysts to determine what was relevant
to these types of impacts. If a particular item identified in
the Plaintiffs' exhibit or during our subsequent review,
indicated that an item was not relevant to that type of impacts.
law or any kind of question that I can answer before we get to
the public comment period? Yes, sir.

TOM: Who are the Plaintiffs?

MR. LOHAN: The Plaintiffs are the Native Village of Point
Hope, the Inupiat Community of the Arctic Slope, and a number of
environmental advocacy groups. Sharon has, I believe, an Order
that lists all the Plaintiffs. Can you give it?

MS. WARKEN: Yes. The Plaintiffs in the case, Native
Village of Point Hope, the City of Point Hope, the Inupiat of
Arctic Slope, Red Oil, Alaska Wilderness League, Center for
Biological Diversity, National Audubon Society, Natural
Resources Defense Council, Northern Alaska Environmental Center,
oceania, Pacific Environment, Sierra Club and the Wilderness
Society.

And the Defendants in this case is the Bureau of Ocean
Energy Management Regulation and Enforcement, previously
Minerals Management Service, the Secretary of the Interior, and
the U.S. Fish and Wildlife Service was sued concerning the
Dangerous Species Act, but that claim, through the Court, was
noted. Because the Fish and Wildlife Service received -- updated the
biological opinion was a subject to the litigation, so that.
The Intervenors in the case is Shell Gulf of Mexico,

MR. LOHAN: Any other questions? Tom?

TOM: Yeah, did you try and incorporate any of the lessons

Environmental Impact Statements and other authorities that, in
the addition to, the creation of a stand-alone, regulatory
Agency to oversee industry’s activities that we have been
involved with making recommendations we believe will be
successful in full aware of the trust of the
American people in what we do. Any other questions? Yes,
Michael.

MICHAEL: You said that, in your documentation, that
nearly $140 million has been spent on pre-leasing studies. Do
you have a handle on how much money in total has been spent to
this point on studying?

MR. LOHAN: Environmental studies in the Arctic is
probably approaching about $40 million by our Agency alone.
Industry spends tens of millions of dollars, just in the short
time that I’ve been with the Agency, to do their own science in
developing baseline information and monitoring of what
activities have taken place.

Most recently, Shell and the North Slope Borough entered
into an agreement by which they will work collectively to do
even more baseline science. And, the posters on the wall, with
the little chart on an email back there -- when the meeting is
over, I invite anyone who’s intellectually curious about the
amount of scientific information that we base our decisions on.
to take a look at this list of environmental studies that have
been conducted and that are currently being worked on. So there

is a substantial amount of information, scientific information
to base these kinds of decisions on. And, I can tell you very
briefly that in the case of the decision to hold a sale in the
Chukchi sea, the decision maker did ask some hard questions.
The decision maker wanted to know if the people in the
communities along the Arctic were confident in industry’s
ability to clean up an oil spill. And whether or not industry
could clean up an oil spill. These are questions that are a
little different than the norm, inside the belay. They
require answers that someone might not like. But, this process
under the National Environmental Policy Act and this meeting
that we’re having right now are all part of informing the
decision maker. And, so, when and if the decision maker asks
how people view certain things, it’s our job, as employees of
this Agency, to tell them the truth. And so that’s our job, and
we’re proud to do it. Tom.

TOM: Jeffrey, can you current on whether, and if so, when
the Agency would submit to the State of Alaska revised Coastal
Consistency Determination, under the State’s Coastal Management
Program?

MR. LOHAN: For this particular Supplemental Environmental
Impact Statement?

TOM: Right.

MR. LOHAN: We talked about that this past week. We have
to, because we just got back.
UNIDENTIFIED MALE: What's the question?

Mr. Logan: Question is, whether or not we will consult with the State, under the Coastal Zone Management Act and get, would essentially be, a confirmation or re-confirmation of consistency. We have not had the chance to hold those discussions with the State because we just got on the ground the other day. And we had to prepare for this meeting. But we will. And we will get back to the North Slope Borough with that. Yes, as 'an.'

UNIDENTIFIED FEMALE: How long will public comments be accepted for the EIS statement?

Mr. Logan: November the 30th. Apparently, it was -- November 29th is the date. But somebody sent somebody something that said, it was November the 30th, so, with the great powers bestowed on me, I have extended the comment date one whole day.

And hopefully that will work for you. This is a straightforward, easy to comprehend document and matter. And that should do it. Jeff, yes.

Jeff: You mentioned several times the decision maker. Who's going to be the decision maker on this, on this EIS?

Mr. Logan: Well, you know, that -- it's the Secretary's shot to call. And the Secretary has the ability to delegate. But I can tell you this, since the Deepwater Horizon incident, decisions on doing things in the Arctic with respect to oil and gas exploration, seem to be of great interest to the Secretary, and even the President, as one could easily understand. So, at a minimum, it will be made by the Secretary of Interior unless he decides to delegate it to the Assistant Secretary of Land and Minerals Management. Yes.

Mr. Harbour: Question on process. It looks like we may have several more of people here interested in testifying. What are your rules? Are we going to have a certain time limit? And how long are you going to allocate? Or are we going to stay here as long as it takes for everybody to be heard? Or are you going to put a limit on tonight?

Mr. Taff: They're moving me along. Yeah, let's get into that. Because we do have a long list. Thank you sir. A long list of people that do want to testify. And so, I counted that list and did the math. We have 'til 10 p.m. and that gives us 78 people about two minutes each. I know how these work, because I do this for a living. Some people will change their mind because somebody's already said something that they said.

And that's okay.

What I'm going to do is, I'm going to call the names in the order of the sign-up sheet. Just to let you know, so you can get in the better's box, we're going to start with Mr. Taff, and on deck will be Mr. Gilmer. So, if you could move that way, we can get started straight away.

And then I would ask that everyone, in as much as possible, that you summarize what you want to say. And if you have it in writing, I will take it from you and make it part of the record.

The only real rules that we have is that we respect each other and be courteous. We talk just loud enough for our Court Reporter, Judy, to understand you. There's no sense to let our emotions get the best of us.

So, without further ado, I know we have more questions, but I'm not going to take them because we do have to get into the testimony. I'd be happy to answer any questions, burning questions that you have, after the hearing is closed. Mr. Taff. You have the floor.

Mr. Taff: Thank you sir. Thanks to you and your organization for all the hard and good work that you do for this State.

Mr. Logan: Is that okay?

Mr. Logan: That will be picked up by the Court Reporter. I'm sorry, but you may not be able to hear the person.

Mr. Taff: I'll do my best.

Mr. Logan: Okay, do your best.

Mr. Taff: Yeah --

Reporter: Could I just ask that you tell me your name so I can put it on the record?

Mr. Taff: Yeah, that's my first line. My name is Maynard Taff. I'm a partner in a small business, Hawk Consultants. We provide supplemental personnel to the oil and gas industry here in Alaska. We're an Alaskan company, founded here in 1985.

Last year we lost 59 employees due to the state of the oil industry at this time. We also are a member of the Alaska Support Industry Alliance, which is an organization representing 500 member companies, and their 35,000 employees.

We believe the OCS should be made available for oil and gas exploration and development for these following reasons.

The United States is in a very vulnerable position related to oil energy consumption. Oil imports have risen about 20 percent in the last few years and the U.S. local production has declined by 14 to 16 percent. We import over 59 percent of our energy as reflected in oil. Where and what is our energy policy? The Opposition to oil and gas exploration and production here in Alaska impacts here in Alaska, the lower 48 and is a threat to nation's security.

Even if we were to get approved tomorrow, OCS production may not be available for some 6 to 10 years, when you consider the permitting and contingency plans and different (indiscernible). Can we accept a vulnerable and subservient position relative to our energy needs? Do you click that the American people will accept a damaged economy, stand by their elders freeze up in New England? Wars have started over problems less than this. We must be always in a position of strength, energy independence, flexibility, sustainability, when it comes to our national security. Energy is the foundation of
our independence and the strength of the world.  
Seven percent of Alaskans, including the Alaskan Native community, support environmentally responsible development.  
Shell is working closely with the local community in Barrow and understands -- and incorporates concerns of the Indigenous Alaskan people. We are citizens of this State, all of us in the oil industry. We care deeply about the environment and its citizens. Remember even oil companies are made up of people.  
I recall an experience when I was working in Barrow in 1972 to '74. We were doing a cleanup project at Unit. And when we were done back, and said they expressed their statement as the amount of oil keeping out, just naturally seeping out under the tundra, up there. And I commented to them, the oil companies have a more stringent oil policy than Mother Nature.  
Alaska needs the jobs, revenues and oil production. And the U.S. needs its energy sources for our nation's security.  
Exploration and production is a win/win. win -- revenues for the government, energy independence for the nation and jobs for a stagnation economy. Thank you.  

MR. GILBERT: Thank you Mr. Taft. I have your written statement. I appreciate your comments. Mr. Gilbert you're up next. And for the Mayor of Anchorage, Mrs. Schubert, I hope you're still here? Yes. Mrs. Schubert -- stay, you're on deck. Mr. Gilbert, you have the floor.  
MR. GILBERT: My name is James Gilbert. I am the President...
Agency on August 26, 2010, in front of Director Michael
Browneich, he said, and the action to suspend drilling
announced by Interior Secretary Ken Salazar on July 12, 2010,
was likely a prudent move, given what we did not know about the
Deepwater accident. However, now is the time to move forward.
Mayor Sullivan also said, nearly four months ago, quote: We
must, as a nation responsibly move forward with domestic
offshore energy production to meet our needs by building a
robust and inclusive OCS leasing program that includes both the
Beaufort and Chukchi Seas. We urged BOEM to continue its work
to evaluate regulatory structures that improve safety and spill
response, while simultaneously making sure any changes are
appropriate to make certain that offshore energy production can
done responsibly, taking heed to protect the environment.

Again, now is the time to move this leasing program
forward. We have learned much from the Deepwater incident, and
we know that drilling in the shallow Arctic is far different
from drilling in the deep Gulf, including overall geology, well
design and pressure. More than 250 studies have been funded in
the Arctic in the past decade, with the bulk focused on the
Chukchi and Beaufort Seas. We know that there’s never been a
blowout in Alaska, or the Canadian Arctic that resulted in an
oil spill. Five wells have been drilled in the Chukchi and 30
wells have been drilled in the Beaufort, and all without

What if that risk is more delay and overburdens and
regulation. Significant market disruptions that are likely to
lead to price volatility and higher prices for American energy
consumers and for Alaskans who are so dependent on oil and gas
revenues to make our economy tick. To that end, Mayor Sullivan
encourages action by Congress to provide States with a fair
share of revenues derived from production (indiscernible) to
drive revenue and help direct a more responsive path forward.
I’d like to reiterate Mayor Sullivan’s opposition to any
further delay to development of Alaska’s offshore oil and gas
resources, and to encourage you to expeditiously affirm Lease
Sale 193.

MR. LOGAN: Thank you.

MR. LOGAN: Now, Ms. Beardsley, sit down, sir.

MR. LOGAN: No, sit down, sir. No, sit down, sir. Sit
down.

MR. LOGAN: I am sitting down. But feel I am
obligated (indiscernible).

MR. LOGAN: You will sit, please, thank you. Ms.
Beardsley. And Mr. Donson on deck. Again, please, in the
effort to allow people enough time to speak, please summarize
your statements, if you can. We appreciate it.

MS. BEARDSLEY: My name is Betsy Beardsley. I’m the
Environmental Justice Program Director for Alaska Wilderness
League. For the record, I’m a life long Alaskan, born and
raised here, deeply rooted in this State. I have a child and my
mother-in-law is here in the audience to support me, so I’m not
an Outside Environmental Extremist.

We’re at an important crossroads right now to the Arctic
Ocean. And while I’m glad to see that BSEE is here, holding
this public meeting to learn about the issues at hand. I am for
the agency to listen to local voices, to improve its process in
working with the community, and to gather the necessary
scientific data and make decisions based upon sound science.

The process, so far, has been bureaucratic, rushed and
technical, to the detriment of capturing local voices on these
issues. These voices do not only have the most knowledge about
this pristine wilderness place, but also stand to lose the most.
If the risky aggressive development proposed by Shell Oil and
others is allowed to move forward.

For example, BSEE needs to improve outreach to the
community. In October BSEE released a 300 page document on
d its draft FEPs for the Chukchi Sea and an (indiscernible)
community hearing was ten days after releasing this document.
This timeline does not give communities adequate enough time
to digest the hundreds of pages of vital information affecting
their communities. BSEE can do a better job is engaging
communities in a transparent and fair process.

Also, very little is known about the icy waters of our Arctic Oceans. And the necessary science is still being gathered. For this reason, the Obama Administration and two Federal Judges suspended all drilling activities in the Arctic earlier this summer, with the request for necessary and missing scientific information. The draft PEIS for the Chukchi should address the missing scientific information. Instead, the Agency dismissed the need to collect missing science and, at this time, its potential negative impact on entire species of Arctic wildlife.

We hope that the process could be similar in the Beaufort where Agency would release a new draft PEIS that would be decisions on sound science, such as the research that your sister Agency, the U.S. Geological Survey, is currently working on. And, also, that you take into account the lessons learned from the BP oil spill.

We learned through the tragedy in the Gulf of Mexico that there were significant problems with the way that oil and gas development in our nation is managed. In fact, BP’s massive mistakes in the Gulf have shown the spotlight on something we, in Alaska, have known for years, that the oil industry cannot be trusted with our precious natural resources. BP’s track record on Alaska’s North Slope has been terrible, averaging more than a spill a day over the past 15 years. Just last week, the

Mr. Steiner.

MR. DANSON: I am not from Alaska and I am an environmentalist but I hope I’m not an extremist. My name is Ted Danson. I’m on the Board of Directors of Oceana which is an International Ocean Advocacy Group, conservation group, with offices in Juneau, Alaska.

I went to Prudhoe Bay, at the invitation of oil companies. About 20 years ago because I was on the opposite side of the fence, trying to keep Occidental Petroleum from drilling in Santa Monica Bay. We became friends and they flew me and a friend of mine up there. And we agreed to disagree. But we did find ways to keep oil out of the system by creating a recycled used motor oil program. So I firmly believe in working with oil companies, when you can.

I was also able to go to Barrow about five days ago. And I met with Mayor Itta and saw somebody in the middle of this conversation. Somebody’s whose entire -- the people he represents have been lifted up economically oil money into a place where they can live in a much more sustainable way. And at the same time, their spiritual and cultural life depends on whaling, the bowhead whale. And they feel that that may or may not be in jeopardy from this drilling. But they feel that the science -- well, let’s now speak for them.

Oceana now feels that, what you need to do with so much at risk, is make sure that the planning and the science is accurate.
1 guy’s the real deal. He’s not just a Hollywood celeb that steps
2 into an issue and then walks back to Hollywood. He’s been
3 involved in ocean conservation issues for decades. And I
4 certainly commend him for that. Thank you.
5
6 There were hearings like this prior to TAPS in which
7 people said. It's important for jobs, for energy and don’t
8 worry, there will not be one drop of oil spilled in the Prince
9 William Sound. We all know that -- the -- what’s wrong about that,
10 at this point. Where there were hearings like this in the Gulf of
11 Mexico prior to deepwater drilling. Obviously, we know what the
12 fates are in that begin as well, right now.
13
14 This is a high risk gamble. I realize that politics are
15 against us in Alaska. Most of the people in this room and
16 probably, most of the people in Alaska want OCS drilling. We
17 get that. The problem is, who shoulds the risk and who gets
18 the benefit? The people of the Arctic Slope cabsolutely shoulder
19 the majority of the risk. And the environment of the Arctic
20 Ocean has most of the risk. So we have to be conscious about
21 that.
22
23 My suggestion would be, Alternative II in the FEIS, which
24 is, no action. But realizing the political realities, might not
25 line up with that. I would suggest, then, an Alternative III-A.
26 And Alternative III is the 60 mile deferral corridor one against
27 the beach. And we ask that it be suspended for a year while
28 further risk analysis and risk assessment is conducted.

1 Arctic Slope region and we're in an economic crisis. Revenues
2 are dwindling with the decline of TAPS and fewer companies
3 investing in on shore exploration.
4
5 There is no alternative to off shore exploration for the
6 people of the North Slope in terms of economic development and
7 stability. Good paying jobs are on vital decline and families in
8 rural Alaska are at the forefront of the nation's economic
9 crisis. Many residents, including some in the North Slope, live
10 in third world conditions in inadequate homes not suitable for
11 the Arctic.
12
13 Oil and gas revenues has provided education, health and
14 social services and numerous other facilities such as proper
15 sanitation services, roads, bridges, airstrips and other
16 critical infrastructure needed for the well-being of our
17 communities.
18
19 I personally had my higher education paid for and
20 graduated from the University of Alaska Anchorage with a
21 Bachelor's degree thanks to oil and gas dollars provided to my
22 region. This also includes the hundreds of other North Slope
23 Inupiat that continue to receive scholarships through endowments
24 and foundations established with oil and gas dollars. It is not
25 a handout, it is a hand up to help our people live in the ever
26 changing world. Even subsistence hunting costs money, money
27 that comes from jobs that are on the decline. Offshore
28 exploration and subsistence hunting co-exist.
It would be a major disservice to my people and to the State of Alaska if BOEM rescinds the leases allowing a de facto xenonarium to continue, which will do more harm than good. I strongly urge you to affirm Lease Sale 193 and commence with necessary permits to allow development of these important energy resources without delay.

Mr. LODOR: Thank you. Mr. Banks for the Governor of Alaska. And Mr. St. John on deck.

Mr. BANKS: Thank you. My name is Kevin Banks. I am the Director of Oil and Gas at the Department of Natural Resources. And I am here on behalf of Governor Daines and I thank you all for this opportunity to testify.

The State of Alaska supports Alternative IV in the Supplemental Environmental Impact Statement on oil and gas Lease Sale 193 in the Chukchi Sea. And affirming the Sale 193 as it was held in February 6, 2008. As all are aware, that Sale yielded $2.6 billion in successful bonus bids from some of the most experienced offshore oil companies in the world. Bidding behavior such as this is undeniably a huge endorsement of the scientific opinion by both BOEMRE and the USGS in their assessments of the resource potential in the Chukchi Sea. I will try to be brief for you all.

Now, almost three years after that sale, in which time these companies would have had the opportunity under less litigious circumstances, to begin exploration in earnest, the

be avoidable through avoidance and mitigation. And the impacts on the human environment from natural gas development are described with the comments in the SEIS as, no major impacts are expected for Alaska Inuit interests.

These conclusions about the environmental impacts of incremental natural gas development, combined with the conclusions already made by the BOEMRE and essentially affirmed by the District Court in the original Sale 193 SEIS means the decision to go ahead with the lease sale has met the requirements of NEPA.

The Agency’s analysis of the second and third issues identified by the Court is encyclopedic and rigorous. It was our impression that the number of instances in the original Sale 193 SEIS where BOEMRE identified incomplete or unavailable information, indicated that the care of the scientist at the Alaska OCS Region took to avoid exaggerated and polemic statements. On the other hand, the Plaintiffs, before the U.S. District Court, pressed that, in spite of exercising an abundance of caution that the Agency had somehow erred in pressing forward with a lease sale, as if it were completely ignorant of the environmental impacts.

The Court didn’t go so far as the Plaintiffs. Instead the court recognized that the Agency be given deference in meeting the requirement, and we believe that they have done so comprehensively.

Lacking a crystal ball or the presence of our Creator should not condemn all human endeavors. Obviously at this stage in the process, we can be sufficiently informed about the likely impacts of selling oil and gas leases in the Chukchi Sea. Later, we can address what we need to know to authorize exploration activities. When uncertainties exist, everyone understands that we must act with caution. The State of Alaska believes we need to act now.

To wrap up, in deference to all of you, State of Alaska has consistently argued that oil and gas development in the Arctic OCS is an essential component of the future of our industry and our State economy. It will contribute to sustaining our livelihoods and our varied cultures. Often lost in the debate about OCS development, it’s a simple fact that when we fail to develop our own resources, we export our nation’s wealth through deeper trade imbalances and costs to maintain our international energy security.

Failure to develop our domestic resources exacerbates the impacts on the environment and other parts of the world where values about environmental protection and the laws that minimize the impact of industrial activity are non-existent.

We compliment BOEMRE for the work they’ve put into this SEIS. And we believe that it provides more than sufficient support for the decision to affirm the February 6, 2008 Sale.
MR. LOMON: Thank you, Kevin. Okay, I sense the
frustration. So I’m going to ask you one more time to please keep
your statements down to two minutes. It’s appreciated by a lot
of people. Thank you.
MS. ST. JOHN: For the record, my name is Jeannine St.
John. And I’m here representing an Alaska company that many of
you now, Lynden. We represent a privately held company that has
over 500 employees in the State of Alaska.
And I’m going to keep my comments extremely brief. I’ll
leave my written comments. What I’d like to say is that we have
registered at all of these public hearings on everything related
to this lease sale. It’s gone on and on and on. You can see
all the studies, the scientific studies that have been done. I
believe -- we believe that people understand that oil and gas
development has to be done responsibly. And we appreciate the
fact that companies have had the patience to go through this
process. However, it’s disheartening to go on and on and on
through this process.
So we urge quick expeditious action. And let’s move
forward. We want to keep our employees employed. And we know
that you guys all want a good Alaska economy.
Mr. Pratt right after Mr. Kendall. Mr. Kendall. Well, Mr.
Pratt, we have an empty seat for those that are up next.

MR. LOMON: Thank you. Thank you very much. Mr. Kendall.

Mr. Pratt right after Mr. Kendall. Mr. Kendall. Well, Mr.
Pratt, we have an empty seat for those that are up next.

harmony energy. You have the chance to make your residential
sector in the Valley, in Anchorage and Girdwood to be all
electrical residential, one of the first areas in the world.
You have a chance, if you do that, to literally launch the new
technology, to make energy based.

And instead of sharing that moment with some of these
companies that were some of the most influential in the world.
By bringing (indiscernible) to Mr. Lomon, to be able to hold over a
hearing for two minutes at a time, instead of being able to have
a three or five day, these companies pretend levels of influence
I’ve never seen the likes of before.

And what happens is this. Instead of them joining us to
make this a very special place to evolve our society, to show
that two paradigms can exist simultaneously, and win out, you
now, in a fair mode, they continue to evade accountability.

There is not going to be anymore (indiscernible) Alaska ladies
and gentlemen. And if you look at the rational factors and all
the data outside of those people who want to mindset you, by
occupation, you will realize that technology is coming unleashed
like I have never seen before in my lifetime.

Carbon and the fossil fuel distribution network system of
associates, they have so neglected, they have so connived and
contrived the markets across, not just America, but the planet
in all reality. That all sectors are now looking to fail. The
only way to come back is for the true free market enterprise to
push back with new and in-harmony designs.

These oil companies know this. And let me give you an
example. I’m going to do a little something here that hopes to
connect you or unfold you. There is no such thing as water. It
is an ancient archaic and distracting term. When you send that
child over to get you a glass. If you do water, you may as well
put that child in a cardboard box and buy him. You need to
send him over to get you a glass of hydrogen and oxygen.

And when he says to you, mom or dad, what is hydrogen, you
can explain to him that the ocean is a complex hydrogen body, a
compound of various particulates and partnerships and life
forms. It’s almost another dimension and to reach into it.

A river is a hydrogen body. A lake is a hydrogen body.

When you drink that hydrogen, your body makes electricity and
sends you a sympathetic impulse. When you have two sympathetic
impulses there about, you have what we call a state of Being
because you can contrast data. You are maintained by a State of
Being by hydrogen, ladies and gentlemen.

It is oxygen under which you die -- pardon me! I didn’t
see a timepiece. But out of respect for your distinguished
guests, here I will do that.

I’m not sure how you nurture it in a moment of such
wonders. Well, I am angry at those companies who now, having
pursued the almost Biblical proportions of greed to feed on
money that which, no longer has value. Or insect mentalty,
insect mentality is like. I need a job. What is a job get you?

I missed that one. But, my point -- men like me is like
kryptonite to Superman. You put me in a time block, fine, but
I'm down. Really falls off a branch.

Complex problems ladies and gentlemen requires slower
thought process at a greater body. And just as you're having
here tonight, it is an injustice. He should have reconvened
this meeting. He should have made a three day meeting, brought
cameras in so that men could rise and challenge other men and
probe, interrogate and then sit down. And rise again. You are
in a very special place ladies and gentleman. You have a chance
in summary for a moment. You have a chance for your children to
lead the rest of the world. Within the next two to eight years,
you could make this transition. The oil companies would be
there with you. Quite frankly I think they're occupying their
they're about to desert you. But the point is it's our outrage
and sense of anger and disposition here is because you see a
great moment, instead of your children. Which are the ones we're
supposed to be about, to be a more free people. Instead of


Ten seconds. I thank you for the opportunity. And it is
a special place that I ran sit with such a distinguished crowd


engine. We are a young State. Population wise, we are a small
State. We know each other. With fewer than 700,000 residents
and barely 50 years of Statehood under our belt, we need all the
economic development we can muster to be a self-sustaining,
envisioned by the Statehood Act. Unless we commercialize our
natural resources, we have little hope of surviving
economically.

Please allow us to continue to live in this thriving
healthy, pristine, magical place we call Alaska. This is the
right thing to do for America. This is the right thing to do

MR. LOGAN: Thank you, sir. And, Kate Williams, next.
Sir, the floor is yours.

MR. MALONEY: Thank you. My name is Sam Maloney. My
father, Tom, is delivering my testimony this evening as I have
English and math classes Tuesday and Thursday evenings at UAA
that I cannot afford to miss. I agree with him.

A few months ago I had the opportunity to personally
testify on the GCS and importance to Alaska and the country's
situation with Secretary of the Interior Salazar.

This has been a big year for me. High school graduation
in May from South High School. I attended RCC in the morning
for their welding program. This great technical program led me
to major in welding and non-destructive testing at UAA. My goal
is to become a certified Welding Inspector in the next few
years. By working very hard I already have four welding certs.
It cost a lot of money to attend a university and take
these kind of programs. The welding supplies, books, materials
are all very expensive. I and my fellow students need to pay
the piper and not expect anyone else to foot the bill. I worked
60 hours a week all summer to help pay my way.

A few years ago the Federal government accepted almost $3
billion for lease sales from oil companies. So far, it appears
that not much is happening to create future employment
opportunities for Alaskans, like myself. Many of my fellow
students who are willing to work and obtain the necessary
education and technical skills are concerned that we will not
have an oil industry in Alaska a few years from now. Isn't
there a few trillion dollars worth of oil and gas reserves in
the GCS that the Federal Treasury may need to pay its debt?

When my dad came home about 20 years ago, the Trans-Alaska
Pipeline had over two million barrels a day. Now we have less
than a third of that. Will the pipeline shut down when it's
only one third of what it is now? Will the oil industry, which
provides almost all of our State revenues, be forced to leave
Alaska to pursue opportunities overseas? Can I get a job
related to the oil industry, which is in rapid decline in
Alaska? Will I be able to pay my student loans and other debts?

Several of my friends' parents have relocated to places
like China, Australia, Canada and Germany to develop new oil and
Alaskan expertise to other countries that are developing their own resources. Why not develop our Alaskan resources to benefit Alaskans and Americans? We need to develop America's own resources especially those here in Alaska. People like me need good paying jobs to support families. The oil industry has been good for my family and thousands of others. We need to keep it going. I do not want to move out of Alaska or maybe the entire United States to work as a Welding Inspector.

Let's get Alaska and America working again. It would be nice to see some of my friends return to Alaska with their families instead of communication through Facebook, Twitter, MySpace and phone calls.

Thanks for listening and feel free to call or email. Sam Holmey.

MR. LOHAN: Thank you.

MS. WILLIAMS: My name is Kate Williams and I am the Regulatory Affairs Representative for the Alaska Oil and Gas Association, AOGA. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining and marketing activities in Alaska.

We appreciate this opportunity to present comments on the draft Supplemental Environmental Impact Statement, for the Chukchi Sea Lease Sale 193.

Access to these resources is critical to the continued operation of the Trans-Alaska Pipeline system, which is currently operating at about one-third of its capacity and could be economic to operate after 2020 without additional throughput. Access is also a key component to the economic feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48. OCS oil and gas development would also benefit Alaska's economy by providing thousands of high paying jobs over a long-term period.

To reiterate earlier testimony, a study by the University of Alaska's Institute of Social and Economic Research and Northern Economics found that new offshore energy production in Alaska would create an annual average of 35,000 new jobs in the State with a total payroll of approximately $72 billion over the 50 year life of the project. New offshore development in Alaska would also generate thousands of new high paying jobs throughout the county across a variety of industries.

Alaska's North Slope and OCS are now perhaps the most studied energy basins in the U.S. In the past decade alone over 250 studies have been funded in the Arctic with the majority focused on the Beaufort and Chukchi Seas. All told over $500 million have been spent on more than 5,000 independent studies since 1973.

AOGA strongly urges the Secretary to affirm Chukchi Sea Lease Sale 193 as recommended by the SEIS. The leases issued...
Unfortunately, as a result of a depressed business activity in Alaska's oil patch, hundreds of Alaska oilfield workers and professionals have lost their job. On behalf of the Alliance and its members, I first want to thank the MHS and the ES that you've done, to date. And I have a simple request tonight. Please submit your Supplemental Environmental Impact Statement to the Court immediately.

Thirty-five thousand Alaska jobs are at stake. Alaskans are ready to go to work. It's time for the Bureau of Ocean Energy Management Regulation and Enforcement to do the same, and fulfill their obligation to properly develop Alaska's Federal resources and create business opportunities for Alaska's oil field contractors and suppliers and their employees. Thank you.

MR. LOGAN: Thank you very much. Mr. Lakosh, two minutes.

MR. LAKOSH: Thank you for accommodating my disability. My name is Tom Lakosh. I'm an Oil Spill Researcher. I've been involved in assessing the legal and technical requirements of affected oil spill prevention and mitigation.

I'd like to say -- start -- I admit that I'm not entirely prepared to produce comments on the EIS. But it's apparent that certain questions need to be addressed because of the concerns of the citizenry. I'd like to remind all of those that are interested in development that, because of scrutiny, there has been half a billion dollars already invested in studying environmental impacts.

of the oil area. They will not be able to concentrate the oil to get to the skimmers that produce the recovery rates that they profess.

They have not -- nobody has studied the effects of burning oil. A recent symposium on that this spring showed pictures of the soot coming right back down, due to temperature inversions, spreading the oil all over the place where bears and fox and seals will all roll around in it. They plan to leave the oil in the winter, which is against the law. They're supposed to recover it in a set period of time. They need to develop the technology that can advance in broken ice. They need, to Shell's credit, they need those ice breakers, the first that have been brought up to the North Slope for recovery purposes.

And so they're sort of in the right way. They need to spend more money. BURENNE really needs to put some of that $2.7 billion into an Arctic skimmer X-Prize (ph). Shell needs to cough up a little bit more.

We could find the solutions, create more jobs and protect the rights of the citizens to use the natural resources, if we work together. Thank you.

MR. LOGAN: Thank you. June Childress.

MS. CHILDRESS: My name is June Childress. I live in Wainwright, Alaska, and also the President of the Village Corporation. And I live right smack dab in the middle of the Chukchi Sea. So, this comes from our community as well as our

environmental impacts.

If the conservation community and support industries would get together, I think you'd find that we could probably do this job right and provide much more -- provide for the rights of Alaskans to superior public uses of their resources.

By the way, oil spills are illegal, so they could never be a superior public use. But we could provide for more jobs and more investments here in Alaska, if we do the job right. Right now we find that the regulatory system does not properly account for effective planning.

In the Gulf of Mexico, you'll see that BP planned for a 491,000 barrel per day spill. They said they had the capability of recovering that amount of oil. They would cover an average of 1,800 barrels per day. So the methodology called the estimated daily recovery capacity was 273 times off of the mark, and what it could realistically be recovered. The technology is available to do it a lot better, if the industry put as much time and effort into developing those technologies as they did in extraction equipment.

They spend billion dollars on floating production and offshore storage platforms. They could spend the money on the technology and do it. Shell has contributed to the oil skimmer X-Prize (ph) but they're not going to study for Arctic skimmers. Their present skimmer systems are not -- cannot be used in broken ice, because they are not designed to process ice. They

Chukchi Sea. So this comes from our community as well as our Board of Directors of Olgonik Corporation, our Tribal organization and the City of Wainwright.

For generations we have followed a subsistence lifestyle. While the waters of the Chukchi Sea provide many basic food sources, it is important to consider the fact that we also must rely on jobs to support subsistence. The cost to buy gas for our boats, snow machines and 4-wheelers is high. In addition, we must pay for the modern community conveniences we enjoy.

public water, electricity, telecommunications services. Without the means of buying supplies, we cannot practice our way of life as Inupiat people, let alone pass along cultural values to our young people.

To meet this need for income, we are keenly aware of the value of economic development in our community. For that reason, the Village of Wainwright sees oil exploration in the Chukchi Sea as one of the most important opportunities we have for creating jobs. That is why we took the initiative in 2007 to make some preliminary investments in the local facilities, equipment and training needed to support oil company operations in the area.

Over the past four years, Olgonik has invested in excess of $3.5 million in this effort. This business decision has made it possible for Olgonik to supply oil industry activities with Marine Mammal Observers, a Communications Center that helps
and supply support operation for companies conducting science
studies in the region and shore-based logistics and camp
facilities.

Let me emphasize that the Olginilik Corporation is not
doing this alone. We are working as a team with the City of
Maine, the Tribal Council and the Whaling Captains. You
heard statements from these groups during testimony in
Maine on November 4th. It is also worth mentioning that
it's not only Maine that supplies properly managed oil
explorations in the Chukchi. Despite what a few social critics
say, and the media's focus on this minority, a great many
residents throughout the North Slope understand that a realistic
balance between subsistence lifestyle and exploration can be
maintained. Given the need to bring more jobs to these remote
villages, we urge the Federal government allow exploration to go
forward.

Thank you for your time.

MR. LORMAN: Dave Harbour.

MR. HARBOUR: I'll leave you with my written testimony.
which will be more succinct than the verbal. But I'll offer the
verbal in view of the time constraint.

MR. LORMAN: Thank you.

MR. HARBOUR: And maybe, after hearing the other witnesses
talk a little bit about things that maybe the panel has not
heard.

At this point, as a former regulator in the State of
Alaska, my advice would be, that because of the delays that have
been incurred over a long period of time, at a cost to the
state of several billion dollars, about a billion more than
was originally bid. We're at the point, I believe, where Alaska
is on the cusp of losing OCS development. If we lose OCS
development due to further delay, and that delay could be a BOEM
decision and a Secretary Salazar decision not to provide the
approvals necessary by the end of this year — if that doesn't
happen, we could see the ability of the industry to mobilize for
the next summer season lost.

If that happens, we may see a loss of OCS altogether.

That could result in an inability of the State to sustain the
Trans-Alaska Pipeline. A previous witness estimated that it
could be in 20 years that that pipeline could be -- to fall into
disuse. But if at three-quarters empty, at this point, between
500,000 and 600,000 barrels a day declining, at a rate of about
six percent per year -- you do the math. In a cold winter day,
out of an abundance of caution, the owners of the pipeline may
well decide to surplus that pipeline well before that time,
perhaps as soon as seven years from now.

Since 90 percent of the State operating budget is based on
that, and since one-third of the entire State economy is based
on the throughput of that pipeline the Chukchi Sea with a
potential of over twice the productivity of Prudhoe Bay, and

The State of Alaska, when it was formed 51 years ago, was
formed really via a triumvirate of actions. One was a publicite
(ph) of the people of Alaska. Second, was the formation of the
Constitution of the State. And third, was enactment by Congress
of the Statehood Act. All three, to one degree or another,
recognized the fact that Alaska should not become a ward of the
Federal government ever again, that it should be able to sustain
itself based upon its significant array of natural resources.

Since Statehood, we've seen a gradual erosion of the
ability of this State to make a living based on its natural
resources. And were there more time and if anybody in the
audience who's shaking a head, wishes to explore that matter we
could explore it with specific examples at great length.

At this point, let's look at current actions leading up to
the present. First of all, Judge Beistline, in effect blessed
the good work of the MRGLB with the exceptions of some
remedies that he sought and rewindow the work to the BOEM.

Thanks to conversations that you shared with me before the
meeting, I learned that you did not have to construct an SEIS
which is part of NEPA required public hearings like we're having
around the State now. Rather, you could have submitted the
remedies more directly to the Court as the Court ordered. But
out of abundance of caution, you didn't. You went through this
process. I respect that.

on the Slope, could provide the ability of the State of Alaska
not to again become a ward of the Federal government.

In addition, the provision of Federal income taxes and
royalties as well as the ability of the State and the local
governments to achieve property taxes and sustain the dwindling
throughput of the Trans-Alaska Pipeline, could enable the State
to continue to function. Thank you for the opportunity.

MR. LORMAN: Thank you. Mr. Thompson. Rachael Daniel.

That was donated by a member of our audience, to help. And Kirk
Jackson after Rachael. Kirk -- Rachael, the floor is yours.

MS. DANIEL: My name is Rachael Daniel and I was born and
raised in Alaska in a family dependent on a subsistence
lifestyle. And, tonight I'm speaking on behalf of the PWS (ph)
Environment Group and we will be submitting comments, written
comments. So as we have limited time, I will only have enough
time to focus on one point tonight. Unfortunately, I can't
cover all the points that I'd like to make. And so I'm going to
focus on one that's important to me and that's science.

As a scientist, I would like to say that while there has
been a great -- well there has been and there continues to be
really good research conducted in the Chukchi Sea. There
remains a great deal of unknowns such as those acknowledged by
BOEM in the original Lease Sale 193, both on the lack of
information about species and habitats, as well as on the
effects of oil and gas activity on species and habitats.
effects of oil and gas activity on species and habitats.

The U.S. Geological Survey office in DOI is currently
conducting an initial review on science gaps related to Outer
Continental Shelf oil and gas development in the Arctic,
Beaufort and Chukchi Seas. This review, under the direction of
Secretary, was to identify gaps in knowledge about the Arctic
Ocean with the results to be viewed -- to be public in April
of 2011. And this information obtained in the USGS review would
likely have provided relevant information of data gaps, and the
means by which to address those gaps as related to OCS oil and
gas activity.

Furthermore, Secretarial Order Number 3305 on Scientific
Integrity signed by Secretary Salazar on September 29, 2010,
provides policy and direction that any decision from DOI will be
based on the best available science.

We do not believe that the review of the gaps in the
Chukchi Sea EIS was consistent with that policy. And we believe
that the BOEMRE should coordinate its lease 193 remand analysis
with the ongoing USGS analysis.

And related to science, one other point that I'd like to
make is that missing information could also be incorporated with
the use of traditional knowledge. And this traditional
knowledge should accompany research to aid western scientific
understanding of the Arctic marine environment. In the
documentation of existing knowledge and gathering of new

endless delays, the endless studies -- pretty soon you're going
to have to have charts that go over the horizon to list the
studies I think -- or else go to a smaller font. I don't know.

That will never be enough. They'll want more. They'll
want another study of this, another delay for that. This is a
resource State as Mr. Harbou suggested. We become a State
because we have resources sufficient to supposedly allow us to
be a functioning State. We're being strangled with our
resources, to the point where maybe we won't function anymore
and we'll be a welfare society State. And I don't know if the
government's got enough money left to make us a welfare society
State.

Instead of going with the Chicken Little scenarios of
worrying about what about this and what about that, and let's
study it some more. And that study is two days old so we got to
do another one because that one is out of data. Let's just get
on with it. Let's approve the EIS, the Supplemental EIS, the
whatever EIS you come up with. And let's do something.

Because that's the best way to learn what you need to do. How to
do it, just like in the Gulf. In the McCondo [phi] well.
everybody had ideas, plans, you name it, theories. Well, something went wrong. It didn't all work. And they've learned
a heck of a lot. I'm sure. That's a 5,000 foot and below well.
We're talking 150 feet. I think the pressure differential is
just a little bit different. And maybe we won't have a McCondo

It's amazing to see in your study that you're trying to
calculate CO2 and CH4 releases when, isn't the idea of drilling
a well -- to pull something out and burn it? And you're going
to worry about how much CO2 and CH4 is -- might be released
while you're drilling for it? That's a waste of time. The lady
from Vainwright, I'm sure and other villages, would love some
natural gas just like this city is starving for natural gas.
Because even though -- I don't know what the barrels per
equivalent is of 15 barrels in here, but this is pretty warm.
But if you shut the gas off, it's not going to be that warm. I
lived in North Pole for 20 years. Man, when it gets 40 below.
man I love my heating oil. You just can't make it without it.

So let's get on with it.

You keep calling for basing it on sound science. That's
just a rope-a-dope trick of, we need one more study. We need
one more study. We need one more, one more -- we'll never get
to the actual thing.

Mr. Denson left, and his recycling motor oil thing, well
we do that over here at the Transfer facility. I don't think
that'll heat this building, let alone the City of Anchorage.

Ideas like that might be nice, feel good but that isn't it. We
need to drill some holes, get some oil, get some gas so we can
keep on living like we are. Thank you.

MR. LOMAN: Thank you sir. Kimberly Howard. Mindy
Mr. Fortman. Mr. Fortman.

MR. STOLTZ: Bill Stoltz. Just got another two years contract renewal, the fifth one in the Legislature. But I'm speaking for myself. The Legislature has also affirmed support for this and other developments. Wish I could have been here a week ago. Everybody was pro-development a week ago, at least the folks who were running against it.

I support forwarding the lease 192 [sic], that's EIS. I look at one of my grade school friends I wasn't expecting to see here. I know his -- he doesn't want his legacy project another study. He's going to -- Coville River to be his legacy project. He'd like to be building some things and pointing to dams and other projects, not saying well this is my 15 years. I got an EIS through. But I'll leave it at that, and I'll supply written testimony later.

MR. LOWAN: Thank you sir. Mr. Fortman then Rebecca.

MR. FORTMAN: Good evening. My name is Carl Fortman. I'm the Deputy Director of the Resource Development Council here in Anchorage. RDC urges the Bureau of Ocean Energy Management to confirm Lease Sale 193. We believe the SEIS provides sufficient information and analysis to support a decision affirming this sale.

OCS oil and gas production is absolutely critical to Alaska's future economy. With the Trans-Alaska Pipeline now running at one-third capacity, exploration blocked in ANWR, and running at one-third capacity. Exploration blocked in ANWR, and non-development activists working toward wilderness designations in the National Petroleum Reserve, nothing less than Alaska's future economy is at stake. The responsible development of potentially immense oil and gas deposits in the Chukchi Sea would significantly boost the economy and extend the life of our oil pipeline. Without new Federal oil production, TAPS could be uneconomic to operate sometime in the next decade as we have heard here this evening.

Between ANWR, the Alaska OCS, and NPRA there could be nearly 40 billion barrels of oil in place. The sustainability of TAPS in our economy will largely depend on some combination of oil production from these Federal areas. Yet there are forces working hard to prevent development in these areas which represent the nation's best onshore and offshore oil and gas prospects. If there is no oil and gas development in ANWR or in the Chukchi Sea, and the best prospects in NPRA are ultimately taken off the table, the Federal government must then accept the consequences, including heavier reliance on foreign oil, soaring trade deficits, a weaker and more vulnerable national economy, and compromised national and energy security. For Alaska, our future will be bleak with the State losing 90 percent of its revenue base.

Not developing Federal oil in Alaska makes no sense from an economic and energy security standpoint, especially given the great cost. OCS development in Alaska would generate hundreds of billions of dollars in royalty and tax revenues and aid the nation's economic recovery by reducing the trade deficit and creating tens of thousands of new jobs.

In addition, OCS gas discoveries would significantly improve the long-term economic viability of the proposed gas pipeline from the North Slope to the Lower 48, a clean energy priority of the Obama Administration.

In conclusion, RDC has a high level of confidence that exploration development can occur safely in the Arctic. Alaska does have a bright future and has much to contribute to the nation with this abundant natural resources. All that is required are policies and key decisions from Washington encouraging development of these resources. Thank you.

MR. LOWAN: Thank you Mr. Fortman. Rebecca and then Chadwan.

RS. MOBLIN: Hi, my name is Rebecca Moblin, and I'm the Alaska Director of the Center for Biological Diversity. And I'm also an Alaska resident and a big fan of the Arctic. As you know the Arctic is in trouble. It's warming at twice the rate of the rest of the world. And Arctic summer sea ice is disappearing more rapidly than any of the climate models predicted. Chukchi species including, polar bears and Pacific walrus are already showing signs of stress from this unprecedented loss of their sea ice habitat. This fall Pacific walrus are already showing signs of stress from this unprecedented loss of their sea ice habitat. This fall Pacific walrus congregated on the shore near Pt. Lay in the tens of thousands, an absolutely unheard of number, because there was no suitable sea ice for them. The climate change isn't the only thing threatening these Arctic animals with extinction. They're also threatened with increasing industrial oil and gas drilling in the Chukchi and Beaufort Seas.

The Agency, formerly known as BHS, and still acting like BHS, has determined that despite huge gaps in information about bowhead whales, polar bears, walrus, and pretty much all living things in the Arctic, it was not a mistake to sell the Chukchi Sea off to the highest bidders in 2008.

MH: I'm here to urge you -- or I'm here to tell you something that you should already know. You cannot realistically claim that drilling in the Arctic is safe. People from Alaska Native communities have been telling you that for years. Scientists have been telling you that for years. Courts have been telling you that for years. But I'll say it one more time. Drilling in the Arctic is too risky.

No one has the technology to clean up oil in broken ice conditions. There is no way to mobilize even a fraction of the response required for the Gulf disaster in the remote Arctic. And the truth is, that a large oil spill could mean the
1. species.
2. Unfortunately, your draft Supplemental Environmental Impact Statement doesn’t come anywhere near addressing these problems of critical importance. Your draft SEIS doesn’t satisfy your obligation to protect America’s Arctic and it does not comply with the law. In order to comply with the law, you must analyze the substantial gaps in scientific information in the current SEIS, and make a good faith effort at obtaining that information that’s realistically attainable. And most importantly, you must not allow drilling to go forward unless you have the scientific knowledge to say, truthfully, that drilling in the Arctic is safe.
3. MR. LOMAN: Thank you, Rebecca. Colleen Keane and then Barbara Huff.
4. MS. KEANE: My name is Colleen Keane, and I’m the Alaska Program Associate with Pacific Environment. Thank you for the opportunity to provide comments tonight. I would like to urge the Alaska Region of the Bureau of Ocean Energy Management Regulation and Enforcement to issue a new draft SEIS after it has reviewed relevant reports from the U.S. Geological Survey covering Arctic Ocean science, and from the National Commission on the BP Deepwater Horizon oil spill and offshore drilling covering BOEMRE shortcomings.
5. This new draft Supplemental Environmental Impact Statement needs to include information from these upcoming reports and

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1. MS. HUFF TUCKNESS: Thank you for the opportunity to testify this evening. I am not going to bore you with a lot of written testimony. We are going to submit more detailed information directly to the Bureau. For the record, my name is Barbara Huff Tuckness. I’m the Director of Governmental and Legislative Affairs for Teestars. Local 955. And I’m here tonight to speak on behalf of Ken Coleman who, unfortunately, is out of town.
2. We represent approximately 6,000 employees, members of our institution, of which we’ve had hundreds that have worked on the Slope. Just for the record, we also represent workers in the mining industry. We also represent workers in the film industry. So, we have a pretty broad gambit of members that we represent across the State. And, fortunately, we believe that the industry does have opportunities out there. We also believe that the industry can do so in a safe and responsible manner.
3. We’ve talked about the Gulf of Mexico. There’s also been discussion about the Exxon oil spill. Those are all unfortunate situations that did occur. I do believe that a lot of us have learned from those particular experiences. And that, just looking at the studies that have been done, and we do believe that the Bureau has been tasked to continue to make sure that the environment is protected, as the industry moves forward with the particular job opportunities as well as -- not only on offshore but onshore, as well.
would be to remove the potential of 35,000 year-round jobs and a
payroll of more than $70 billion.

Obviously, concerns about the safety of the environment
are paramount. And Shell should and, I'm sure, will be held to
the highest safety accountability standards possible. And as
everyone knows, we can ill afford a Gulf Coast style catastrophe
in our Arctic waters. But this company's got an excellent track
record in Alaska. They've got a robust safety plan. They've
been safely drilling in Alaska for 50 years. And as long as the
company can meet all environmental and regulatory benchmarks,
they should be allowed to proceed towards development.

As it's been said, dozens of wells have been drilled in
the Beaufort and Chukchi, all without incident and all with
older technologies. I'm confident and experienced in knowing
that the Obama Administration trusts and values the concerns
expressed by the hard-working men and women of the Alaska labor
movement. The ability to safely explore and produce oil in
Alaska is among the highest priority of Alaska's building and
construction trades unions.

And thank you again for the opportunity.

MR. LOGAN: Thank you sir. Bob Scheidemann and then
Robert Foster.

MR. SCHEIDEMANN: I'm Bob Scheidemann. I'm a scientist.
A lot of the points supporting exploration, I agree with. And
I'd like to concur with those people and recommend that we

it's our position that offshore oil and gas leasing and drilling
in the Arctic Ocean should not occur until we have a basic
scientific understanding of the region, and only obtain adequate
spill clean-up capability. Neither exists now. And the
Deepwater Horizon tragedy shows us that offshore oil and gas
drilling is terribly risky business. We need to understand and
duly disclose those risks before making decisions to commit the
Arctic's people and its wildlife to those risks.

Specifically, we believe that BSEE's Alaska Region has
to meet the obligations of NEPA and the District Court's
Order in its draft Supplemental EIS here. In the original EIS
and in the Supplemental EIS, the agency admits that much
information -- here it's over 100 pages of admissions of missing
information is not known. And that a lot this information is
relevant to significant effects from oil and gas activity.

Yet, amazingly, this document BSEE concludes that
none -- not a single piece of that missing information is
essential to a decision about whether -- where, how, if.
(indiscernible) in the Chukchi Sea. To take one example, the
original EIS and the draft Supplement says, we don't know enough
about marine mammals. And that's a lot of things in the Chukchi
Sea. We don't know enough so, at this time, we're not able to
determine whether or not there would be significant effects from
oil and gas activity on marine mammals.

Yet, the Agency concludes this isn't essential to our

been drilled in the Alaska OCS since 1980. all without
significant incident or any incident, whatsoever. And I think
it's prudent to move forward at this time and ask for the SEIS
to let them move forward.

MR. LOGAN: Thank you sir. Mr. Foster.

MR. FOSTER: My name is Robert Foster. I work for Shell
Oil Company. I'm a Geophysicist. I think most of my points
have already been covered. I just want to say that I urge the
department to affirm its previous lease sale decision and allow
exploration Sale 193 to proceed.

MR. LOGAN: Thank you sir. John Shepherd and then Mr.
Grafe.

MR. SHEPHERD: Well, I'm John Shepherd. I'm a scientist
and taxpayer. And my main points in support of Sale 193
exploration have already been made by others. So to allow more
time for others. All I need to say is that the Environmental
Impact Statement and the Supplemental Environmental Impact
Statement do provide sound scientific basis to allow exploration
to begin in the Chukchi. And so I urge the Department of the
Interior to affirm its previous lease sale decision and let's
get started with exploration. Thank you.

MR. LOGAN: Thank you sir. Mr. Grafe. And then it looks
like after Mr. Grafe, Craig Johnson.

MR. GRAFE: My name is Erik Grafe and I am here on behalf
of Earthjustice. It's an environmental law firm. And broadly,

choice about where or whether to allow this to happen. This is
just -- it's simply not credible. The BSEE, you owe an
obligation to the American public so people, to everybody, to do
your job and figure out what is the information that's missing.
That it's essential to the lease sale choice and not just paper
over with -- not just paper the problem over, but do an honest
effort, a big and honest effort to identify what's missing.

There are other parts of the government that are doing
this now. The USGS is conducting a survey about what are the
important missing information. NOAA says there's important
missing information. They closed the fisheries up there because
they need to get more information before you make management
decisions. This is simply the first step. And doing proper
management and ensuring that we know it's there. So we know how
to manage oil and gas in the region and whether it can go
forward and whether it's a good idea to do so.

So we urge BSEE not to finalize this draft Supplemental
EIS, but rather to go back, take another look and do an honest
- take an honest crack at identifying the missing information.
And finding out. Which of it can be gotten, not at an exorbitant
expense rather than concluding that, simply none of it, not any
of the hundreds of missing pieces of information is essential to
the lease sale choice.

Thank you very much for this opportunity to testify.

MR. LOGAN: Thank you.
MR. JOHNSON: My name is Craig Johnson. I'm the sitting Chair of Natural Resources Co-Chair in the House of Representatives. I'm here today to, hopefully, bring this conversation back to why we're here. We've heard about polar bears. We've heard about shrinking ice. We've heard about, yes, we should, no we shouldn't.

What we're here today for, is to decide whether or not -- and your charge is to decide whether or not to return something that a Judge has asked you for. That's the bottom line. If you've done your job, and I believe you have. I've looked through the document. Then I encourage you tonight, put a stamp on it. Send it to the Judge. And then he'll be the person that determines whether or not you did a good job. That's where it's going to end up. It's not going to end up in this group. It's not going to end up with you. It's going to end up in the hands of the Judge who's going to say, yes you did, or no you didn't.

If you did, we're done. If you didn't, we'll be back here in three weeks doing this all over again.

We just had a President go to India. And he's saying, 35,000 jobs, boy, look what we did. We could provide 35,000 jobs here starting quickly. And we don't even want a seat on the Security Council. We don't even want to be in the U.N. We just want our jobs. We want our resources. You've done your job. Finish it up. Put a stamp on it. Do it tonight.

MR. LOMAN: Thank you very much. Mr. Pastos, Nikos

Nikos, we're going to do this. As you've seen, we've come a long way. But we still have a lot of work to do.

Mr. Pastos, you've done a great job. We appreciate your work. Keep it up. We'll see you in three weeks. Thank you.
MR. LOMAN: Yeah, I called your name. Keith Silver is next.

UNIDENTIFIED NAME: What about Andrew Hartsig would he be next?

MR. LOMAN: Okay I didn’t know you were here. Okay, sorry. Andrew, Keith, Susan Childs, then you sir.

UNIDENTIFIED NAME: All right thank you.

MR. HARTSIG: My name is Andrew Hartsig. And I’m a Director of Ocean Conservancy’s Arctic Program. In preparing the draft SEIS the Alaska Region should have reviewed the information gaps in the original EIS and taken a fresh look at the decision to hold a lease sale. Instead, the draft SEIS ignores important information gaps in an improper attempt to justify a previously made decision. So, despite all these charts on the wall and all these studies, the original EIS identified hundreds of instances of missing information.

The draft SEIS concluded that not a single piece of that — those missing information was essential to the Agency’s decision. That conclusion is not plausible. It’s not supported by the record. And it’s inconsistent with the Obama Administration’s commitment to science-based decision making.

So the Agency needs to go back to the drawing board and it should satisfy this flawed draft SEIS. undertake a more serious attempt to identify essential missing information.

And to do that, the new analysis should be based in part on the data generated by the ongoing USGS analysis. Once that missing information is identified, the Agency should obtain that information, ideally through a comprehensive scientific research and monitoring program. And then, finally, the Agency should prepare a revised draft SEIS and re-evaluate the lease sale in light of the new information. Thanks.

MR. LOMAN: Thank you, sir.

MR. SILVER: Good evening. My name is Keith Silver and I’m a resident of Anchorage. We must move forward with Lease Sale 193 -- opportunities for employment for those in the area as well as other parts of Alaska. Although I realize that the U.S. District Court sent this back to you, it is vitally important that the EIS be approved. I’m an unemployed oilfield service worker. I worked in -- previously, just recently worked in Anchorage. It’s a lack of activity in the oilfield, including that of the Chukchi Sea and the Beaufort Sea, caused my firm to downsize. I am one of thousands idle. How do I pay for my mortgage or feed my family is the question being asked by many of those displaced persons.

The Trans-Alaska Pipeline is only one-third full and needs additional sources of oil to keep it operating. This is the sixth or seventh time I have testified on OCS leasing issues. I will continue to advocate for environmentally responsible oil development, as long as necessary. Thank you for your time.

MR. LOMAN: Thank you. Susan Childs and then Michael.

MS. CHILD: Good evening. So my name is Susan Childs and I’m the Alaska Venture Support Integrator for Shell here in Alaska. So there have been lots of comments made that I hope I don’t repeat. But, the one thing would ask is that the Agency continue with the process that you’re on. It’s a legal NEPA process to go through the draft to collect these comments, to take the comments from the North Slope and from Kachemak, to incorporate those comments into your final report and then to go to a record of decision. So that’s the process that you go through in NEPA. And so I support that process and I just encourage you to expedite that process.

So if you’ll indulge me, I’d like to go back to February of 2008. It was when the Chukchi Sea Lease Sale 193 signaled for all in attendance that the offshore was clearly the next chapter in this State’s oil and gas history. There were audible gasps when the bids were opened, and with good reason because there was $2.7 billion committed in bonus bids. The leases in the Chukchi Sea, which made it the largest lease sale in Alaska’s history.

Shell’s $2.1 billion in successful bids also solidified our standing as the major leaseholder in the Alaska offshore, including in the Beaufort Sea where Shell first started purchasing leases again in 2005. So, since we have re-entered Alaska, we have spent over $3.5 billion in pursuit of Arctic exploration. And we will commit to many billions more if we are able to go forward to a development program. I would like to repeat that sentence to you. This company has spent over $3.5 billion in pursuit of an exploration program. Not a development program, but to drill a well. So for those opposed to OCS development, this comment period is another bite at the apple, and to take your course.

But I will tell you there many that understand the issues and they are stark and here they are. America depends on oil to drive our economy. We will import all oil we do not produce in this country. America continues to expand its percentage of imported oil today. Alaska depends upon energy development for vast portions of our economy. MAPS through put continues to diminish and currently flows at a third of capacity. Alaska’s CO2 could be, and we believe it will be, the new heartland for energy and for Alaska and for this country.

We are ready to go. We have been ready to pursue a drilling program since 2007. And yet we wait. We wait upon an Administration to establish an Arctic policy to allow the permitting process to proceed. We wait upon courts to review an incessant number of litigation. We wait for Agencies to review and assess more rounds of comments and submissions. And we know what’s at stake. We’ve been over 450 stakeholder engagement processes over the last four years on the North Slope. So we have engaged with the community. We have engaged a great deal
1. with the people on the North Slope.
2. We just signed a North Slope Borough Science Agreement
3. with the mayor and his staff. So that was a long awaited
4. collaborative effort. And we look very much forward to making
5. sure that we do that, and that we get more studies done.
6. Because, I will tell you, the North Slope and the Arctic
7. offshore are now perhaps the most studied energy basins in this
8. country. In the past decade, over 250 studies have been funded
9. in the Arctic with the majority focused on the Beaufort and the
10. Chukchi Seas. You can argue with that, but those are thestats.
11. Since 1973, more stats -- the Federal agencies and
12. industry have performed more than 5,000 environmental
13. assessments, studies to better understand the Alaska Outer
14. Continental Shelf and coastal environment, because that's very
15. important to understand the coastal environment, as well.
16. So we've been ready to explore Alaska's OCS. AndIdo
17. thank you for this opportunity to express our wishes for this
18. NRPA process to go forward expeditiously.
19. MR. LOGAN: Thank you.
20. MR. DROEGE: Hi. I'm Michael Droegue. I'm the President
21. Elected of the Anchorage Board of Realtors. I sit on the State
22. Board of Realtors and I'm the Realtor Political Action
23. Committee, one of our -- the three Trustees in this state.
24. I was born and raised in Alaska. I moved out of the State
25. once for six months to L.A. where all of our supposed

1. There's no more environmentally conscious or conservation
2. minded people than the people that live here, want to work here.
3. want to continue to have our children do the same as we've been
4. privileged to do. So I encourage you. Jeff, keep rolling.
5. Thank you.
6. MR. LOGAN: Thank you. Cathy Giessel, Representative
7. Cathy Giessel? Doug Smith?
8. UNIDENTIFIED MALE: He's gone. Doug Smith is gone.
10. MR. PASTOS: I'll make it quick.
11. UNIDENTIFIED MALE: Thank you.
12. MR. LOGAN: Thank you. Sorry about that.
13. MR. PASTOS: My name is Nikos Pastas and I was born here
14. in Anchorage, didn't come here to get rich. I'm an
15. Environmental Sociologist, so I study technological disasters
16. and the social impacts of technological disasters of the oil
17. spills.
18. My comments here are on behalf of the Center for Water
19. Advocacy. I'm on the Board of Directors for a nonprofit public
20. interest law firm. And simply, our comments are focused at --
21. there's three natural resource trusts in the United States.
22. There's the State, the federal government, which is Federal
23. Agencies, and Tribal governments. And our comment will
24. incorporate a lot of the aspects of conversancy. And there will
25. be an extensive written form. All I want to do is simply

1. summarize a couple of points.
2. My position is that we are completely aligned with the Alaska Inter-
3. Tribal Council's Resolution 200508 which opposes Outer
4. Continental Shelf drilling and drilling in the Arctic National
5. Wildlife Refuge. There is a Federal trust responsibility, it's
6. on Executive Order that government Agencies have to consult on a
7. government to government on par basis with Tribal governments.
8. I think it's a legal question whether Tribal governments
9. have been included in the original scoping process for the EIS
10. that we're talking about in thesale 193.
11. Furthermore, we completely support the Native village of
12. Point Hope and their Resolutions against the offense to the
13. peace and dignity of humankind. Which, I may be paraphrasing
14. the title of it, but there's a -- Point Hope has a Resolution
15. opposing Outer Continental Shelf oil development and drilling in
16. the Arctic National Wildlife Refuge.
17. So, given the Gulf of Mexico Deepwater Horizon tragedy
18. which, again in the comments, there's absolutely no scientific
19. proof that we can adequately clean up spilled oil in broken ice
20. conditions. It's -- environmentally that's too big a risk to
21. take in the Arctic Ocean. Arctic Ocean is much more complex
22. than the studies that we've spent so much money on.
23. As far as Shell Oil spending so much money, good. We're
24. going to hold your feet to the fire and get you to get
25. know, the best valid peer review -- science available. Beyond
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1. That, the tribal governments have the only valid claim in the
2. Arctic. The State of Alaska has a fraudulent claim and the
3. United States’ claim is not fully substantiated when it comes to
4. who owns our Outer Continental Shelf.
5. So, in the summary, Center of Water Advocacy is in support
6. of Resolutions that are standing through the Alaska Inter-Tribal
7. Council, and especially with the Native Village of Point Hope.
8. This is not just about billions of dollars, it’s about the
9. health of the oceans and the future of customary and traditional
10. life ways of indigenous peoples who have lived in the Arctic
11. since time immemorial.
12. This is just no simple quick rush oil lease. And so we
13. can afford to do a fair and decent and adequate process of
14. looking at this. Thank you.
15. MR. LOMAN: Thank you, Geoff.
16. MR. HADDAD: All right. It’s kind of funny talking to
17. this mic. I’m not sure it works. All right, I’ll talk into it.
18. My name is Geoff Haddad and I’m the Alaska Exploration Manager
19. for Conoco Phillips. Thank you for the opportunity to speak
20. here tonight at this public meeting.
21. Conoco Phillips favors developing all forms of energy,
22. conventional, renewable and alternative. However, we recognize
23. that even with aggressive alternative energy research and
24. development, most sources estimate that fossil fuels will still
25. represent more than 80% of the world’s total energy

supply, even by 2030.

In addition, the United States currently produces only
approximately 49% of the oil it uses each day. So the
majority of our oil must be imported. Given this background in
the analysis and studies that support the decision to lease in
the Chukchi Sea, Conoco Phillips strongly encourages the Bureau
of Ocean Energy Management to firm the leases as issued in 2008.

Conoco Phillips sees great potential in the Chukchi Sea as
evidenced by our investment to $506 million on 98 OCS leases.
And Conoco Phillips has also invested tens of millions of
dollars on environmental studies, working with other offshore
operators, universities, research institutions and local
stakeholders on a multi-year program collecting biological,
oceanographic and air quality data in the Chukchi Sea. This
program has been welcomed by the North Slope communities
and several environmental groups.

As one of the largest owners of State and Federal leases
in Alaska, a major owner in the three largest oilfields on the
Alaska North Slope, operator of both Kuparuk and Alpine
Oilfields, and operator in the Alaska Cook Inlet, Conoco
Phillips has over 40 years of safe and environmentally
responsible operating experience in Arctic conditions. We bring
decades of experience in preparing our permit applications and
operational plans for activities in the Arctic.

Alaska’s North Slope production continues to decline with
buried in this State.

And I’ve heard a lot of pros and cons about development
but the big idea is this. When the Pilgrims came over here, if
they would have had to complete an EIS comparable to what Shell
is going through, we would never have developed America. And
the big idea is even this, we are a country of doers and
explorers and producers. And we’ve always been that way. But
in the last two decades, this country has taken a turn to the
left. A turn, which I believe, is prejudicial to the future of
this country as a world leader, give that whatever you want it
to be.

Certainly, scientific studies are important. But we have
studied this to death. Also what’s not -- I haven’t heard here
-- there are Arctic countries which could be threatened by --
more by an oil spill than our own coastline could be threatened
in the Arctic, because of the distances from where these leases
actually exist. And these wells are going to be drilled from an
exploration standpoint in open water. Yes, there are threats
for ice. There’s always threats. But what’s missing in all of
this is the thread that Americans are doing. They are creators.
We wouldn’t have gone to the moon, we wouldn’t have done other
creative things if we would just -- if we would have let people
with that whisper say us, we can’t do it. You can’t do it.
You’ll never be able to do this. That is a big problem.

Obviously, I’m pro-development. Thank you.
MS. KLEIN: For the record, my name is Christine Klein.

I'm the CEO of Calista Native Corporation. We are one of the largest Native Corporations in Alaska but, unfortunately, one of the poorest socio-economically, and one of the poorest regions actually in the United States.

I went to bring up that our Corporation represents more than 13,000 direct shareholders and 20,000 descendants of Yupik, Cupik and the Athabaskan heritage. And that is 56 villages in Alaska and the Yukon. Our shareholders, the cheapest price to get here was $600, the average was $1,200, and due to the large distances in our Region and the lack of infrastructure, basic infrastructure.

Many of our shareholders continue to live in remote villages, which experience higher costs of living than you can imagine. Especially, when it comes to fuel and heating oil, which, due to the lack of transportation infrastructure, people have to travel by boat up the rivers, by aircraft and airports in the State and snow machines in winter. Fuel is currently three to five times higher than you're seeing at the pump here in Anchorage. And, of course, much higher than the United States. Heating fuel often costs $11 a gallon right now in our Region.

I would like to remind you here, my fellow citizens in Alaska as well as others, that the people in Emmonak had to choose between fuel and staying warm and food in the Village of

Mr. LOMAN: Thank you.

MR. HORST: I'm not sure if I should say good evening or good morning, the way the clock is going here. But for the record, my name is Leonard Horst.

I wanted to speak to the issue of Lease 193 from three perspectives tonight and strongly encourage the Bureau to move forward quickly so we can get on with development here in Alaska.

First of all, I want to speak as an Alaskan. I'm a relative newcomer here. I've only been here since 1977, but I am privileged to be married to a third generation Alaskan. Our kids we call fourth generation, and looking forward to the fifth coming on soon.

I've been privileged to travel to every corner of this State. I have, through work, had the chance to -- many of the things that Michael talked about, hunting and fishing, all across the State. And having done business in many, many places. I'm excited about Alaska's future. But I'm also really concerned about the message that we're sending right now with the delays that we have undertaken on this project.

Secondly, I have the privilege of serving as a Senior Vice President of Northrim Bank and manage their commercial and industrial banking across the State. As a banker and as an economist, I got to tell you, I'm extremely concerned about where we are right now. We have not suffered like our friends and neighbors in the Lower 48 have. But believe me when I say it, we are on the verge. It is absolutely time for us to move forward with development in this State. We were founded as a State based on our ability to stand upon our own resource base. And that is what we need to do, and we need to do it now.

Finally, I have also the privilege of serving on the Resource Development Council's Executive Committee and Board of Directors. And I joined that group simply because of their mission which is to responsibly develop the natural resources of the State of Alaska. I believe we've proven we can do it. I think it is again, time for us to do it again, and do it now.

Mr. LOMAN: Lois Epstein.

MS. EPSTEIN: There are actually a few things that haven't
As of some time, possibly Jeff may have done. I woke up at
five a.m. yesterday and today to watch the Oil Spill
Commission, two days of hearings in D.C., the cause of the
Deepwater Horizon tragedy. Director Browne from the Bureau
today noted the extreme sensitivity of the Arctic environment
and its marine resources and their importance to subsistence, as
well as the region's spill clean-up challenges.

On a technical level, the two days of hearings may clear
how well-financed drilling companies nevertheless could.

One, misinterpret data from a key integrity test.

Two, decide not to utilize potentially critical well
components known as centralizers, because they would take too
long to arrive. And imagine that kind of situation occurring in
the Arctic where it'd be much worse in terms of timing.

Three, the companies decided not to take actions that
would have mitigated much of the tragedy, possibly because it
all occurred so quickly. For example, using the platform's
divert-a-system (pbb) to mitigate some of the damage.

What the hearings, these past two days, demonstrate is
that no matter how good the regulatory oversight, and everyone
acknowledges that the Bureau needs regulatory improvements,
there will be infrequent but highly tragic spill events. This
information, combined with a clear need for collection analysis
of scientific data on the Arctic's natural resources which was
recognized by the Court, demonstrates that the Bureau is not

 decisions before allowing drilling in the Chukchi. This
includes reassessing which scientific information in Appendix A
of the draft SEIS is obtainable, at a cost that is not
enormous, rather than the Bureau dismissing the need to gather
such information all together. In effect, the Bureau states in
the draft SEIS, that it has decided to allow drilling regardless
of the impacts. The public needs to know those impacts and in
as specific detail as possible, for rational decision making.

I was hired on to improve oil and gas operations. I'm not
opposed to them in Alaska. They just have to be as good as
possible and made in a rational way, the decision. If there is
any doubt about blowouts or other offshore problems in the
Arctic, consider the following events which also occurred in
Alaska's shallow offshore areas in Cook Inlet.

1985. There was a gas blowout, contrary to what we've
heard earlier, that we had no blowouts in the State, at the
Graying Offshore Platform, which shut down production.

Platform occurred while drilling an oil production well. Fire
burned for one week. While drilling the relief well, another
blowout occurred. The relief well was finally completed in

1989. Anoco's Anna Offshore Platform caused a spill of
over 20,000 gallons of crude. Clean-up was not attempted due to
30 to 90 percent moving ice flows in Cook Inlet.

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TRANSCRIBER'S CERTIFICATE

I, Judy Bradshaw, hereby certify that the foregoing pages numbered 4 through 100 are a true, accurate and complete transcript of the Bureau of Ocean Energy Management Regulation and Enforcement Public Hearing regarding the Environmental Impact Supplemental Statement Relating to Chukchi Sea Sale 193 held in Anchorage, Alaska on November 9, 2010, created by me from log notes plus typed presentations, as well as a copy of the electronic sound recording, to the best of my knowledge and ability.

[Signature]

Date: [Signature]
Draft SEIS

Comment Letters

Federal Government
Tribal Governments and Alaska Native Organizations
State Government
Local Government
Environmental Organizations
Corporations and Industry Groups
General Public
United States Environmental Protection Agency Comment

November 20, 2010

John Gill, Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99507-5825


EPA Project #05-D-09-03MS

Dear Mr. Gill:

We have reviewed BOEMRE’s Draft Supplemental EIS for Chukchi Sea Lease Sale 193. Our review of the EIS was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the EIS considers the expected environmental impacts as well as the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

EPA recognizes that the limited scope of the EIS (evaluation of natural gas development and production, and missing or incomplete information) is in response to the U.S. District Court, District of Alaska ruling. This ordered BOEMRE to address these deficiencies identified in the initial EIS.

We believe that BOEMRE has produced a succinct document that clearly addresses these deficiencies. We are particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. We also believe the process employed by your agency fully meets the intent of the Council of Environmental Quality’s requirements for such situations. Additionally, the analysis of potential impacts from possible gas exploitation, development and production is quite thorough, with clear indication of relatively minor impacts (with the potential exception of unknown archeological resources) from such activities.

Based on our review and, in part due to the limited scope of the analysis, we have assigned a rating of LD (Lack of Objective) to this EIS. A summary of our rating system is enclosed.

Sincerely,

[Signature]

Environment and Energy

[Note: The text is too small to be fully legible, but it appears to be a comment related to environmental impact statements and regulatory procedures.]

Marine Mammal Commission Comment

6 December 2010

Mr. John T. Gill, Regional Director
Alaska Office Commercial-Shefley Field
Bureau of Ocean Energy Management, Regulation, and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99507-5825

Dear Mr. Gill:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Supplemental Environmental Impact Statement for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193. The Bureau prepared the draft statement as a supplemental to its 2007 Final Environmental Impact Statement for Oil and Gas Lease Sale 193 and Subsea Surveying Activities in the Chukchi Sea. The Commission also has reviewed the Bureau’s 5 October 2010 Federal Register notice (75 Fed. Reg. 6151) requesting comments. When appropriate, the Commission will comment in detail on site-specific activities associated with oil and gas operations in the Chukchi Sea Planning Area. For now, the Commission offers the following recommendations and comments:

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement:

- consider and adopt a slow, phased approach to oil and gas development in the Chukchi Sea Planning Area by limiting initial operations to one or two active lease areas until the ice regime, industry, and all responsible parties have demonstrated their ability to conduct oil and gas operations safely in this region, have developed means for responding to oil spills in icy waters, and have collected sufficient baseline information on the marine wildlife and habitat at risk from such operations; and
- strengthen its supplemental environmental impact statement by providing a more complete description of the added roles associated with natural gas extraction, including a large-scale spill or loss of well control, prolonged use of platforms in the harsh Arctic environment, and construction and maintenance of the proposed pipeline; and
- work with other agencies with related responsibilities, such as the Bureau of Ocean Energy Management;

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RATIONALITY

The purpose of an environmental impact statement prepared under the National Environmental Policy Act is to inform decision-makers and the public about the environmental risks associated with various alternative approaches to a proposed activity, including no action alternative. From the Commission’s perspective, the three main concerns associated with oil and gas development in the Chukchi Sea Planning Area are (1) a major spill that exposes the Chukchi and Beaufort Seas to large amounts of crude oil (2) long-term, cumulative degradation of those ecosystems to the extent that species (including some that are threatened or in danger of extinction) abandon preferred habitats or are otherwise adversely affected by habitat destruction, and (3) a shift in the distribution of wildlife, including marine mammals, that they are not readily available to Alaska Native subsistence harvesters. Whether or not these specific concerns are included in the Chukchi Sea may well depend on the spatial and temporal pattern of oil and gas development in the areas included in the lease sale.

After reviewing the supporting documents, the Commission believes that the most environmentally cautious way to manage oil and gas development in the Chukchi Sea is through a phased, phased approach that initially limits the amount of oil and gas development in one or two lease areas until the responsible agencies have collected essential baseline information on the wildlife habitat in the Chukchi Sea Planning Area, the impacts of ongoing development to the ability to provide oil and gas safely in such a harsh environment, and the agencies and industry together have developed more reliable means to mitigate and manage the present risks and respond effectively to a large-scale incident. Such an approach would allow the Secretary of the Interior to pursue oil and gas development as required under the Outer Continental Shelf Lands Act but would balance that development against environmental risks by proceeding slowly and carefully.

The coastal-oil spill distinction that forms the basis for the alternatives reflects a continuum of risks from oil and gas operations, including:

- the propensity for wildlife and habitat disturbance during exploration drilling, commission, and production,
- the likelihood of oil from a major spill contaminating wildlife (marine mammals, seabirds, fish, invertebrates) and habitats, including wetlands and the northwestern border and productive high-latitude communities located offshore,
- the nature and degree of weathering of spilled oil before it reaches particular sensitive areas and, therefore, the nature of the risks associated with oil spills to those areas or wildlife dependent upon them,
- the potential for disruption of subsistence hunting,
- the length of oil and gas pipelines from platform to shore and the implications for a pipeline accident involving oil, gas, or both; and
- the ability of the Coast Guard, the Coast Guard, and others to respond to a spill.

These and other considerations pertain to the nature and extent of risk from oil and gas activities in the Chukchi Sea marine ecosystem. The Commission recognizes that the Secretary must balance the environmental risks against our nation’s energy needs. To achieve that balance, the

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The Environmental Impact of Natural Gas Development

One area where the Commission believes that the Bureau could strengthen the supplemental environmental impact statement is its description of the impacts associated with natural gas development. On this topic, the supplemental impact statement provides little information and then argues that the lack of information is not a concern because any relevant information would not distinguish between the action alternatives. However, the Commission disagrees with the Bureau for the following reasons. First, if one of the major concerns with regard to oil and gas development is a loss in well control, then the Bureau should provide a description of the added risk associated with producing both oil and gas during the later stages of oil extraction. How are both oil and gas extracted simultaneously, and how does the extraction of the gas affect the probability of a serious oil spill accident? If gas production is not incorporated into the risk model, then decision-makers should take that added risk into account when determining whether and where drilling will be allowed.

Second, what are the added risks associated with the shift from a primary source on oil in extraction of oil to extraction of gas, which will maintain existing off the platforms for several more decades? Given the harsh conditions in which these platforms are built and maintained, how does the addition of several decades of operation affect the risks of a platform failure?

Third, when and how will the additional pipeline for gas be built and how will that affect the risks to the environment? If the gas pipeline is constructed concurrently with the oil pipeline, does it simply make matters for 10 years or so before it is used and, if so, does that affect the integrity of the pipeline and the risk it poses to the existing oil on offshore operations, then the impact statement should account for the additional disturbance caused by the corrected periodization.

Each of these considerations may not help decision-makers distinguish between the action alternatives, but they do contribute to the risk assessment and thereby distinguish between the no-action and action alternatives. Because the action alternative should be considered seriously, the Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement work with the Department of the Interior to strengthen its supplemental environmental impact statement by providing more complete description of the added risks associated with natural gas extraction, including a large-scale spill or loss of well control, prolonged use of platform in the harsh Arctic environment, and construction and maintenance of the proposed gas pipelines.

The Bureau’s Responsibility in Developing a National Energy Policy

Unquestionably, oil and gas will continue to be major sources of energy for the United States for decades to come. In the event that we determine that we are to continue our oil and gas operations we will continue to be into areas where drilling and production impose increasing threats. Such drilling and production may be necessary, of course, because of decisions made in the past or even in the past few administrations, but because for decades we are a nation that has failed to develop and implement a national energy policy, despite the predictable consequences that are now facing. On a number of occasions, the Marine Mammal Commission has written to the former Minerals Management Service recommending that the Service develop a national energy policy that, over time, would result in a shift away from our reliance on oil and gas development in high-risk areas. To be sure, such a policy would provide immediate relief from those risks but should put our nation on a path that reduces the risks faced by future generations. The Bureau and the Department of the Interior may be working on such a policy, if so, it would be useful to continue other agencies and the public to help shape and develop the policy and, particularly, to facilitate its implementation. To reduce the likelihood that future generations face climate change challenges similar to or worse than those we are facing now, the Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement work with the Department of Energy and related agencies to develop a national energy policy that will reduce the environmental risks being imposed by the nation’s current dependence on oil and gas for energy.

The Commission hopes you find these recommendations helpful. Please contact me if you have questions about our recommendations or if we can provide further assistance.

Sincerely,

Michael R. Bromhead

Licensure Cited

General Comments

As NOAA has commented in the past, we remain very concerned about potential impacts to living marine resources and their habitats, fisheries, and subsistence use of marine resources as a result of lease sales, exploration, and development in the Chukchi Sea Planning Area (CSFA). The individual and cumulative effects of development in this relatively pristine environment could be significant. The Arctic waters are experiencing a change in oceanic condition, and the effects to marine resources and their movements are uncertain. Any proposals for development in this area should fully assess the associated environmental, economic, and social consequences to ensure the continued productivity of living marine resources for future generations.

In 2006, the North Pacific Fishery Management Council began considering options for fishery management in the Arctic. Ultimately, the Council decided to take a precautionary approach, voting to prohibit commercial fisheries in the Arctic Management Area (federal waters north of 79°N latitude) until sufficient information on the Arctic ecosystem is available to sustainably manage commercial fishing.

The Draft SEIS recognizes that not all Essential Fish Habitat (EFH) has been determined yet in the Chukchi Sea. For several life stages of various fish species in the Chukchi Sea EFH's simply does not have enough information to designate EFH. Such data gaps heighten the need to obtain a better understanding of the ecosystem and to BOEMRE to also take a precautionary approach regarding potential activities in the Chukchi Sea.

Marine Mammal Issues

NMFS is proposing to list four subspecies of ringed seals, found in the Arctic Basin and the North Atlantic, and two distinct population segments of bearded seals in the Pacific Ocean, as threatened under the Endangered Species Act. Please visit our website http://www.fak.nmfs.gov/endangered/ceo/ehom.htm for more information.

In Chapter II, Alternatives, Mitigation Measures, and Issues on the 195 FEIS, as part of the description of Alternative III (Conserve I Deferal), BOEMRE notes that this alternative is to protect important bowhead whale habitat used for migration, feeding, nursing calves, and breeding. NMFS concurs that Alternative III would provide some degree of impact reduction for the endangered bowhead whale, as this population migrates through the nearshore tidal system of the sea ice during its spring migration into the Beaufort Sea. The spring feeding is one of the most sensitive environments for these whales. Alternative III would also offer some mitigation and avoidance for the Native villages along the Chukchi coast which depend on subsistence resources, especially marine mammals. NMFS notes that the Draft SEIS contains some misinterpretations or omission of existing scientific references that, when corrected, do not affect conclusions of the Draft SEIS. For example, on Page 27 the Draft SEIS reads, "Because falling migrating bowhead whales are not expected to be in the deferred area, fall bowhewder encounters with oil and gas related industrial noise and oil spills would be the same as for Alternative I (Proposed Action)." The 2006-2007 BOEMRE-sponsored COMIDA (Chukchi Offshore Monitoring in Drilling Area) marine aerial surveys completed with NMFS have observed bowhead whales migrating within the deferred area during the fall. While the Final Report on COMIDA surveys has not been sent to BOEMRE, all of the information has been presented as Annual Reports which could be utilized to assess the current information is presented.

In Chapter III, Description of the Environment, the Draft SEIS information on bowhead whales use of lead systems to transit to summer grounds in the Canadian Beaufort Sea is no longer supported by the recent satellite tagging studies. NMFS recommends incorporating the information found in the BOEMRE-sponsored study "Satellite Tracking of Western Arctic Bowhead Whales,"(Quakenbush et al. 2010).

NMFS has provided a more comprehensive list of current scientific information regarding marine mammals and their environment as an attachment to this letter.

Essential Fish Habitat

Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Stevens Act) requires federal agencies to consult on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. If a federal action agency determines that an action will not adversely affect EFH, no consultation is required, and the federal action agency is not required to contact NMFS about their determination. Please see our website for more information: http://www.fak.nmfs.gov/endangered/ceo/ehom.htm.

The Draft SEIS notes that in 2006 BOEMRE consulted with NMFS regarding the potential effects to EFH of all five species of Pacific salmon, and that no additional EFH consultation is required for Pacific salmon as result of the Draft SEIS. NMFS would like to note that as a result of that consultation, in a letter to BOEMRE dated January 30, 2007, we recomended that BOEMRE select Alternative III (Conserve). Since the FEIS in 2007, EFH has been identified for Arctic cod, saffron cod, and opilio crab in the Fishery Management Plan for Fish Resources of the Arctic Management Area adopted by the Secretary of Commerce in August 2009. BOEMRE states that the agency is, "currenty assessing whether additional consultation is required for potential effects of Sale 193 on Arctic cod, saffron cod, and opilio crab EFH."

In a summary of past relevant completed EFH consultations, BOEMRE refers to a Supplemental EFH Analysis completed in 2010 for Arctic cod, saffron cod, and opilio crab. The supplemental EFH assessment that BOEMRE provided to NMFS on May 4, 2010, analyzed anticipated activities in 2010 (July-December) in the Beaufort Sea and Chukchi Sea that included exploration drilling for oil and gas, geophysical and geologic surveys (3D/2D seismic surveys), and anticipated ancillary activities (site clearance surveys). However, due to the administration policy on offshore drilling at that time, the consultation only addressed proposed surveys and anticipated ancillary activities. This consultation clearly stated that it did not encompass any other current or future activities which were not analyzed in the proposed EFH assessment. Also, BOEMRE noted that designated effluents of EFH was located at least 160 km (100 miles) south of proposed activities and therefore no assessments of impacts were
considered for this species. Thus, the scope of this 2010 supplemental EFH assessment does not include all activities and Arctic EFH species covered in Lease Sale 193.

It was difficult to find a clear determination in the Draft SEIS stating whether BOEMRE’s preferred alternative may adversely affect EFH. In the Summary of Impacts section for the Alternative I, BOEMRE described effects to EFH using such terms as “temporarily a short-term and at a negligible level” and “minor adverse impacts.” Under this section for Alternative III (Corridor I Deferrals), BOEMRE notes that “all of the potential impact categories remain the same as the proposed action, but the anticipated impacts would be lower due to the setback from the coast.” Under Alternative IV (Corridor II Deferrals), BOEMRE comments that “the primary benefit of the deferral of Corridor II under Alternative IV is that it would move sources of potential adverse effects further away from important fish habitats”.

The Magnuson-Stevens Fishery Conservation and Management Act and its implementing regulations at 50 CFR 600.920 use specific terms regarding the level of effect on EFH and what constitutes an adverse effect to EFH. NMFS recommends using exact terminology from the Magnuson-Stevens Act and its regulations in future decision making documents to avoid confusion between our agencies and to ensure that the public can ascertain if the Magnuson-Stevens Act consultation requirements have been satisfied. BOEMRE should also clearly state for each alternative whether the proposed action may adversely affect EFH and if any EFH consultation would be within the scope of our programmatic EFH Consultation for Lease Sales.

While not clearly stated, this Draft SEIS does imply that EFH may be adversely affected. NMFS agrees. In 2006, BOEMRE chose Alternative IV (b) (corridor defined as of Alternative III, larger deferral area). NMFS has previously recommended the larger deferral area which allows for more protection of NMFS’ trust resources.

BOEMRE did adopt the mitigation measures that were outlined in the Draft EIS for Lease Sale 193, Section II.B.3 (and in the Draft SEIS Section H.1.C), which NMFS recommended in the 2007 consultation. However, this Draft SEIS does not mention mitigation measures for seismic survey activities, whereas the Draft EIS for Lease Sale 193 specifically did in Section II.B.4 and B.4.a. Our January 30, 2007 EFH consultation for the Lease Sale 193 Draft EIS recommended that these specific mitigation measures for seismic survey activities be part of the final lease sale. It is not clear in any of the documents if these were indeed part of the final sale. If BOEMRE adopts both mitigation measures, as listed in Section 11.1.4 and B.4.a in the Draft EIS, no further EFH consultation with NMFS will be necessary. BOEMRE should notify NMFS of their decision regarding this matter.

Fish Resources

The Draft SEIS includes a review of all statements in the FEIS that dealt with missing or incomplete information and evaluates whether the statements are (1) relevant to identifying potentially significant effects and (2) essential to making a reasoned choice (Section 150.22 Analysis).

Sixteen of the statements reviewed in the 150.22 analysis section dealt with potential effects of seismic exploration in the Lease 193 area on fish stocks. Of these, four statements were not communities where seafood consumption may be a magnitude of order greater than that used in the models.

Finally, the statement on Page 101, “Because of the nearly homogenous insular perception, it is not possible to identify a ‘reference’ or ‘control’ group within the potentially affected geographic area (for purposes of analytical comparisons) to determine if the impact are affected disproportionately,” is a questionable interpretation of the Environmental Justice Executive Order that would negate a large proportion of Environmental Justice Analyses conducted to date.

Additional Comments

The Draft SEIS does not analyze the potential introduction of marine invasive species under the Cumulative Impacts section. Few industrial activities occur in the CSAF currently. The risk of invasive species being introduced from drilling equipment, ballast water of large tankers, etc., would increase with OCS development in these areas.

The Draft SEIS does not examine the effects of natural gas development and production on any unique habitat areas, such as Hanna Shoal, which are present in the lease sale area. It is important for other agencies and the public to understand what special areas may be present, how they function in the ecosystem, and how they may be impacted.

Oil spills clean-up in the broken ice and open water conditions that characterize Arctic waters is problematic. BOEMRE acknowledges that the larger deferral area would allow more time to respond to any potential oil spills before they reach the bowhead spring-migratory route and sensitive coastal resources. The greater distance would also potentially allow for increased weathering of oil before it reaches these areas. Given the difficult and unique challenges in responding to potential spills in the Arctic, the response should factor heavily in BOEMRE’s examination of alternatives for this sale.

Conclusion

As BOEMRE notes under the Summary of Impacts for Alternative III, the greatest net ecological benefits to EFH would accrue from this alternative because it contains the largest deferral area. Alternative III also offers a larger migration corridor for marine resources, including those that are important to subsistence activities. BOEMRE recognizes in the Summary of Environmental Impacts that “...any differences in the potential environmental impacts associated with the gas development and production under each action alternative analyzed are directly traceable to the size and location of proposed deferrals.” Alternative III would protect resting marine resources and reduces the potential for a catastrophic event to impact terrestrial habitats, migratory marine corridors. It would also increase the distance between sensitive subsurface areas and any discharges, emissions, and noise associated with drilling and platform installation and operations.

NMFS recommends that BOEMRE modify Lease Sale 193 and adopt Alternative III (Corridor I Deferrals) given that the larger corridor offers a precautionary approach to afford protection of marine resources in a data limited environment.

Should you have any questions, please contact LT Amy Cox by email at amy.cox@noaa.gov or by telephone at (907) 271-6620.

Sincerely,

Janet W. Bagley, Ph.D.
Assistant Director, Alaska Region

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BOEMRE’s online graphic (http://www.alaska.boem.gov/Marshelf_Lease_193_leases_final.pdf) depicts the areas leased as a result of Sale 193. Although the Draft SEIS does not examine the issue of how many leases have already been issued within Corridor I, the graphic does not show

many leased tracts within the 90 mile buffer zone. From this graphic, it appears that most industry interest (with a few exceptions) lies well offshore and outside of Corridor I.
"Sea ice is generally assumed to limit the distribution of bowhead whales. However, even though the Beaufort Sea has virtually 100% ice cover when bowhead whales migrate through the spring, ice does not seem to limit the movements of tagged whales between Barrow and Amundsen Gulf (e.g., Fig. 23). These bowhead whales were believed to be restricted to polynyas or the ice edge (Amundsen et al., 1991; Brodie, 1982). In 2009, six bowhead whales migrated to Amundsen Gulf, which was filled with land-fast ice. The whales remained at the ice edge until the gulf closed on land-fast ice (Fig. 24).

However, this does not discount the importance of the coastal region in the northeastern Chukchi Sea to bowhead whales during the spring migration, as this area is protected under federal and state law. In 2009, a bowhead whale was observed feeding on 3 June to 11 July near Prudhoe Bay, and at least one likely non-identifiable whale was present during this 13-day period. Ice cover in this area was less than 20% in 2009. A group of at least twelve bowheads was also observed feeding south of Point Barrow on 19 September during this 13-day period, but ice was present."
The report entitled, "Expert Panel Review of Monitoring and Mitigation Protocols in Applications for Incidental Take Authorization Related to Oil and Gas Exploration, Including Seismic Surveys, to the Chukchi and Beaufort Seas," which was written in 2018 by the peer-review panel that NMFS Office of Protected Resources convened to review all IHA applications for 2018, discusses weaknesses in existing mitigation and monitoring methods for marine mammals. In light of the peer-review panel's report, we recommend that BOEMRE include additional exploration to support its contention that the mitigation measures critiqued by the panel are effective.

B. [p. 30] "The primary benefit of this corridor is that it would move sources of potential adverse effects further away from important coastal habitats. The increased distance between offshore development and coastal habitats also could slightly decrease the percent chance of spilled oil reaching marine mammals, increase weathering of spilled oil prior to reaching coastal habitats, and increase available spill-response time.*

*That only for coastal habitats. Pulse bears, walruses, and ice seals prefer sea ice habitat, which is located offshore. Alternatives III (Corridor I depots) and IV (Corridor II depots) provide no additional protection to marine mammals associated with sea ice habitats.

C. [p. 31] "Because potential long-term effects for oil spills would move away, time for spilled oil to weather and time to assess an oil-spill response would be increased. Consequently, the effects on subsistence-harvest patterns would be expected to be reduced.*

*That is true only for landfast or stationary ice-based hunts. Need to consult North Slope Borough or the Alaska Eskimo Whaling Commission to find out how for offshore bowheads are hunted. The bowhead hunt might occur within the boundaries of the regions in which drilling is permitted under Alternatives III and IV.

D. [p. 48]*"Walruses rely on sea ice as a substrate for resting and giving birth (Angiüssi and O'Farrell, 2005) and generally require ice thicknesses of 50 cm or more to support their weight (Pay, 1982). When suitable pack ice is not available, walruses will haul out to rest on land, preferring sites sheltered from wind and wave. Traditional haulout sites in the eastern Chukchi Sea include Cape Thompson, Cape Lisburne, Icy Cape, and the barrier islands off of Kigmiuit Island. In low ice years, when the pack ice retreats northward of the continental shelf, walruses come ashore to rest and remain near foraging areas. By August, depending on the retreat of the pack ice, walruses are found further offshore, with principal concentrations to the northwest of Barrier. As the pack ice advances at the

Alaska Eskimo Whaling Commission

November 29, 2010

Via Electronic Mail

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Re: Comments on the Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Dear Mr. LeBrasseur,

Thank you for the opportunity to provide input on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) Draft Supplemental Environmental Impact Statement (DSEIS) for Lease Sale 193. These comments are submitted on behalf of the Alaska Eskimo Whaling Commission (AEWC). The AEWC represents the eleven bowhead whale subsistence hunting villages of Barrow, Nap酊, Kaktovik, Point Hope, Wainwright, Kivalina, Wales, Savoonga, Gambell, Little Diomede, and Point Lay. Our villages rely on the living resources of the Beaufort and Chukchi Seas for the majority of our food and for the continuation of our subsistence culture and society.

The AEWC was formed by the whaling captains of our constituent villages in 1980, for the purpose of protecting our bowhead whale resource and subsistence hunt. We carry out our responsibilities through locally-delegated tribal authority and through federal authority delegated pursuant to the NOAA-AEWC Cooperative Agreement. Alaskan Native subsistence takings of marine mammals are exempt from the Marine Mammal Protection Act’s (MMPA) memorandum on the take of marine mammals. MMPA 101 (b). In addition, Congress has given our subsistence hunt a prioritized position over other uses of the marine environment, requiring that other users mitigate the impacts of any activities with the potential to adversely affect the availability of our subsistence resources. Our communities potentially face very significant impacts from oil and gas exploration and development in the Chukchi Sea. Therefore, the AEWC must insist that

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BOEMRE undertake careful review and thorough analysis of potential impacts from the proposed lease sale, and that the agency consider all impacts with the potential to affect the availability of our subsistence resources be mitigated properly under the terms of the MMPA.

On remand, the District Court of Alaska has instructed the agency (1) to disclose potentially relevant scientific information not available during the NEPA review and to analyze whether that information could be necessary for the lease sale decision, and (2) to analyze the impacts of natural gas development in the lease sale area. Unfortunately, in the resulting DSEIS, BOEMRE offers an empty excuse designed to address the letter but not the intent of the court order. Similarly, and inexplicably, the agency ignored its own research providing important new information about bowhead whale use of the lease sale area. Specifically, a two-year report on a bowhead whale satellite tagging study funded by BOEMRE was published in July 2010, two months before the DSEIS was finalized. Virtually every whale tagged during the four-year period migrated through the lease sale area; some whales moved through the area multiple times in a season. The information from this study was available to BOEMRE throughout its review for the DSEIS; it was updated regularly on the study’s website prior to publication of the study, and it is important to the lease sale decision, certainly from the perspective of the agency’s analysis of marine mammal impacts. Yet there is no mention of this work at all in the DSEIS.

In addition to the above, the AFWC would like to bring to your attention the fact that the SEDS concludes the MMS’s practice of assuming that our villages could sustain up to two years of a potentially serious reduction in food supply without experiencing a significant impact from development.

Finally, BOEMRE, continuing the practice of MMS, supports its recommended alternative by asserting that impacts to our subsistence livelihood will be addressed through “conflict avoidance measures.” Yet BOEMRE also continues MMS’s practice of not requiring that lessees adhere to the Open Water Sensor Conflict Avoidance Agreement, which specifies negotiated and reasonable.

It is the AEWC’s sincere hope that during the current Administration we might see greater integrity and a higher quality of work from your agency. Unfortunately, this hope is not realized in the DSEIS.

I. SUMMARY OF THE COMMENTS

The Remand Order And NEPA Were Not Complied With. As an initial matter, BOEMRE ignored the remand and nullified the National Environmental Policy Act (NEPA) in the DSEIS. The pages and pages of gutting in the SEDS is nothing to address our concerns about impacts to subsistence resources and mitigating information, and certainly, they fail to provide the analysis required by NEPA and the Council on Environmental Quality’s (CEQ) regulations.

BOEMRE Has An Inadequate Duty To Analyze Significant New Information And Circumstances And Has Failed To Carry Out That Duty. NEPA requires the preparation of a supplemental EIS when significant new circumstances or information emerges that is relevant to

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The Significance Thresholds Are Unfairful. The threshold BOEMRE is using to define a significant impact falls to comport with NEPA. The SEDS includes a plethora of impacts to natural and subsistence resources, including the harms to cetaceans from noise and potential oil spills that the agency concludes do not warrant concern. For example, the agency discusses several potential impacts from noise, pipelines, and oil spills. See e.g., SEDS at 79-80. Serious impacts to whales could be devastating to our communities who rely on whales for our survival, yet the agency concludes that there will be no “major adverse impact” to Alaskan natives. SEDS at 103.

Moreover, the agency makes simplistic assumptions about how impacts can mitigate these potentially serious impacts, including actually acting on information that would be possible. For example, the agency assumes that if subsistence resources because unavailable, our communities could simply buy pre-packed foods. SEDS at 103 (explaining the metabolic effects and other health problems that would result from replacing a subsistence diet with Western foods). But the agency’s assumption not only disregard the social and cultural dependence of our communities on subsistence hunting—especially whaling—it fails to take account of the fact that the majority of our families do not have the income to afford pre-packed foods, which are extremely expensive and not always available in our villages.

Another NEPA Analysis Is Required. A new NEPA process is necessary to: comply with the terms of the remand order and 40 C.F.R. § 102.02(b), analyze significant new circumstances and information pertaining to bowhead whale use of the Chukchi Sea and oil spills in the U.S. OCS, develop a reasonable range of alternatives; and to analyze the significance of the impacts of the lease sale NEPA. The public may have an affordable voice in this NEPA process and the opportunity to comment on BOEMRE’s analysis. By re-analyzing the environmental impacts, the agency must not merely go through the motions of the NEPA process to reach a pre-determined result, as it seems to have done before. Rather, a new process is necessary that truly enables BOEMRE to make a well-informed decision and how to build a lease sale in the Chukchi.

II. THE REMAND ORDER AND NEPA WERE NOT COMPLIED WITH BY BOEMRE.

A. BOEMRE Has Failed To Comply With The Remand Order.

BOEMRE has failed to fully and meaningfully comply with the District Court of Alaska’s order to correct flaws in the FES for Lease Sale 193 related to the missing and incomplete information. See Alaska v. BOEMRE, 793 F.3d 1011, 1012 (9th Cir. 2015) (citing Decision Document 5840, Docket No. 10-5560-NMPA, 2010 U.S. Dist. LEXIS 77515 (D. Alaska 2010)). The District Court of Alaska found that the FIS excluded “dreams not hundreds of entries indicating a lack of information about species and habitats, as well as a lack of information about effects of various activities on many species.” (emphasis added) instead of an appropriately identifying and addressing the missing information according to NEPA’s requirements, the court found that the agency had acted arbitrarily by ignoring the procedures required by 40 C.F.R. § 1502.22 and ordered the agency to comply with the regulation on remand.

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1 Available at: http://www.whitehouse.gov/developers/_FinalExxonValdezcoo/20100806-enr-centros-wcmn.pdf

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Section 1502.22 requires that

1) The availability of sufficient information to support sound scientific judgments and
reasoned managerial decisions, even without the identical incompleteness or unavailable
information.
2) The presumption that adverse effects would certainly occur under the specific
alternative impacts to which the incomplete information applies.
3) The comparability of potential impacts amongst all action alternatives, which
lessened the utility of incomplete information to the decision maker.
4) The existence of other environmental laws and regulations that would preclude
significant adverse effects on particular resources.
1) The availability of sufficient information to support sound scientific judgments and
reasoned managerial decisions, even without the identical incompleteness or unavailable
information.
2) The presumption that adverse effects would certainly occur under the specific
alternative impacts to which the incomplete information applies.
3) The comparability of potential impacts amongst all action alternatives, which
lessened the utility of incomplete information to the decision maker.
4) The existence of other environmental laws and regulations that would preclude
significant adverse effects on particular resources.

Id. at 3-4. These reasons fail to justify the lack of critical information about the impacts of the
noise as required by section 1502.22.

First, the agency’s conclusion that the existing information is sufficient to make a
reasoned decision is contrary to the evidence in the record. There is too little information about the
impacts from oil and gas exploration activities on whales to make an informed decision to authorize
this lease sale. For example, the agency admits that “there is uncertainty about effects on
whales...in a large area,” which concludes that this information is not necessary to make a
reasoned decision. SDEIS, App. A at 1. This conclusion shows that no matter what the
impacts to the whales, including complete extinction of the species, the agency would still
authorize this lease sale. The full list of potential impacts from NEPA is not avoided by
assuming that a full analysis is prepared before “resources have been committed or the
discussion cost.” Mescal Yelapa, 490 U.S. at 349.

Second, BOEMRE cannot rely on the presumption that adverse effects will occur to
meet the obligations of section 1502.22. Again, the agency’s discussion of adverse impacts must
include a “summary of existing credible scientific evidence” that is relevant to the impacts and
the agency’s evaluation of such impacts based on accepted methodology. 40 C.F.R. §
1502.22(b)(4). Nor can BOEMRE avoid this preclusion by declaring that in lieu of
explaining the environmental impacts. In fact, this reasoning is contrary to NEPA’s dual goals of
requiring that (1) the agency has carefully and fully contemplated the environmental effects of its
action and (2) that its decision is made in light of those effects. See 490 U.S. at 349: 40 C.F.R. §
1502.22(b)(4). To comply with these goals, NEPA requires the agency to determine what these
impacts will be and not simply declare that the agency has undertaken all appropriate actions
regardless of whether the agency already knows they will be significant or not. By
preserving that no amount of information about the severity of the impacts could change the
agency’s decision among alternatives, BOEMRE is admitting that its mind is already made up
about Lease Sale 193.

Third, BOEMRE’s conclusion about the comparability of the impacts between
alternatives ignores the import of the alternative scenario, which the NEPA regulations
require for a decision on the “best” option. Sustar, Native Tribe of the ESK, 331 F.3d 1094, 1120 (9th Cir.
2003). For example, the agency has stated that

... the severity of potential impacts would be nearly identical under any action
alternative; therefore, very specific types of information relevant to species,
particularly life history traits, or behavior do not help substantiate in distinguishing
amongst alternatives.

SDEIS App. A at 3. This conclusion ignores that the fact that BOEMRE can and should develop a
range of action alternatives based on the information available. As noted above, the model of NEPA
as a proposed lease sale. If all the alternatives have the same environmental consequences,
then BOEMRE has failed to present a reasonable range of alternatives, and the NEPA
requirements for “carefully and fully contemplated the environmental effects of its
action” have been trivialized. Alternatives, the information can be obtained in which the procedure to the
agency’s decision among alternatives for Lease Sale 193. For example, the mining information relating to the effects of
noise and oil spills on whales is important in proposing assessing the impacts to our subsistence
resources and communities. See, e.g., SDEIS App. A at 1 (acknowledging the uncertainty about the
impact of an oil spill on whales). By limiting the extent of these impacts, the agency can
determine which alternative allows the agency to meet NEPA’s policy “to conserve and
evaluate the quality of the human environment and avoid or minimize any possible adverse
effects of their actions upon the quality of the human environment.” 40 C.F.R. §
1502.22.

By failing to obtain a comprehensive overview of the mining information, BOEMRE is
undermining NEPA’s emphasis on the importance of information and comparing
up-front environmental analysis to ensure informed decision making to the end of
the “all actions” which the alternative be the more
significant adverse effects to the whales will be avoided.

SDEIS App. A at 3. This conclusion ignores and undermines NEPA’s purpose of
independent disclosure and analysis of environmental impacts. Regardless of whether the
Clean Air Act process, or other similar environmental laws, will mitigate environmental impacts,
the agency is still required to identify these in the NEPA process.

BOEMRE has an Independent Obligation Under NEPA To Consider The
New Information And Circumstances That Have Arisen Since The FEIS
Was Prepared.

BOEMRE cannot rely on the narrow scope of the record to exclude new information and
circumstances since the FEIS for Lease Sale 193 was prepared. Even the District Court of
Alaska had noted the FEIS, the agency would still need to consult a supplemental EIS
to address the new information that has come to light about bowhead whales and oil spills.

NEPA requires an agency to prepare a supplemental EIS when “(i) there are significant
circumstances or events or changes to the environment which were not known when
the proposed action or its impacts...” 40 C.F.R. § 1502.9(c)(ii). When new information relating to
EIS comes to light, the agency must take “a hard look” at whether the new information is
significant to the environmental impact analysis. N. Alaska Cmty. Action Network v. United
States Army Corps of Engineers, 198 F.3d 1015 (9th Cir. 2002) (emphasis added).
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State DOT, 415 F 3d 1147, 1146-1155 (9th Cir. 2008) citing Road Price Neighborhood Ass’n v. U.S. Dep’t of Transp., 113 F 3d 1505, 1510 (9th Cir. 1997). If the new information may give rise to significant environmental impacts “in a manner not previously evaluated and considered,” the agency must conduct an SEIS. id at 1157.

NEPA also requires that an agency use “high-quality information and accurate scientific analysis,” 40 C.F.R. § 1508.21(a); Council v. Powell, 395 F 3d 1019, 1031 (9th Cir. 2005). An agency cannot rely on “outdated data” or fail to “acknowledge the limitations in a methodology.” Nw. Ecological Ass’n v. Ray, 380 F. Supp. 2d 1175, 1193 (W.D. Wash. 2005).

I. The SEIS must include current scientific information about bowhead whale use of the proposed Lease Sale area.

AFWC is concerned about the impacts of the proposed Lease Sale on bowhead whales and other whales and marine mammals. Bowhead whales are inextricably linked to the cultural heritage and way of life of indigenous people of Alaska, Russia, and Canada for at least the last 2000 years. Quackenbush at 1. As pressure for oil and gas development has increased in the Chukchi Sea, one of the historic breeding locations of bowhead whales, we have repeated emphasized that there is a serious lack of scientific information on the baseline conditions of this area and the impacts of exploration on the environment and these whales. Despite this serious lack of information, the agency has proceeded to auction lease blocks and approve exploration plans in the area.

BoeMRE has chosen to ignore new scientific information about bowhead whales in the Chukchi Sea that was previously unknown. This includes: ADFG, et al. Satellite Tracking of Western Arctic Bowhead Whales (July 2010); DOC/NOAA is funding the twinning agency); Quackenbush, et al. Fall and Winter Movements of Bowhead Whales in the Chukchi Sea (2009); and NMFS’s July 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas. All of the research conducted by the Bureau of Ocean Energy Management (BOEMRE) and the Western Arctic bowhead stock migrates through the Lease Sale area. BOEMRE has ignored this information, the agency has proceeded to auction lease blocks and approve exploration plans in the area.

This failure is critical. For example, the SEIS concludes that “[p]rolonged exposure to freshly spilled oil could cause adult whale mortality” but that “number would be small.” SEIS at 19. This conclusion is undermined by the new scientific information on bowhead whale, which shows a far more extensive use of the Lease Sale area than previously expected.

The ADFG study examined the annual distribution of these whales, including in wintering and calving locations throughout the Chukchi Sea. The new information stepping from the Deepwater Horizon Oil Spill requires BOEMRE to revisit its prior NEPA analyses regarding oil spills in the Outer Continental Shelf (OCS). CEQ Report on the Minerals Management Service’s National Environmental Policy Act Policies, Practices, and Procedures. As They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (August 16, 2010) (hereafter CEQ Report). Specifically, the CEQ concluded that

[the BP Oil Spill] constitutes significant new information and circumstances that may require reconsideration of prior conclusions made in the OCS NEPA reviews and other environmental analyses and studies. Specifically, conclusions may change about the likelihood, magnitude, and environmental impacts of a major spill in connection with OCS oil and gas drilling activities.

Id. at 32. The report went on to state “the fact and effects of the BP Oil Spill requires revisiting prior assessments of the risk of catastrophic spills and their probability analysis.” Id. at 34.

Even though CEQ issued this report before BOEMRE conducted the CEQ report and decided not to reexamine the oil spill assessment in the SEIS. In doing so, BOEMRE provided three irrelevant reasons for its decision not to consider the Deepwater Horizon oil spill or re-examine the oil spill analysis in the FEIS. 1) the [Deepwater Horizon] DHW did not change the background conditions in the Chukchi Sea. 2) the Chukchi Sea is predominantly shallow water unlike the DXW area; and 3) even if an oil spill is more likely the impacts have already been analyzed.

SOEIS at 16. The agency cannot rely on any of these reasons to justify its failure to re-examine the oil spill analysis because they are unrelated to the overarching reason why additional analysis is needed.

BoEMRE’s first argument is flawed because the need for additional analysis does not stem from changed background conditions in the Chukchi Sea. Rather, it stems from the inadequacy of MMS’s review processes for approving OCS oil spill assessments and contingency plans that proved inadequate in the Gulf of Mexico. Second, BOEMRE cannot rely on the fact that the Chukchi Sea is shallower than the Deepwater Horizon location as a distinction that rules drilling in the Arctic into the “deep Gulf.” If drilling is taking place in the Chukchi Sea presents significantly different and dangerous conditions due to the harsh Arctic climate that are not present in the Gulf of Mexico.

Not only the agency relies on the previous analysis in the FEIS. The CEQ report has made clear that the new information related to the Deepwater Horizon Spill triggers the NEPA requirement that the agency re-examine previous analyses related to oil spills in the OCS. CEQ

Alaska Eskimo Whaling Commission Comment

[...]

Alaska Eskimo Whaling Commission Comment

[...]

An additional issue is whether natural gas production would cause noise and disturbances that would force whales to avoid “high value areas” and risk biological consequences. SDUS at 79. But the agency concludes that “[n]ot present, available data do not suggest that strikes of bowhead whales by oil and gas activities in the area would become an important source of injury or mortality.” SDUS at 80. Because the new data shows significant use of the proposed lease area by bowhead whales, there is an increased likelihood that noise and disturbance will be greater such that strikes may now become an important source of injury.

As this example illustrates, the agency’s limited range of alternatives is inordinate in light of the new information about bowhead use of the proposed lease area. AWC asks BOEMRE to propose new alternatives based on time area restrictions that would mitigate the impacts to bowhead whales from oil and gas activities in the area. AWC also asks that the agency develop an alternative that requires the use of new and improved technologies that would mitigate impacts to bowhead whales. For example, requiring the use of equipment that does not depend on caged seismic waves to function seems to be included in this alternative. Currently, the agency’s range of alternatives is inadequate. See, e.g., Te-Mook Tribe of W. Shoshone of Nevada v. U.S. Dept. of Interior, 528 F.3d 592, 602 (9th Cir. 2008).

BOEMRE has helped fund some of this research, undertaken some of it, and certainly is aware of it — yet it does not appear in the SEIS. The telemetry research was even raised in litigation over BOEMRE’s approval of Shell’s exploration plans for the Chukchi Sea. Nevertheless, the agency ignored this information in the SEIS. In short, the SEIS lacks updated information on other species, including bowhead whales, and polar bears. NMFS at 43 (“With regards to threatened and endangered species, the following new information was reviewed”). By failing to update the bowhead whale information, the agency has violated its duties under NEPA. Nw. Ecological Ass’n v. Carter, 99 S. Ct. 926, 937-8 (9th Cir. 2010) (finding that the Forest Service violated NEPA by failing to update an EA when new information on potential habitat in the project area became available).

2. The new circumstances and information pertaining to oil spills and blowouts from the Gulf of Mexico require review in a SEIS.

BOEMRE cannot rely on the limited scope of the District Court of Alaska’s remand for ongoing duty to supplement the EIS with new information and analysis regarding the possibility of an oil spill and blowout in the U.S. OCS. NEPA imposes an independent obligation to supplement an EIS when significant new information or circumstances arise. 40 C.F.R. § 1502.22(a). The new information about oil spills constitutes new information and circumstances that are relevant to BOEMRE’s analysis of oil and gas drilling in the Outer Continental Shelf.

The catastrophic in the Gulf of Mexico raises substantial questions about the efficacy of BOEMRE’s price analysis of oil spills in the OCS.

Alaska Eskimo Whaling Commission Comment

Report at 22. The magnitude of the spill in the Gulf highlights the fundamental flaws within the agency review process that allowed such improbable harm to the Gulf ecosystem. To prevent these harms in the Chukchi Sea, the agency must re-assess the likelihood of an oil spill and consider the environmental impacts that would result. This additional analysis is crucial in the Chukchi Sea where the environmental blowout would implicate the environment and subsistence resources on which we depend.

The existing analysis is not sufficient to address these impacts, nor does it acknowledge and assess the impacts from a well blowout. Throughout the SEIS, BOEMRE describes the multitude of adverse impacts to Arctic ecosystems from an oil spill event in the OCS. For the missing pieces of information related to the impacts of an oil spill on various resources, the agency frequently concludes that the agency “assumes that a large oil spill would lead to significant impacts,” so additional information in commentaries to assist NEPA reviewers and other environmental analyses and studies. Specifically, conclusions may change about the likelihood, magnitude, and environmental impacts of a major spill in connection with OCS oil and gas drilling activities.

Id. at 32. The report went on to state “the fact and effects of the BP Oil Spill requires revisiting prior assessments of the risk of catastrophic spills and their probability analysis.” Id. at 34.

Even though CEQ issued this report before BOEMRE conducted the CEQ report and decided not to reexamine the oil spill assessment in the SEIS. In doing so, BOEMRE provided three irrelevant reasons for its decision not to consider the Deepwater Horizon oil spill or re-examine the oil spill analysis in the FEIS. 1) the [Deepwater Horizon] DHW did not change the background conditions in the Chukchi Sea. 2) the Chukchi Sea is predominantly shallow water unlike the DXW area; and 3) even if an oil spill is more likely the impacts have already been analyzed.

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BoEMRE’s first argument is flawed because the need for additional analysis does not stem from changed background conditions in the Chukchi Sea. Rather, it stems from the inadequacy of MMS’s review processes for approving OCS oil spill assessments and contingency plans that proved inadequate in the Gulf of Mexico. Second, BOEMRE cannot rely on the fact that the Chukchi Sea is shallower than the Deepwater Horizon location as a distinction that rules drilling in the Arctic into the “deep Gulf.” If drilling is taking place in the Chukchi Sea presents significantly different and dangerous conditions due to the harsh Arctic climate that are not present in the Gulf of Mexico.

Not only the agency relies on the previous analysis in the FEIS. The CEQ report has made clear that the new information related to the Deepwater Horizon Spill triggers the NEPA requirement that the agency re-examine previous analyses related to oil spills in the OCS. CEQ
As an initial point, the “mitigation measures” in the FEIS are inadequate. The NEPA document fails to call for meaningful mitigation measures that can be enforced at later stages of the OCSLA process. For example, to mitigate the impacts to subsistence users, AWC recommends that BOEMRE require users to enter into Conflict Avoidance Agreements (CAAs) to mitigate impacts in the manner suggested by the State Resource Easterly (SRE) process. In this scenario, the mitigation measures are not specific to natural gas development and production in the area; instead, they are focused on natural gas development and production in the area. The mitigation measures are also not enforceable protections for subsistence and other resources in the Chukchi. BOEMRE needs to identify additional mitigation measures because the natural gas development and production will have impacts to the environment, natural resources, and subsistence lifestyles that are in addition to and different from those related to oil and gas development. For example, BOEMRE identifies several aspects of natural gas development that may negatively affect the marine environment, including:

- the presence of infrastructure (offshore platforms, offshore and onshore pipelines, and shore bases); noise and other disturbance from development activities; vessel, air, and ground transportation; emissions and discharges; and accidental events.

SDEIS at 66. Specifically, the agency identifies additional impacts to whales from the noise associated with natural gas construction and development activities. See, e.g., SDEIS at 19 (“Natural gas development and production could result in increased noise and disturbance to bowhead as well as fix and lumberhead whales.”). The agency goes on to say that “it is possible that disturbance caused by those activities could alter the local availability of those resources to harvesters.” Ed. at 231. "BOEMRE is considering the potential for modification of species, an already identified potential impact from oil spill, SDEIS, App. A at 104, does not rise to the level of significant.

When the agency adds the effects from those impacts to those already identified for oil and gas development and other actions in the area, the effect, according to the agency, seems sufficient to account for the relevant studies. In this scenario, the agency concludes that these do not rise to the level of significant cumulative impacts. SDEIS at 106. AWC is aware of additional disturbance to whales from a natural gas pipeline, water column, and noise associated with the potential for extirpation of species, an already identified potential impact from oil spill, SDEIS, App. A at 104, does not rise to the level of significant.

Additionally, there is a doubt and meaningful analysis with which to understand the agency’s conclusions. Throughout the cumulative impacts analysis the agency makes several unsupported statements without providing a meaningful analysis. For example, the agency has not provided specific data to suggest that noise levels will not significantly impact whales. To understand the agency’s conclusion, the public needs a comparison of the levels of noise that whales can withstand to the levels of noise that are cumulatively expected to occur in the project area. In the absence of this data, the public cannot understand the agency’s conclusions that the impacts to whales will be minor and not significant. Thus, it appears that the agency has tailored its conclusions and analysis to fit its prior decision to issue its final EIS.
CONCLUSION

One purpose of NEPA is to ensure that an agency conducts a through environmental analysis before "resources have been committed or the die otherwise cast." M'ehow Valley, 490 U.S. at 349. It is clear BOEMRE has failed to meet this goal and that another supplemental EIS is necessary before the agency decides how to proceed in the Chukchi. We ask that the new EIS provide a meaningful response to the remand order, address new science about bowhead whale use of the lease sale area, provide a new oil spill analysis; provide a reasonable range of alternatives that include time area restrictions and technological requirements; provide improved mitigation measures that are enforceable; and include a process that involves the public and enables BOEMRE to make an informed decision.

Sincerely,

Harry Brower

Native Village of Point Lay, Native Village of Point Hope, Alaska Inter-Tribal Council Comment

Native Village of Point Lay
Native Village of Point Hope
Alaska Inter-Tribal Council

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
E: BOEMREAPublicComment@boemre.gov

Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

Native Village of Point Lay submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

The current draft SEIS concludes that BOEMRE has no obligation to fill the massive gaps in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of Arctic species and their key habitat to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on mere speculation. We find this unwillingness to analyze the lease sale with scientific rigor deeply offensive. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of the decisions. It needs to do better—as the Deepwater Horizon spill demonstrates, we need to know the environmental effects of offshore drilling before it happens. Instead of finalizing the current proposed draft, BOEMRE should undertake a complete and thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and revitalize the impacts of the lease sale in light of the new information. It should then assess whether to cancel the leases, modify the leases or affirm the leases. In making this decision, it should not take into account that there are existing lease sale 193 leases in the Chukchi Sea. BOEMRE needs to make a fresh, new decision about lease sale 193.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness—it gambles our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this injustice. BOEMRE must set a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populations in the decision-making process. The policy of the United States is that “[w]hen undertaking to formulate and implement policies that tribal implications, agencies shall ... consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes,” Executive Order 13175 § 3(c)(3). We ask that BOEMRE meet this government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. The input of Alaska Native governments is essential because decisions concerning lease sale 193 will affect the ability of our communities to sustain themselves. We also request that BOEMRE provide a meaningful opportunity for public involvement. This was not done here. For example, the Point Hope hearing on lease sale 193 was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.

We will do everything in our power to protect our water, land, and of life and hope that you will address our concerns. We look forward to meeting with your agency on this important issue.

Sincerely,

Native Village of Point Lay IRA Council
PO Box 59031
Point Lay, Alaska 99759

Native Village of Point Hope

P.O. Box 109
Point Hope, Alaska 99766
November 29, 2010
Regional Director, Arctic OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
Email: BOEMREAKPublicComment@boemre.gov
Re: Chukchi Sea Draft SEIS
Dear Sir/Madam:

This letter provides comments on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (“BOEMRE”) Draft Supplemental Environmental Impact Statement (“SEIS”) for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193.

Introduction
These comments are submitted by the Arctic Slope Regional Corporation (“ASRC”). ASRC is an Alaska Native Regional Corporation created at the direction of Congress under the terms of the Alaska Native Claims Settlement Act of 1971 (“ANCSA”). See 43 U.S.C. § 1606. This landmark legislation extinguished Alaska’s aboriginal land rights, and authorized and directed Alaskan Natives to adopt a western corporate model, managing lands, funds and natural resources. Although the western corporate model was foreign to Alaska Natives, our people were also able to manage our assets consistent with our stewardship and values. Under ANCSA, Iñupiat Eskimos living on the North Slope in 1971 were enrolled as shareholders in ASRC. ASRC has since issued additional shares to their descendants, giving ASRC a shareholder base of approximately 11,000 Iñupiat Eskimos.

Through ANCSA, Congress created ASRC and provided ASRC with the ability – and duty – to use the North Slope’s natural resources to benefit Iñupiat people financially and culturally. Congress authorized ASRC “to provide benefits to its shareholders who are Natives or descendants of Natives or to its shareholders’ immediate family members who are Natives or descendants of Natives to promote the health, education or welfare of such shareholders or family members.” 43 U.S.C. § 1606(r) (emphasis added). Consistent with this unique legislation, ASRC is a for-profit business that is committed both to providing sound returns to our shareholders and to preserving our Iñupiat way of life, culture, and traditions.

Operating in one of the least hospitable natural climate in the world, we have built businesses to provide jobs for our people, tax revenues for our Villages and Boroughs, and cash dividends for our shareholders. At the same time, we have integrated ASRC’s subsidiaries centered around four fundamental areas:

- Risks of a catastrophic oil spill that would affect our coast and our communities;
- Impacts to the environment our marine mammals are dependent on;
- Industry’s ability to clean up a spill in ice-infested waters.

With respect to the above issues we have taken the stance that the Iñupiat have the most to lose if any or all of the above impacts occur. Based on these fundamental concerns ASRC has been notably silent on the process and issues with respect to oil and gas leasing in the Arctic OCS. We have diligently worked to gain an understanding of the new technologies to be employed by industry and we have watched with disbelief the Gulf of Mexico oil spill that occurred in April 2010. It is this background and careful consideration that ASRC has decided to comment on the Draft SEIS.

With the above points in mind, we wish to affirm, modify or cancel Lease Sale 193. ASRC itself owns approximately 5,000,000 acres of on-shore land (surface and subsurface) on the North Slope – an area nearly the size of Massachusetts. Our lands are located within our regional area of 89,000 square miles – an area the size of Minnesota. Our regional area follows the coastline of the Beaufort and Chukchi Seas. The eight Iñupiat villages in the region, six of which are located on or near the coastline of the Beaufort and Chukchi Seas, each of which have Village Corporations pursuant to ANCSA. In addition to ASRC-owned lands, Alaskan Native-owned lands include property of Village Corporations, Villages or Boroughs and native allottees. These lands are distributed within a rugged and challenging terrain. Our businesses depend on activities on lands owned by others, including the federal and state governments. The Iñupiat and our ancestors have occupied and depended upon these Northern Alaska lands and waters since time immemorial, extending at least 10,000 years.

In just a few short decades, the Iñupiat have adapted from an economy based almost solely on subsistence to a mixed economy. We operate ASRC consistent with Iñupiat cultural values, and our 21st century life is an integration of traditions into a contemporary economy. The cash portion of that mixed economy depends on oil and gas and other natural resource activity to provide the jobs, economic activity, and a tax base for our local government that make available basic amenities such as schools, health care and sanitation facilities – all of which, although taken for granted elsewhere in the United States, are operated and maintained in our region at considerable cost. In carrying out its congressionally-mandated mission, ASRC and its subsidiary companies are active participants in North Slope oil exploration, development, and production. This is the source of many jobs for ASRC’s Iñupiat shareholders and many contracting opportunities for ASRC’s subsidiaries. This includes work as contractors in oil field developments, engineering work, maintenance of pipelines, and leasing property for exploration and development.

In the 21st century and into the future, the Iñupiat’s ability to maintain our traditions, our communities and the rudimentary services and amenities that make it possible for our people to live, to provide economic opportunity for the Iñupiat to maintain our traditions and culture.

1 Even with this increasingly mixed economy, subsistence hunting continues to provide 40% of calories and 50% of protein for Iñupiat Eskimos living on the North Slope. Subsistence hunting continues to be important for the Iñupiat both to provide sound returns to our shareholders and to preserve our Iñupiat way of life, culture, and traditions.

2 The ASRC family of companies includes ASRC Energy Services, Inc.; ASRC Construction Holding Company, Inc.; Petro Star, Inc.; ASRC Federal and other entities and subsidiaries.

The Arctic Slope Regional Corporation Comment

3 Determine whether the cost of obtaining the missing information was exorbitant, or unavailable information.

Summary of Major Comments by ASRC

ASRC has historically been very concerned about Arctic OCS exploration and its effects on the subsistence activities of our communities and shareholders. Our concerns have centered around four fundamental areas:

- Impacts to the marine mammals our culture is dependent on;
- Impacts to the environment our marine mammals are dependent on;
- Risks of a catastrophic oil spill that would affect our coastal communities;
- Industry’s ability to clean up a spill in ice-infested waters.

With the above points in mind, we wish to affirm, modify or cancel Lease Sale 193.

The Arctic Outer Continental Shelf (“OCS”) holds significant potential for discovery of large oil and gas accumulations that could assist in meeting the nation’s energy needs. The Chukchi Sea is considered the nation’s most prolific, unexplored offshore basin in North America. BOEMRE has estimated that Alaska’s OCS has up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The size and significance of the potential in the Chukchi Sea has caused ASRC to re-evaluate its impacts to our shareholders, our communities, our business and our business – all of which our region relies on for a viable economic future.

In the Draft SEIS the BOEMRE analyzes three specific issues raised by the U.S. District Court of Alaska. The District Court ordered remanding the BOEMRE’s Chukchi Sea Lease Sale 193 Final EIS (“FEIS”) to address three areas of concern with the FEIS.

The three concerns are:

1. Analyze the environmental impact of natural gas development;
2. Determine whether missing information identified by BOEM in the FEIS for Lease Sale 193 was essential or relevant under statute; and
3. Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

The SEIS is intended to provide the Secretary of the Interior with sufficient information and analysis to make a final informed decision among the alternatives on whether to affirm, modify or cancel Lease Sale 193.

The availability of sufficient information to support sound scientific judgments and reasoned managerial decisions, even without the identified incomplete, missing, or unavailable information.

The availability of sufficient information to support sound scientific judgments and reasoned managerial decisions, even without the identified incomplete, missing, or unavailable information.

The Arctic Slope Regional Corporation Comment

Email: BOEMREAKPublicComment@boemre.gov

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3. Determine whether the cost of obtaining the missing information was exorbitant, or unavailable information.

The Arctic Slope Regional Corporation Comment

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The availability of sufficient information to support sound scientific judgments and reasoned managerial decisions, even without the identified incomplete, missing, or unavailable information.
Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. In addition, we are familiar with, and favorably impressed by the additional drilling safeguards introduced by the Chukchi Sea explorers and by their methods to minimize other environmental impacts that have historically been deemed inevitable for OCS exploration wells. The spill prevention portion of today's Arctic OCS plans is truly and offers us great confidence in a successful outcome. Any oil spill in the Arctic OCS will be catastrophic to our communities and people and ASRC has taken a very deliberate approach in our consideration for off-shore exploration and development. As part of our assessment we have reviewed the spill prevention and response components anticipated for the Arctic OCS and we feel industry has committed to unprecedented provisions for prevention and spill response plans that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give us a high level of confidence that exploration and development can occur safely and without harm to our off-shore subsistence environment. Since the Gulf of Mexico spill, industry has increased its prevention and spill response plans creating a system of redundancy that provides us with some comfort they will be able to response to the unlikely event of a spill in an immediate and effective manner. These developments can occur safely and without harm to our off-shore subsistence industry has committed to unprecedented provisions for prevention and spill response components anticipated for the Arctic OCS and as that data and information is collected and analyzed all parties continue to gain knowledge that can be built into mitigations and future environmental review.

It is actually through the concerns brought forward due to Arctic OCS leasing that research dollars have increased to allow for the collection of important data with respect to the Arctic marine environment. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Chukchi and Beaufort Seas. After the Gulf of Mexico incident we have seen increased scrutiny on the Arctic OCS with calls that there is not enough data.

Our position is to not allow the de facto moratorium to continue while additional research is conducted and analyzed but to instead mislead the research component of a solid regulatory program and industry mandate moving forward. All parties benefit from the resources and research being directed at the Arctic OCS.

Item Three ordered for review by the District Court is to determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. In responding to this item of review the BOEMRE has stated that if information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the costs of obtaining it are exorbitant the statement will be made that such information was incomplete or unavailable. A statement of the relevance of the missing data will be made as to its impacts on the human environment, and a summary of credible scientific evidence as to its impact on the human environment will be included in the environmental impact statement. ASRC feels this is a reasonable approach to addressing the costs of obtaining missing information. Our response to this item is consistent with our response for item two since both addresses the issue of missing data. Ongoing research and data collection will continue and there are other times in the OCS process that new data and research can be incorporated into the knowledge-base to make informed decisions.

On-going data collection is a critical component of the affirming the FEIS and continuing with the lease activities. It is through this additional activity that our communities and residents gain Western scientific information about our off-shore environment while at the same time having the opportunity to incorporate our Inupiat traditional knowledge into the mix. Our shareholders have been employed as researchers and marine mammal observers in the Chukchi lease area as new scientific baseline data is collected. This is a double-win for our people; they are employed in the research and data collection process while at the same time learning more about our nature environment in the process. We see this as a positive impact to our region and our understanding.

ASRC believes rescinding the leases and allowing a de facto moratorium to continue will harm the North Slope's and Alaska's economies and discourage future industry investment, without a corresponding benefit to the environment. Economic estimates state that the Arctic OCS would provide upwards of 4,000 direct jobs on the North Slope with direct tax revenue to the North Slope Borough of over $3.0 billion from the on-shore facilities and infrastructure. Jobs and the North Slope Borough tax base are critical to the long-term economic sustainability to our communities. As such it is important to ASRC that the Secretary affirms Sale 193.

We feel the oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvester activities. There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.

Despite the Gulf of Mexico incident, we recognize the difference in geologic conditions between the Macondo Well in the Gulf and prospective exploratory drilling in the Chukchi Sea. The differences between the two areas are significant and they cannot be compared as analogous. First the Macondo Well was drilled in an ultra-deep water column into a high- or over-pressured reservoir. By contrast geologic targets in the Chukchi are in relatively shallow water and based on past drilling in the leased area we know that the geologic targets are normally pressured greatly reducing the potential for a Macondo-style blow-out in the Chukchi.

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. In addition, we are familiar with, and favorably impressed by the additional drilling safeguards introduced by the Chukchi Sea explorers and by their methods to minimize other environmental impacts that have historically been deemed inevitable for OCS exploration wells. The spill prevention portion of today's Arctic OCS plans is truly and offers us great confidence in a successful outcome. Any oil spill in the Arctic OCS will be catastrophic to our communities and people and ASRC has taken a very deliberate approach in our consideration for off-shore exploration and development. As part of our assessment we have reviewed the spill prevention and response components anticipated for the Arctic OCS and we feel industry has committed to unprecedented provisions for prevention and spill response plans that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give us a high level of confidence that exploration and development can occur safely and without harm to our off-shore subsistence environment. Since the Gulf of Mexico spill, industry has increased its prevention and spill response plans creating a system of redundancy that provides us with some comfort they will be able to response to the unlikely event of a spill in an immediate and responsive manner.

All of these contrasts should lead BOEMRE to conclude that exploration should move forward in the Chukchi.

ASRC appreciates the opportunity to present these comments on the Draft Supplemental Environmental Impact Statement for the Chukchi Sea Oil and Gas Lease Sale 193.

Sincerely

ARCTIC SLOPE REGIONAL CORPORATION

Richard Glenn
Executive Vice President

November 19, 2010

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-0920

Subject: OCS Testimony, Calista Corporation

Hearing Date: Tuesday, November 9, 2010
Time: 7:00 p.m.

My name is Christie Klein. Chief Operating Officer for Calista Corporation. I'm here to provide testimony on behalf of Calista, one of Alaska's 13 Regional Native Corporations created after Alaska Native Claims Settlement Act in 1971. Calista represents more than 13,000 direct shareholders, as well as, their descendants of Yupik, Cupsh, and Alaskan Heritage. It includes 50 remote villages throughout Yukon-Kuskokwim Delta and Bering Sea Coast of Western Alaska.

Many of our shareholders continue to live in remote villages which experience higher costs of living especially fuel and healing oil due to a lack of transportation infrastructure - people must travel by boat, plane or wheeled vehicles to get to the nearest town. Fuel is 3 to 5 times more expensive than in the rest of Alaska and Lower 48 States! Heating fuel can often cost more than $13/gallon. Can YOU imagine what would or will happen when you and Other citizens in the rest of Alaska and US get the opportunity to pay $13/gallon for heating fuel? We are Calista shareholders, pay right, now right here, already!!!

1. We support OCS environmentally safe drilling and want to see MMBoE/OEM Lease Sale 193 affirmed as intended in 2009, for the purpose of producing oil, and boosting domestic oil production from existing U.S. energy deposits.
   a. To remove on the intent of that sale was unlawful in the EIS and SEIS process is an injustice denying reason given current economic conditions.
   b. The SEIS provides sufficient information & analysis to support an informed decision.
   c. More delays, canceling leases, and continuing moratoriums will further harm the Alaska and U.S. economy, and discourage industry investment, without any corresponding benefit to other the environment or citizens.

2. We have confidence in the regulatory and scientific community of Alaska that has risen to the challenges of responsibly overseeing offshore oil and gas development in ensuring protection of vital wildlife and water resources.
   a. There has never been a blowout in Alaska or Canadian Arctic that resulted in an oil spill. Thirty wells were drilled in Beatific and live in Chukchi – all without incident in the 80’s utilizing older technology compared to what exists today.
The draft SEIS concludes that BOEMRE has no obligation to fill the massive gap in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of species and their key habitats to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on more speculation. We find this unsatisfactory in evaluating the lease sale with scientific and deeply offensive. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of the decisions. It needs to do better—despite the Deepwater Horizon, we need to know the environmental effects of offshore drilling before it happens. Instead of finalizing the current proposal, BOEMRE should undertake a complete and thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and revise the impact of the lease sale in light of the new information. It should then assess whether to cancel the lease, modify the lease or affirm the lease. In making this decision, it should not take at face value that there are existing lease sale 193 issues in the Chukchi Sea. BOEMRE needs to make a fresh, new decision about lease sale 193.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, gathers not only a pristine, changing, and rich wildlife as its home and our way of life. If oil spills occur and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this tragedy. BOEMRE must start a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populaces in the decision-making process. The policy of the United States is that “[w]hen undertaking to formulate and implement policies that shall implications, agencies shall . . . consult with tribal officials to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes.” Executive Order 13175 3 (EQ). We ask that BOEMRE meet with representatives of the government to government meeting was held after Point Hope had to cancel an initial meeting due to conflicts. In Barrow, BOEMRE held the public hearings on the lease sale at the same time as the government to government meeting with ICAS, casting local members to have to choose between the two.

We support and join the comments submitted on the draft SEIS by the Alaska Eskimo Whaling Commission and the Alaska Wilderness League, et al. conservation groups. We will do everything in our power to protect our water, land, and way of life and hope that you will address our concerns.

Sincerely,

Doreen Lamp
President
While admittedly it is only possible to obtain a basic level of knowledge in regard to the complex interrelated ecological processes at play in the Chukchi Sea, it is the position of the Tribe that a serious attempt to obtain this level of understanding is necessary before the process moves forward. As BOEM is aware many research projects are currently underway and much of the needed missing information is being collected and analyzed. For instance the Tribe has spent the last 6 years studying ice seals and their habits and habitats, yet sufficient time for publication of results has not been provided before BOEM actions are being taken. There are many more similar research undertakings occurring by others, but again without sufficient time to publish and incorporate findings in an analysis of environmental impacts of a lease sale. In addition, as recent assessments of the ability to clean oil in ice have demonstrated, there remain serious challenges and concerns regarding the ability to respond successfully to such an event, especially under worst case scenario of both kind of spill and seasonal timing of such an incident.

Instead of finalizing the current proposed draft, BOEM should undertake a thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and reevaluate the impacts of the lease sale. In order to meet this need there must be an ongoing commitment from BOEM, other federal agencies, and industry, to aggressively fund and seek to increase the knowledge of the affected environment and impacts on communities, so there will not remain such a large knowledge gap on which to base decisions in the future. Part of this effort should include specific opportunities for communities along the Chukchi Sea to undertake research to provide information of concern to which will inform subsequent steps and decisions in the development of the Lease Area 193. Currently, targeted communication and involvement with the Alaska Studies Program, in relation to local Chukchi Sea communities, is largely absent, and the BOEM could correct this by informing coastal communities living on the shores of the Chukchi Sea about current research and creating specific funding opportunities for communities to undertake, or actively participate in, future research related to Lease Area 193.

Thank you for your consideration.

Alex Whiting
Environmental Specialist

Colton Schaeffer
Executive Director

Native Village of Kotzebue Comment

Native Village of Point Hope Comment

Routhier, Michael

From: Lily Tuzroyluke [ltuzroyluke@tikigaq.org]

To: BOEMRE AK Public Comments

Subject: Native Village of Point Hope Public Comments

Attachments: Chukchi SEIS Comments Nov 2010.doc

Please accept the attached comments on behalf of our President Mrs. Caroline Cannon, and our Tribal members of the Native Village of Point Hope.

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
E: BOEMRE@PublicComments@boemre.gov

Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

The Native Village of Point Hope submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

The Native Village of Point Hope is a federally recognized tribal government that is responsible for the well being of its 590 members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life, hunting bowhead whales, walrus, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean deteriorates, so will the physical health of our people. Yet, the importance of subsistence hunting runs much deeper. Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.

The Arctic Ocean is central to our communities’ cultural and subsistence traditions, and we are gravely concerned about the potential effects of oil and gas exploration and development upon it. We are worried that BOEMRE intends to allow oil and gas leases and drilling in the Chukchi Sea without first obtaining basic scientific data about the Chukchi Sea and the Arctic environment as a whole. As demonstrated by the National Ocean Policy, the U.S. Geological Survey’s Arctic science gap analysis, and the decision to close the Arctic Ocean to commercial fishing until more scientific information can be obtained, the Obama Administration has repeatedly promised a commitment to a scientific-based decision-making process for the Arctic Ocean. However, in direct opposition to the Administration’s promise, the Alaska Region office of BOEMRE has hastily published a draft SEIS in response to a court order to reconsider the 2008 lease sale 193 in the Chukchi Sea. The court ordered BOEMRE to redo its analysis of missing information about the region and natural gas development that could result from the lease sale. BOEMRE is then supposed to reconsider whether to cancel, modify, or affirm the leases in the Chukchi Sea in light of the new environmental analysis. Instead of doing a thorough job and fulfilling its duties under the National Environmental Policy Act, BOEMRE has rushed out a draft document that seeks to justify the lease sale and the earlier environmental analysis that the court found insufficient.

The current draft SEIS concludes that BOEMRE has no obligation to fill the many gaps in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of Arctic species and their key habitat to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on mere speculation. We find this unwillingness to make a fresh, new decision about lease sale 193 will affect the ability of our communities to sustain themselves. No government to government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, puts at risk not only a pristine, changing, and rich wilderness—it puts at risk our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or spilled, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this injustice. BOEMRE must set a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populations in the decision-making process. The policy of the United States is that “[w]hen undertaking to formulate and implement policies that tribal implications, agencies shall . . . consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes.” Executive Order 13175 § 3(c)(3). We ask that BOEMRE meet this government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. The input of Alaska Native governments is essential because decisions concerning lease sale 193 will affect the ability of our communities to sustain themselves. No government to government meeting was held after Point Hope had to cancel an initial meeting due to conflicts, we request that BOEMRE reschedule the missed government to government meeting. We also request that BOEMRE provide a meaningful opportunity for public involvement. The Point Hope hearing on lease sale 193 was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.

Sincerely,

Caroline Cannon
President
Native Village of Point Hope

Lily H. Tuzroyluke, Executive Director
Native Village of Point Hope
P.O. Box 109
Point Hope, Alaska 99766
(907) 368-2330 F
(907) 368-2332 F

Native Village of Point Hope Comment

We support and join the comments submitted on the draft SEIS by the Alaska Wilderness League, et al. conservation groups. We will do everything in our power to protect our water, land, and way of life and hope that you will address our comments.

Sincerely,

[Signature]

Native Village of Point Hope

1/10/2011
Native Village of Point Hope Comment

November 30, 2010

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
E: BOEMREAKPublicComments@boemre.gov

Anchorage, AK 99503-5802

Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EIA BOEMRE 2010-034)

Dear Regional Director:

The Native Village of Point Hope submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

The Native Village of Point Hope is a federally recognized tribal government that is responsible for the well being of its 950 members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life, hunting bowhead whales, walrus, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean deteriorates, so will the physical health of our people. Yet, the importance of hunting runs much deeper. Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden.

It is what sustains us physically and spiritually as individuals and as community members.

The Arctic Ocean is central to our communities’ cultural and subsistence traditions, and we are gravely concerned about the potential effects of oil and gas exploration and development upon it. We are worried that BOEMRE intends to allow oil and gas leases and drilling in the Chukchi Sea without first obtaining basic scientific data about the Chukchi Sea and the Arctic environment as a whole. As demonstrated by the National Ocean Policy, the U.S. Geological Survey’s Arctic science gap analysis, and the decision to close the Arctic Ocean to commercial fishing until more scientific information can be obtained, the Obama Administration has repeatedly promised a commitment to a scientific-based decision-making process for the Arctic Ocean. However, in direct opposition to the Administration’s promise, the Alaska Region office of BOEMRE has hastily published a draft SEIS in response to a court order to reconsider the 2008 lease sale 193 in the Chukchi Sea. The court ordered BOEMRE to redo its analysis of missing information about the region and natural gas development that could result from the lease sale. BOEMRE is then supposed to reconsider whether to cancel, modify, or affirm the leases in the Chukchi Sea in light of the new environmental analysis. Instead of doing a thorough job and fulfilling its duties under the National Environmental Policy Act, BOEMRE has rushed out a draft document that seeks to justify the lease sale and the earlier environmental analysis that the court found insufficient.

The current draft SEIS concludes that BOEMRE has no obligation to fill the many gaps in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of Arctic species and their key habitat to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on mere speculation. We find this unwillfulness to analyze the lease sale with scientific rigor deeply offensive. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of the decisions. It needs to do better—as the Deepwater Horizon spill demonstrates, we need to know the environmental effects of offshore drilling before it happens. Instead of finalizing the current proposed draft, BOEMRE should undertake a complete and thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and revitalize the impacts of the lease sale in light of the new information. It should then assess anew whether to cancel the leases, modify the leases or affirm the leases. In making this decision, it should not take into account that there are existing lease sale 193 leases in the Chukchi Sea. BOEMRE needs to make a fresh, new decision about lease sale 193.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, puts at risk not only a pristine, changing, and rich wilderness—it puts at risk our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this injustice. BOEMRE must set a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populations in the decision-making process. The policy of the United States is that “[w]hen undertaking to formulate and implement policies that tribal communities may be significantly affected, the Federal Government must consult with them in a good faith, cooperative manner.” Executive Order 13175 § 3(c)(3). We ask that BOEMRE meet this government-to-government consultation requirement by setting down with Alaska Native governing bodies to discuss the lease sale decision. The input of Alaska Native governments is essential because decisions concerning lease sale 193 will affect the ability of our communities to sustain themselves. No government-to-government meeting was held after Point Hope had to cancel an initial meeting due to conflicts; we request that BOEMRE reschedule the missed government to government meeting. We also request that BOEMRE provide a meaningful opportunity for public involvement. The Point Hope hearing on lease sale 193 was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.

We support and join the comments submitted on the draft SEIS by the Alaska Wilderness League, et al. conservation groups. We will do everything in our power to protect our water, land, and way of life and hope that you will address our concerns.

Sincerely,

Caroline Cannon
President
Native Village of Point Hope

Native Village of Point Hope Comment

Ukpeagvik Inupiat Corporation Comment

Regional Director
John Gol
Bureau of Energy and Ocean Management Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

30 November 2010

RE: OCS Lease Sale 193 Supplemental EIS Comments

Dear Mr. Gol:

Ukpeagvik Inupiat Corporation (commonly known as UIC), created under the Alaska Native Claims Settlement Act of 1972, serves the social and economic interests of the Inupiat people from the community of Barrow, Alaska - the northernmost community in the United States. UIC is the village corporation of Barrow, one of eight villages in the Arctic Slope Region.

UIC actively supports the oil and gas industry in Alaska. Our family of companies employs 1,400 people worldwide with 750 employees here in Alaska. Core services include scientific support, engineering, construction, logistical, and marine transportation services, as well as regulatory consulting and compliance for the oil and gas industry.

Our community and shareholders hold enormous value for the Inupiat traditional subsistence lifestyle and depend upon the Arctic Ocean. We also recognize the need for, and economic opportunity provided by oil and gas development to our people.

UIC shares the interests of the North Slope Borough, as our coastal district governing body, to create a strong and growing industrial sector in the Alaskan Arctic. We strive to develop long-term, meaningful employment opportunities for our shareholders, their descendents and dependents. Each year our young people go further from our community to take advantage of employment opportunities. Responsible oil and gas development in the Chukchi and Beaufort Seas will provide diverse employment opportunities and careers for our young shareholders and support the continuity of our way of life - balancing responsible resource exploration and development with our customary and traditional subsistence practices.

UIC continues to support responsible and accountable oil and gas exploration and development as captured in a policy statement from our Board of Directors: In our interactions with the oil and gas industry, we will leverage our position to benefit the Ukpeagvik Inupiat Corporation Family of Companies, its shareholders,
and the community. We acknowledge the inevitability of exploration and development by the oil and gas industry and we will support exploration and development activities as long as they are done in a way that ensures:

• Protection and preservation of the Inupiat culture and subsistence lifestyle
• Economic benefit for our community
• Employment for our shareholders and their families, and
• Contract opportunities for our companies

UIC shares an interest with the North Slope Borough in protecting our Inupiat heritage and traditional way of life through local participation in project planning and implementation, including engagement in all OCS proposed activities in our region.

We believe industry should integrate local and traditional knowledge with scientific knowledge to support environmentally sound and culturally sensitive activities in the Arctic.

We believe that when industry partners with the local people to share and apply this Traditional Knowledge, it will lead to preservation of our land, our resources, and our way of life.

UIC recognizes that finding balance between the goals of economic opportunity and preserving our way of life will require compromise, diligence, creative thinking, open communications and active stakeholder engagement.

In addition to employment opportunities, UIC believes there should be a provision for coastal producing states to share in federal oil and gas revenues generated on the adjacent OCS. Specifically, UIC recommends federal OCS revenues generated in Alaska should be allocated to the communities within reasonable distance to development. These communities serve as the platforms for onshore and offshore lease activities, and must develop resources and infrastructure to support industrial development while managing potential effects of that development on the people and environment.

UIC values the opportunity to provide comments and looks forward to continued engagement with BOEMRE to communicate the challenges, impacts, and opportunities that the OCS presents to our locally affected community.

Respectfully,

Chris J. Morgan  
Ukepeagvik Inupiat Corporation  
Chief Executive Officer
The State has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193. We comment that BOEMRE for the work put into this SEIS. Alaska has a tremendous stake in the successful progress of leasing, exploration, and development of the Arctic OCS. In a study conducted by the University of Alaska Anchorage Institute of Social and Economic Research, the Alaska economy would be sustained by the addition of 35,000 jobs with a $72 billion payroll over a 50-year period. Development of the OCS could spin off approximately $5.8 billion in additional state and local revenues. OCS development is a prime source of the continued health and diversity of our oceanic oil industry. Production from the OCS has several indirect effects including lower pipeline tariffs and longer life of the TAPS pipeline, a more robust and lower cost service industry, and longer-lived onshore facilities. Note also that these state impacts pale in comparison to the many more jobs, incomes, and energy for the Nation as a whole.

The purpose of the SEIS is to provide new analysis in accordance with the United States District Court for the District of Alaska Order remanding the BOEMRE’s Chukchi Sea Lease Sale 193 Final EIS. The District Court’s Order instructs the BOEMRE to address three concerns: (1) Analyze the environmental impact of natural gas development; (2) determine whether the proposed information identified by BOEMRE in the 193 FEIS is essential or relevant under 40 CFR 1502.22; and (3) determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

It is apparent from our review of the SEIS that BOEMRE has addressed the court’s three concerns in a comprehensive manner. Moreover, the Governor of Alaska previously expressed support for Lease Sale 193 with the inclusion of the Corridor II Deferral in 2007 and Lease Sale 193 was reviewed and found consistent with the State’s Coastal Management Program on October 30, 2007. The State of Alaska’s position remains that the Corridor II Deferral represents the best balance of environmental protection and development of the nation’s oil and gas resources. Therefore, we urge the Secretary to affirm Lease Sale 193 without delay. The comments below summarize the State’s review of the SEIS in the context of the court’s instruction to BOEMRE.

Regarding the court’s concern for analysis of the environmental impact of natural gas development, the BOEMRE correctly concludes that natural gas development “would merely extend the life of existing plays and infrastructure and build new facilities within previously disturbed areas.” The State concedes with BOEMRE that the incremental nature of natural gas development “would be

“Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans”
Dear Sir,

My name is Cathy Giessel, Alaska State Senator-elect, but, more importantly, a lifelong Alaskan. I was born in the Territory of Alaska and there are four generations of my family living in our state today. I have watched our economy change over the years from before statehood until now. The vibrant economy we currently enjoy is based on the development of our vast natural resources.

I am advocating that the OCS lease sale 193 be affirmed as held in 2008. Rescinding those leases would destroy Alaska's economy and Alaskans' future in this wonderful state.

Presently the schools of the North Slope Borough (Point Hope, Point Lay, Wainwright, Barrow, Nuiqsut, Kaktovik, Atqasuk and Anaktuvuk) are wonderful facilities. The schools are well-staffed and supplied. All the schools have wireless internet in the buildings, with high school students issued new laptop computers. In fact, I can walk into any North Slope school, open my laptop, and in minutes I am connected to the internet. The schools are community centers for evening activities for the whole community, in the gym and library. Several of the schools even have swimming pools.

All of this educational opportunity is funded by petroleum tax revenues to the North Slope Borough.

After graduation, these rural students have the opportunity to pursue jobs in resource development close to home on the North Slope. These are good paying jobs, in a place where jobs are limited. The income brought home from resource development jobs benefit the entire community by injecting revenue into their economy.

Alaskans, present and future, need these valuable jobs.

I strongly support affirmation of the OCS Lease Sale 193. Thank you for consideration.

Respectfully,

Cathy

Cathy Giessel, MS, AMP, FAANP
Senator-elect, Alaska Senate District P
12701 Ratpenant Rd
Anchorage, AK 99516
www.cathygiessel.org

Routhier, Michael

From: Cathy Giessel [cathy@giessel.org]
Sent: Wednesday, November 10, 2010 4:49 PM
To: BOEMRE AK Public Comments
Subject: attn: Chukchi Sea Draft SEIS

Dear Mr. Goll:

I strongly support affirmation of Lease Sale 193 as held in 2008. I urge you to eliminate any further delays in allowing lease holders to develop Chukchi Sea interests. Companies paid top dollar for their Chukchi Sea leases in 2008, with the full expectation that the federal government would allow development already deemed in the best interests of Alaska and of the nation.

Delays - including rescinding leases - discourage crucial new industry investment in Alaska.

Alaskan OCS development is critical to the state’s economic health. Delays are costing real jobs and generally discouraging investment in the face of growing uncertainties and higher risks.

With eventual development — if plans meet the most stringent environmental and regulatory standards—Alaska’s rich OCS reserves may drive 33,000 additional jobs, annually, for 50 years, and would generate an estimated $72 billion in new payroll. Tapping into those 27 billion barrels of oil and 132 trillion cubic feet of natural gas would secure Alaska's economic health through a new generation of support industries, jobs and modest tax revenues, while funneling billions into the federal treasury.

The United States already imports more than 60 percent of its oil, refusing to tap extraordinarily rich resources within its own bounds. This risks financial and political security in a global game of prices and production, manipulated by foreign leaders in direct competition with the private sector oil and gas interests based here at home. If there ever was a time to promote responsible, active drilling, it is now.

We can, as numerous projects and companies have demonstrated, produce resources without compromising the environment or subsistence lifestyles prized in Alaska. I urge prompt action clearly supported by BOEMRE's supplement to the EIS.

Sincerely,

Mike Hawker
House Finance Committee Co-Chairman
Alaska State Legislature, House District 32

Representative Mike Hawker
House Finance Committee Co-Chairman
Alaska State Legislature, House District 32

Rep.Mike.Hawker@lege.state.ak.us • http://www.akrepublicans.org/hawker/

November 29, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska’s Resources

Dear Mr. Goll:

I strongly support resource development in Alaska including the development of oil and gas in the Chukchi Sea. As you are aware, drilling in the Chukchi Sea is different than drilling a deep water well in the Gulf of Mexico. We have the technology and expertise required to safely extract oil and gas without harming the environment or wildlife. I urge you to lift the de facto moratorium in the Chukchi Sea for the good of Alaska and our nation.

Thank you for consideration.

Sincerely,

Representative Bob Lynn
Alaska State House of Representatives
Mayor Northwest Arctic Borough Comment

October 24, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centripoint Drive, Suite 500
Anchorage, Alaska 99505

RE: Chukchi Sea Draft SEIS – Support of Local Energy Resource Development

Dear Mr. Goll:

Please accept this letter in support of the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska. As a representative of local government in California, I believe that the development of local energy resources is critical to local, state and national economic development efforts. I am hopeful that the federal government will finally approve the responsible development of the Chukchi’s abundant oil and natural gas resources as well as others throughout the country.

It is important that the federal government brings Alaska’s vast oil and natural gas resources back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. I am in support of large-scale local projects that have the potential to fuel growth and stability for the long term.

In my opinion, the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

[Signature]

Regina M. Candelier
City Administrator
City of Galena

1284 Sydney Street, Santa Cruz, CA 95060

Mayor Northwest Arctic Borough Comment

November 29, 2010

John Goll
Region Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centripoint Drive, Suite 500
Anchorage, AK 99503-5220

Subject: Chukchi Sea Draft SEIS Comments

Submitted by email: BOEMMEAPublicComment@boem.gov

Dear Mr. Goll:

The Northwest Arctic Borough Administration (NWAB) submits these comments on the September 2010 draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193. The NWAB believes the SEIS did not adequately address missing information, and it urges the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) to develop a comprehensive interagency research plan before issuing the final SEIS. The research plan would identify what information is needed for the lease sale, exploration and development phases and use a coordinated approach among agencies and industry to obtain this information.

On October 12, 2010, the Alaska Region of the BOEM released the draft SEIS in response to a June ruling by the U.S. District Court that the environmental analysis for Lease Sale 193 was inadequate. The order required the BOEM to address three subjects: Completeness of the environmental impact of natural gas development, determine whether missing information is identified by BOEM in the 193 FES was essential or relevant under 40 CFR 1502.22, and determine whether the cost of obtaining the missing information was unreasonable, or the means of doing so unknown.

While most of our comments address outstanding information needs, the NWAB is also concerned about the significance threshold outlined in Section IV.A.1 of the SEIS: The thresholds for determining significant impacts are too high. For example, an impact to a marine mammal would not be considered significant unless it took 3 or more generations for a population to recover to its former status. An impact to subsistence harvest would not be considered significant unless subsistence resources were “unavailable, undeniably for use, or

Mayor Northwest Arctic Borough Comment

November 29, 2010

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available only in greatly reduced numbers for a period of 1-2 years” (p. 60). For the people of this region, impacts to fish and wildlife and subsistence would be significant at much lower levels.

The NWAB urges BOEM to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife and the people who live in this region. The analyses in the original FES notes hundreds of areas in which information was missing.

In response to the court mandate, the draft SEIS made an across-the-board determination that none of the missing information was essential to a reasoned choice, and that no matter what impacts might result, it would allow drilling to proceed. Appendix A of the Lease Sale 193 SEIS summarily dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife. The SEIS implies that since there will always be incomplete information, the missing information is not necessary at the lease sale stage. Nowhere in Appendix A, however, does BOEM explain why existing information is sufficient for making decisions among the alternatives.

The SEIS repeatedly states that most information will be required at the exploration and development phases, but it does not indicate what specific information will be needed at those phases. The NWAB is concerned that few information gaps will be filled during reviews of exploration projects, especially considering the 30-day requirement for BOEM to make a decision on a proposed exploration plan. During review of Shell’s Chukchi Sea exploration plan, there was little emphasis on filling information gaps. In addition, Shell’s exploration plan dismissed a large oil spill as not being reasonably foreseeable. Considering the recent oil spill in the Gulf of Mexico occurred during the drilling of an exploration well, it is important that the BOEM specify exactly what information gaps it identified in the FEIS that will be filled during the exploration phase.

The BOEM’s decision to release the draft SEIS without acknowledging the need to fill information gaps goes against science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident. New information about oil spill response capabilities should be incorporated into the SEIS. The original FEIS was developed on historic spill data from the Gulf of Mexico and incorrect assumptions about the capability of responding to a large spill. Considering only about 25 percent of the oil from the Deepwater Horizon disaster was removed by mechanical means, assumptions for oil recovery in the

Mayor Northwest Arctic Borough Comment

November 29, 2010

Page 3

Chukchi Sea need to be revised. The extreme conditions in the Arctic and distance from infrastructure would make it difficult to recover oil from a large oil spill, especially under adverse weather conditions. In addition, considering it took 4.5 months to complete the relief well for the Deepwater Horizon, a spill occurring late in the drilling season in the Chukchi would mean a relief well would need to be drilled throughout the harsh Arctic winter.

Since issuing the FEIS, the agency knows what specific locations of the planning area have been leased. This knowledge makes it more feasible to fill information gaps for this lease sale.

We must be thoughtful and responsible in developing offshore resources in Alaska so that we protect the pristine fisheries, wildlife, and subsistence way of life for generations to come. In the Arctic, we must continue to be guided by science and the voices of Northwest Arctic and North Slope communities as we chart a wise path forward.

The process for development of oil and gas resources in the Alaska Outer Continental Shelf (OCS) should recognize the need to fill information gaps before leasing proceeds. The fact that there will always be additional information needs should not be a reason to proceed without obtaining essential information. The NWAB believes a precautionary approach, such as the one used by the North Pacific Management Council for the Arctic fisheries, provides a model for oil and gas development.

The August 2009, Fisheries Management Plan for the Fish Resources of the Arctic Management Areas found that commercial fishing in Alaska’s Arctic waters should not proceed until more information is available to support sustainable fisheries management.

Instead of proceeding with the current draft SEIS, the NWAB requests BOEM first develop a complete plan for fulfilling information needs. The plan should put a priority on collecting essential missing information and what level of information is necessary at the lease sale, exploration, and development phases. The plan should be based in part on the data generated by the ongoing United States Geological Survey analysts of Arctic oil and gas activities due out in spring 2011. Before making any final decisions, the agency should prepare a revised draft SEIS, followed by public review and comment.

BOEM’s first priority must be to protect the people of the Northwest and North Slope boroughs where survival is directly linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about when to allow oil drilling in the Chukchi Sea.
Mayor Northwest Arctic Borough Comment

November 29, 2010

The NAB is pleased to have the opportunity to submit comment on the SEIS, and we look forward to working with the BOEM in the future on activities in the northern Continental Shelf.

Sincerely,

[Signature]

Mayor Northwest Arctic Borough

NORTHWEST ARCTIC BOROUGH

P.O. Box 1110
Kotzebue, Alaska 99752
(907) 442.2500 or (800) 478.1110
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November 30, 2010

John Goll, Region Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-8520

Subject: Chukchi Sea Draft SEIS Comments
Submitted by email: BOEMRPAKPublicComment@boemrs.gov

Dear Mr. Goll:

The Northwest Arctic Borough (NAB) submits these comments on the September 2010 draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Lease Sale 193. Overall, the NAB believes the SEIS did not adequately address missing information, and we urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) to develop a comprehensive interagency research plan before issuing the final SEIS. The research plan should identify what information is needed for the lease sale, exploration and development phases and use a coordinated approach among agencies and industry to obtain this information.

While most of our comments address outstanding information needs, the NAB is also concerned about the significance thresholds outlined in Section IV.A.1 of the SEIS. The thresholds for determining significant impacts are too high. For example, an impact to marine mammal would not be considered significant unless it took 3 or more generations for a population to recover to its former status. An impact to subsistence harvest would not be considered significant unless subsistence resources were “unavailable” or “unreliable”. For use, or available only in greatly reduced numbers for a period of 1-2 years” (p. 60). For the people of this region, impacts to fish and wildlife and subsistence would be significant at much lower levels.

The NAB urges BOEM to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and respect for Arctic people who live in this region and depend upon the wildlife for culture and subsistence. Note, the analyses in the original FEIS notes hundreds of areas in which information was missing. In response to the court mandate, the draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice, and that no

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Now in the Arctic, we must continue to be guided by science and the voices of Northwest Arctic and North Slope communities as we chart a wise path forward. The process for development of oil and gas resources in the Alaska Outer Continental Shelf (OCS) should recognize the need to fill information gaps before leasing proceeds. The fact that there will always be information needs should not be a reason to proceed without obtaining essential information. The NAB believes a precautionary approach, such as the one used by the North Pacific Management Council for the Arctic fisheries, provides a model for oil and gas development. The August 2009, Fishery Management Plan for the Fish Resources of the Arctic Management Area found that commercial fishing in Alaska's Arctic waters should not proceed until more information is available to support sustainable fisheries management.

Instead of proceeding with the current draft SEIS, the NAB requests BOEM first develop a complete plan for fulfilling information needs. The plan should put a priority on collecting essential missing information and what level of information is necessary at the lease sale, exploration and development phases. The plan should be based in part on the data generated by the ongoing United States Geological Survey analysis of Arctic oil and gas activities due out in Spring 2011. Before making any final decisions, the agency should prepare a revised draft SEIS, followed by public review and comment.

BOEM's first priority must be to protect the people of the Northwest and North Slope Boroughs whose survival is directly linked to the Chukchi Sea and Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decisions about where to allow oil drilling in the Chukchi Sea.

The NAB appreciates this opportunity to submit comments on the SEIS, and we look forward to working with the BOEM in the future on activities in the Outer Continental Shelf.

Sincerely,

[Signature]

Ukialayakuaq Tom Olkenak, Planning Director

Cc: Silkaauq Whitling, Mayor
Alagiaq Grant Hildesh, Deputy Planning Director
Killaq John Chase, Community Planner and Coastal Area Specialist
Dan Forester, Planning Director North Slope Borough
Next, we discuss additional analysis still lacking in the document, including the need for an expanded human health impact assessment. Finally, we suggest a slightly revised timeline for drafting of the Final SEIS. This will enable BOEMRE to better identify and address potential risks associated with the critical lack of data to support responsible decision making, and therefore better comply with the order of the District Court.¹

A. DEFICIENCIES IN DISES ANALYSIS

Appendix A of the DISES provides an analysis of individual statements from the 193 FEISs that identify incomplete or unavailable information. We are told that the analysis “comprehensively addresses each item of incomplete or unavailable information.” The methodology used in the analysis is briefly described as follows:

“information was considered relevant if it could be connected to reasonably foreseeable significant adverse impacts as stipulated by CEQ regulation and following the significance criteria described for each resource in the 193 FEISs. All statements including relevant incomplete or unavailable information that would be relevant were then evaluated to determine whether the information was essential to a reasoned choice among alternatives. To be essential, the information must provide a means for making a clearer distinction between two or more alternatives. Lastly, if missing information was determined to be relevant and essential, management evaluated the potential means of obtaining the information to determine whether cost would be exorbitant.”¹

This entire approach is problematic in several respects, both in terms of its logical construction, and its implementation.

1. Focus on Individual Statements Ignores Data Gaps in These Statements

By focusing only on each individual statement, the analysis overlooks acknowledging the sheer weight of all of the information not known that, taken as a whole, reveals a poorly understood ecosystem and poorly understood potential impacts. Small data gaps, which individually may be dismissed as not greatly significant, can through their interrelationships and associations pose significant risks. And small data gaps are critical in light of the almost total lack of information on the use of the Chukchi Sea by most marine mammal species.

BOEMRE explains its reason for ignoring particular scientific data as follows:

“...some information is simply not of a type that would alter scientific judgments or affect decision-making. Some information simply is not significant or relevant enough to be considered essential to a reasoned decision among alternatives. For example, additional information about the winter food habits of a whale that is...”¹

BOEMRE’s Alaska Region concludes in the draft SSIS that the effects under all the action alternatives proposed in the original EIS are basically the same. This conclusion suggests that the range of alternatives is inadequate. The basic information about the Chukchi Sea ecosystem that the Alaska Region concludes is missing and conceives in, in many instances, relevant to potentially significant effects from the lease sale, is essential to proposing a meaningful range of alternatives that would have meaningfully different effects on the environment.”¹

We strongly agree with this assessment. We ask that BOEMRE refrain from using information that is not statistically complete available science within the framework of a conservation precautionary approach designed to avoid adverse impacts where they cannot be reliably quantified or qualified due to a lack of available information.

The Council on Environmental Quality (CEQ) refers to the alternatives analysis section as the “heart of the environmental impact statement.” CEQ regulations require agencies to present the environmental impacts of the proposal and the alternatives in comparative form, “thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.”¹ Yet the alternatives in the 193 FEISs are defined without reference to a clear and scientifically grounded baseline of ecosystem information. They are therefore not based on sharply differing levels of impacts and associated risks to resources and competing uses, and there is no clear basis for choice among them.

B. SIGNIFICANCE OF THE MISSING INFORMATION

1. Need to Consider Information at This Stage

Decisions made as a result of a lease sale planning process are consequential in that they determine whether, when, where, and under what conditions to issue leases in a particular OCS region. Information concerning the resources in the area and the effects of oil and gas activity on these resources is essential to making those critical leasing decisions.

On September 16, 2009, more than 400 Ph.D.-level scientists signed a letter to President Obama as Secretary Salazar was taking comments on a proposed interim 5-year OCS Leasing Program. The Secretary was in part considering what level of offshore oil and gas activity to allow in the Chukchi and Beaufort Seas. The scientists cited the changes taking place and urged the President


² DISES, Appendix A, p. 1 [emphasis in original].


⁴ Id.

Mayor North Slope Borough Comment

only present within the action area during summer months may not be significant or relevant enough to be considered essential to a reasoned decision among alternatives.

It is our belief that, precisely because little is known about whales, members, distribution, and behavior in the Chukchi Sea “action area” during the summer months, more attention should be paid to the animals’ habits elsewhere during other times of the year (including food habits and any stressors to those habits that the population may be experiencing). Given what is known about the rapidly, and unpredictably changing Arctic and sub-Arctic marine environments, it is reasonably foreseeable that whales may be experiencing stressors throughout their migratory range. This must be considered in assessing the wisdom of permitting additional activities that have the potential to further affect the population.

We ask that BOEMRE consider for each resource and conflicting use the totality of what it knows and does not know. The agency should, on a case-by-case basis, determine whether it can credibly say that projected activities can be conducted in a manner that does not significantly impact each wildlife resource, environmental value, or use.

The agency’s inability to identify specific impacts should not lead to the conclusion that there are no impacts. In our many years of reviewing lease sale documents, we have seen this BOEMRE’s predecessor agency employ this flawed reasoning all too often.

We remind you of comments made by then President-elect Obama in his December 17, 2008 weekly radio address in a bold stand for making decisions based on science and facts rather than ideology as he introduced leading members of his science and technology team: “The truth is that promoting science isn’t just about providing resources—it’s about protecting free and open inquiry,” President-elect Obama said. “It’s about ensuring that facts and evidence are never twisted or obscured by politics or ideology. It’s about listening to what our scientists have to say, even when it’s inconvenient—especially when it’s inconvenient. Because the highest purpose of science is the search for knowledge, truth and a greater understanding of the world around us. That will be my job as President of the United States...”¹

2. Range of Alternatives is Inadequate

BOEMRE’s acknowledgement of just how much it does not know about Chukchi Sea resources and values renders the agency’s identification of alternatives, against which the importance and relevance of missing information is measured, defective as a means of ensuring that efforts to those resources and values can be avoided, minimized, or mitigated.

A coalition of conservation organizations discussed the improper framing of Sale 193 alternatives in an October 27, 2010 letter to Secretary Salazar and BOEMRE Director Bronnevig.

¹ Id. at p. 3.
Mayor North Slope Borough Comment

to take a time out from offshore industrial activity to allow for a precautionary, science-based approach that better assesses the consequence of development in a rapidly changing ecosystem.

We believe that the environmental impacts of oil and gas development in the waters of the U.S. Arctic are not adequately assessed and cannot yet be accurately predicted. Hence offshore oil and gas development can take place safely and appropriately, we must have a better understanding of the ecosystem, adequate consultation with Alaska residents in the Arctic about their needs and concerns, and adequate prevention, mitigation, and response capacity and measures.

As scientists, we urge the President of the United States and his administration to take a science-based precautionary approach on decisions regarding the offshore oil and gas development of the U.S. Arctic. Dozens of oil and gas permits for new oil and gas development, must be thoroughly researched, sustained monitoring, and comprehensive planning to better understand and avoid impacts and determine the best way forward in the U.S. waters of Alaska and Beaufort Sea.

The DSEIS does not acknowledge or address the concerns and recommendations of scientists in its conclusion that “while many items of incomplete, missing, or credible information were broadly relevant to the important issues at hand, none were essential for a reasonable choice among alternatives.” The BOEMRE offers a process to comply with the order of the U.S. District Court to determine whether missing information identified in the Sale 19 FES is essential or relevant under 40 C.F.R. 1502.22.

A lease sale involves competitive and consequential decisions that by law and by practice greatly enhance the likelihood that oil and gas activities will be permitted. To such small measure, as we have seen in recent years, leases have the capacity to bring about significant decision on agencies, local private relations, and otherwise, can substantially affect public resources and information far beyond the decision of market makers, other stakeholders, and the public to support their desired offshore operations. Good, reasonable, complete, and credible information about the biological function of different parts of the planning area, and the relative importance and interdependence of those parts for biota is critical to the success of a lease.

Similarly, a reasonably complete understanding of the potential effects of industrial activities, alone and in combination with other foreseeable activities and forces, on different components of the ecosystem is critical, determining whether, when, what, and under what conditions those activities should be permitted.

2. Same Information Gaps in DSEIS and FEIS

Our comments today are similar to those we and others submitted during the drafting of the original EIS. We are concerned that the DSEIS has come no closer to a thorough, reassessed

3. New Information and Considerations to Include

We strongly believe that the BOEMRE must consider new information and circumstances that have arisen since the FES was prepared more than three years ago. With so little known about the Chukchi Sea ecosystem, overestimation of new information becomes all the important to leasing decisions.

Under the National Environmental Protection Act (NEPA) and its regulations, new information would have triggered a supplemental EIS (regardless of what the court order requires). NEPA also requires that an agency use “high-quality information and accurate scientific analyses.” An agency cannot rely on “outdated data” or fail to “acknowledge the limitations in a methodology.”

Although new and relevant reports regarding bowhead whales in the Chukchi Sea have been released since the issuance of the FES, the DSEIS does not consider them. We urge you to consider an important finding of these reports: the majority of bowhead whales in the Western Arctic stock migrate through the Lease Sale 19 area. This information is relevant, is important, and we think the agency has performed key conclusions reached in the DSEIS and FEIS, but has yet to be considered by BOEMRE.

The results of these studies, their implications with respect to potential impacts to bowhead whales and other resources associated with Sale 19 related activities, and the failure of BOEMRE to appropriately acknowledge and analyze them are discussed in detail in comments on the DSEIS to be submitted by the Alaska Fishermen’s Whaling Commission (AEWF). We share

A supplemental EIS must be prepared where “[t]here are significant new circumstances or information relevant to the environmental impacts and bearing on the previously prepared EIS.” Where information related to an EIS comes to light, the agency must take it “hard look” at whether the new information is significant to the environmental impact analysis. 43 C.F.R. § 1502.90(c). Where new information related to an EIS comes to light, the agency must take it “hard look” at whether the new information is significant to the environmental impact analysis. 43 C.F.R. § 1502.90(c). Where new information related to an EIS comes to light, the agency must take it “hard look” at whether the new information is significant to the environmental impact analysis. 43 C.F.R. § 1502.90(c). Where new information related to an EIS comes to light, the agency must take it “hard look” at whether the new information is significant to the environmental impact analysis. 43 C.F.R. § 1502.90(c).

4. See 40 C.F.R. 1502.90(c).


6. See Executive Order 12941, Federal Actions to Address Environmental Impacts on Minority Populations and Low-Income Populations, April 1, 1993; 60 FR 16014.

Mayor North Slope Borough Comment

analysis than the Draft (DSEIS) and Final Sale 193 EIS (FEIS) documents that BOEMRE was required to supplement.

In the DSEIS, BOEMRE concludes that much of the information identified as missing in the Sale 193 EIS was relevant to potential significant effects of the lease sale. The agency concludes, however, that none of the missing information is essential to resource choices among alternatives, and thus there is no obligation to obtain the information.7 This of course echoes the conclusions reached in the Final 2007 EIS.

We could not disagree more. The missing information concerns the most basic details concerning the existence, distribution, and life history characteristics for most marine mammal and other important trophic level species occurring in the region. There is a near total lack of information concerning lower trophic level species, and no assessment of the potential impacts of industrial activities on these critical components of the Chukchi Sea ecosystem.

In our comments on the DSEIS, we set out a compelling basis for our assertion that the range of alternatives was inadequate. But rather than respond to our points, the Minerals Management Service (MMS) simply stated that it disagreed with our conclusions.8 No additional or modified alternatives were presented in the FEIS. With the exception of the added and narrow gas development scenario, none are included in the DSEIS that reflect the absence of essential information and adopt an appropriately cautious approach to leasing.

In the FEIS, BOEMRE avoids consideration of nearby projects as follows:

At present, no process is in place to acquire meaningful information regarding Russian commercialization and industrialization in the high Arctic. While MMS acknowledges the existence of various industrial activities, these activities are not well understood and, as a result, fall into the speculative category of activity as defined in Section V of this EIS.9

As we pointed out in our comments on the FEIS, information is readily available concerning large-scale oil and gas development at Russia’s Sakhalin Island. The details of the project, and the challenges it has and continues to face, have been extensively reported in the industry and general press. Shell’s website describes that company’s involvement on Sakhalin. Thousands of other references are identifiable through a simple web search. Indirect operations in adjacent Russian waters must at least be considered a credible cumulative effects analysis considering oil and gas leasing in the Alaska Chukchi Sea, yet BOEMRE has still made no attempt to gather readily available information.

To adequately respond to the Court’s order, BOEMRE must expand its definitions of what information is essential and relevant to include information on all effects producing activities and C. NEED FOR ADDITIONAL EXPANDED ANALYSIS

The District Court in part ordered BOEMRE to analyze the environmental impact of natural gas development. But the BOEMRE does not expand the human health impact analysis in the Sale 193 EIS. To the extent that the assessment of the potential impacts of gas development is new additional analysis in the DSEIS, it requires an expansion of the human health impact analysis

The North Slope Borough, our communities, and individual residents have long been concerned about the potential human health impacts from potential oil and gas exploration, development, and production activities. These concerns include air quality issues and subsequent increase in respiratory problems, contamination of subsistence resources through and air pollution, disruption and impact of access to subsistence resources and associated food insecurity, and social issues associated with increased contact with non-resident industrial workers.

BOEMRE is obligated by NEPA,10 by Executive Order 12898,11 and by subsequent guidance from the Council on Environmental Quality to assess possible human health impacts. A commitment to perform this required assessment at the lease sale planning phase was made in the 2007-2012 OCS Leasing Program. We remind you that the assessment is not itself the required objective; it is but a means of identifying potential health related impacts. The legal mandate then to attempt to mitigate these identified potential impacts.

Neither the FEIS nor the DSEIS adequately recognizes and addresses as a component of cumulative analyses the likely long-term impacts on human residents of the increased industrialization of the Arctic. There are numerous studies that report potential health impacts and others concluding that many potential impacts to wildlife can be mitigated to varying degree. We are unsurowed, however, of any comparable literature identifying an adequate and proven approach to mitigating impacts on subsistence activities.

The FEIS referred to a wide array of potential human health impacts associated with Sale 193 lease sale, and the cumulative case, and included some analysis of these impacts provided to the agency by the Borough. Public health issues were mentioned in the “sociocultural” impacts and “environmental justice” discussion. Yet there was not an effort to systematically and thoroughly address human health concerns associated with the DSEIS.

The DSEIS neither corrects these deficiencies nor provides any meaningful analysis of potential human health effects associated with gas development alone, or with other potential development and factors that may cumulatively impact the health of our people. Nor does the DSEIS identify any potential mitigation measures to address those issues.

Mayor North Slope Borough Comment

Rebecca’s Comments for DSEIS for Lease Sale 193 Page 7 of 12

Mayor North Slope Borough Comment

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BOEMRE is legally and actually required to include a rigorous, systematic assessment of human health impacts in its NEPA analyses, and to identify strategies to mitigate identified potential impacts.

D. ENVIRONMENTAL JUSTICE

Federal agencies must "make achieving environmental justice part of their mission," pursuant to Executive Order 12898. It has been troubling to hear some of the consistent themes of comments and testimony offered to date by industry stakeholders, the State of Alaska, and the Municipality of Anchorage, among others, concerning the Sale 193 SEIS. These comments repeatedly acknowledge the great resource potential of the Arctic OCS, but also suggest that the nation's dependence on foreign sources of oil, the jobs that would be generated, and the revenues that will be received at the state level. They have said that in light of these considerable benefits, the risks are worth taking.

First, we believe that it is always wise when conjectural resource estimates are offered as justification for industrial expansion into a frontier area to remember that they are largely speculative. It is somewhat ironic that during the first Sale 193 comment period the estimate of recoverable oil within the National Petroleum Reserve-Alaska, once heralded to hold over 19 billion barrels, was dramatically downsized to less than one billion barrels.

Second, our nation's dependence on foreign oil would annually be reduced by only single-digit percentage points even if the wholly optimistic estimates of recoverable volume prove accurate. The jobs figures quoted are misleading. Only a fraction would be directly oil industry positions implied, and it is likely that many of those slots would be filled by workers not now residing in Alaska. And yet, it is true that the State would receive considerable revenue from oil transported through the Trans-Alaska Pipeline System. The Borough also would receive some measure of revenue from taxes on industrial facilities constructed onshore and in state waters, and perhaps funds from the Coastal Impact Assistance Program if it is continued into the distant future.

That all being said, it is clear that the great majority of any benefits associated with Chukchi Sea OCS leasing, exploration, and development will be realized by the Borough and our residents, by companies, agencies, organizations, and workers elsewhere. The great majority of the risks, however, will be borne by our people, and our social and cultural institutions and systems. That imbalance in benefits and risks, as well as what environmental justice requirements were created to identify and avoid. But the DSEIS fails to meaningfully assess the potential environmental justice implications of Lease Sale 193.

Here too, the unavailability of critical relevant information, and the framing of alternatives that do not provide clear choices defined by levels of potential impacts and risks, confounds any attempt to meaningfully assess the potential threats of this sale to our people.

reasonable efforts to respond to the issues raised on remand by January 21, 2011, and to file a report with the Court outlining the status of the matter if the deadline proves unrealistic. We recognize that BOEMRE intends to Enforce the SEIS by January 21, 2011, but believe that if the agency articulates a legitimate reason, there is room for extending the deadline. We ask that BOEMRE seek such an extension delay from the Court to accommodate the need to review additional information not yet available, but which has the potential to enhance the agency's ability to comply with the orders of the Court.

Independent of the January 21, 2011 date set by the Court, there is no urgent need for the SEIS to be completed by January 2011 or for a Record of Decision (ROD) to be issued by March 2011. There is no drilling now proposed in the Chukchi Sea during the 2011 open water season, Shell, which had proposed exploratory operations on Sale 193 leases in recent years, has announced that it will be drilling only in the Beaufort Sea in 2011.

Secretary Salazar has already acknowledged that significant data gaps exist with respect to the Arctic marine ecosystem and the associated changes being caused by accelerating climate change. He has ordered the U.S. Geological Survey (USGS) to prepare a report outlining the effects of oil and gas exploration on marine mammals and other resources, to determine what research is needed for effective and reliable spill response in ice-covered regions, to evaluate what is known about cumulative effects of oil and gas extraction on ecosystems and other natural resources, and to review how ongoing climate change may mitigate or complicate Arctic oil and gas development impacts.

The task assigned to BOEMRE by the Court and that assigned to the USGS by the Secretary are essentially overlapping and highly complementary. BOEMRE must determine whether missing information identified in the FEIS for Lease Sale 193 is essential or relevant, and the USGS must identify Chukchi and Beaufort Sea knowledge gaps. With the USGS report due in the first quarter of 2011, it seems to us that the production of the Final SEIS and ROD to align the results of both efforts and to ensure that BOEMRE's compliance with the Court's order can benefit from the work of the USGS.

CONCLUSION

We have long advocated a precautionary approach to oil and gas leasing and operations in our Arctic waters. In the past year, we have pointed to the essential components of such an approach adopted in August 2009 by the Department of Commerce in its Arctic Fishery and Management Plan, and asked that a comparable strategy be adopted by the Department of the Interior with respect to its responsibilities in the same Arctic waters. The Commerce approach was adopted largely in response to the recognition that a warming Arctic is bringing rapid and unpredictable change to the region. Disturbing revelations concerning failures in planning, preparation, oversight, and oil spill response in the less extreme and better understood waters of the Gulf of Mexico following the April 20, 2010 Deepwater Horizon spill only bolster the argument for caution in the challenging frontier of the Arctic. Significantly, retired U.S. Court Commandant Thad Allen, who oversaw the federal spill response in the Gulf, heralded the Fishery Management Plan as "a wise precautionary measure to ensure that we find the right balance between the environment and economics for a healthy and sustainable Arctic region." We ask...
Mr. Clara Cowles
Acting Regional Supervisor, Licensing and Environment (MS 8300)
Minerals Management Service
Alaska OCS Region
3801 Centerpoint Drive, Suite 400
Anchorage, AK 99503-5823

Via E-Mail: akels@mms.gov

Re: Comments on Chukchi Sea Lease Sale 193 Final EIS

Dear Mr. Cowles,

The North Slope Borough (Borough) appreciates this opportunity to comment to the Minerals Management Service (MMS) on the Final Environmental Impact Statement (FEIS) for proposed Chukchi Sea OCS Lease Sale 193. We are pleased that some of our comments on the Draft EIS (DEIS) have resulted in changes in the FEIS.

However, MMS has essentially taken the position that leasing is prudent regardless of inadequate knowledge of the area to be leased; the potential for significant impacts to so many resource, to our subsistence harvesters, and to our health; and regardless of the near-impossibility of an effective response to oil spills under Chukchi Sea conditions. The persistent theme of the affected environment and environmental consequences sections of the document is the staggering lack of information regarding this vast marine area. With so little information upon which to base its decision, it is unreasonable for MMS to allow Sale 193 to proceed.

Our position remains unchanged that oil and gas leasing should not occur in the Chukchi Sea, and therefore recommend adoption of Alternative II. Among the action alternatives, we join the Alaska Eskimo Whaling Commission (AEWC) in believing that Alternative III is preferable, and fully endorse the AEWC’s FEIS comments on this point. We also believe that adoption of Alternative IV is indefensible given that MMS acknowledges that it was based on a 24-year-old biological opinion from the National Marine Fisheries Service that is nearly out of date and has in any event been unavailable for review.

With respect to the Exploration Seismic Survey Activities Alternatives, it is unclear why an additional alternative was not analyzed. Namely an alternative that would prohibit pre-Sale 193 seismic surveys in the NEZ and/or partial blocks of the Corridor I (Alternative III) Deferral area along the coastal edge of the sale area until the sale sale decisions have been made and the NMFS/MMS Arctic Beringian EIS has been completed. It would seem logical to have included such an alternative to track with Alternative III, in the same way Seismic Alternative B tracked with Alternative IV.

As was the case throughout the DEIS, many of the conclusions reached in the FEIS lack meaningful support. The same is true with respect to some responses to comments. The lack taken by MMS’ response to the Borough’s first identified comment, NSB 006-001, that the range of alternatives presented in the DEIS was inadequate, is one example. We set out a compelling basis for our assertion that the range of alternatives was inadequate. Rather than respond to our points, MMS simply states that it disagrees.

There are problems as well when an actual response is provided. With respect to response NSB 006-006, for example, MMS states: “[t]hat present, no process is in place to acquire meaningful information regarding Russian commercialization and industrialization in the high Arctic. While MMS acknowledges the existence of various industrial activities, these activities are not well understood and, as a result, fall into the speculative category of activity as defined in Section V of this EIS.” On the contrary, information is readily available concerning large-scale oil and gas development in Russia’s Siberian hinterland. The details of the project, and the challenges it has and continues to face, have been extensively reported in the industry and general press. Shell’s website describes that company’s involvement, and thousands of other references are identifiable through a simple web search.

Response NSB 006-001 is non-responsive. We appreciate that “[t]he MMS acknowledges the impact of numerous meetings and documents reviews on the planning staff of the NSB and the even more limited manpower available in smaller communities.” It is also apparent that “[t]he accelerated MMS leasing timetable and an increase in the number of seismic survey and exploration permits has taxed the agency, as well.” None of this, however, relieves MMS of its responsibility to mitigate the identified and significant impacts to our minority North Slope population.

The workload of MMS and other agency staff is not of concern under the Environmental Justice Executive Order 12898. Nor were our comments limited to concerns about Borough and community staff workloads. They were meant to explain the dual nature of the impacts associated with continuous multiple overlapping planning processes. Each single review within the seemingly endless multitude of reviews deals with a proposal that would alter the health and culture of the majority of our residents. Moreover, the reviews themselves have a hugely significant impact. The fear and anxiety engendered by

Sincerely,

Edward S. Itta
Mayor

Edward S. Itta, Mayor
July 16, 2007

Mr. Clara Cowles
Acting Regional Supervisor, Licensing and Environment (MS 8300)
Minerals Management Service
Alaska OCS Region
3801 Centerpoint Drive, Suite 400
Anchorage, AK 99503-5823

Via E-Mail: akels@mms.gov

Re: Comments on Chukchi Sea Lease Sale 193 Final EIS

Dear Mr. Cowles,

so much activity, independent of the outcomes, burdens both our subsistence-dependent residents and our community institutions.

NSB 006-016 is also non-responsive on any meaningful level to our identification of the cascading and complex impacts associated with the many overlapping planning processes, including the choices that must be made, and the effects felt by individual North Slope residents and the community as a whole.

With respect to NSB 006-011 and other responses to our comments concerning the necessity of MMS fulfilling its responsibility to analyze and mitigate the potential impacts of OCS oil and gas leasing on human health, we appreciate the additions to the document resulting from the consultation between MMS and Dr. Aaron Wernham, representing the Borough on these issues. However, MMS has failed to include or even respond to the health-related mitigation measures submitted by Dr. Wernham. This is a significant omission that must be corrected before any leasing decision can be made based on this FEIS.

In conclusion, we strongly believe that oil and gas leasing, exploration, and development should not occur in the Chukchi Sea. The absence of baseline environmental data, the region’s harsh weather and ice conditions, its remoteness from existing infrastructures, and the established lack of capacity to respond to a spill under even less challenging conditions require that there be no oil and gas leasing in the Chukchi Sea.

Thank you for considering these comments.

Sincerely,

Edward S. Itta
Mayor

July 16, 2007

John Goll
Regional Director
Alaska OCS Region
Minerals Management Service
3801 Centerpoint Drive, Suite 600
Anchorage, AK 99503-5823
email: akels@mms.gov Attn: Sale 193 EIS

RE: Comments on Final EIS for Chukchi Sea Lease Sale 193

The Alaska Eskimo Whaling Commission appreciates this opportunity to provide comments on the Minerals Management Service’s final environmental impact statement on Lease Sale 193, proposed for the Chukchi Sea.

Thank you for your time and attention in considering our comments. Please call me if you have any questions.

Sincerely,

/ Harry Brower, Jr.
Chairman

cc: AEWC Commissioners, Senator Ted Stevens, Senator Lisa Murkowski, Congressman Don Young
Mayor North Slope Borough Comment

INTRODUCTION

MMS is in the final process of conducting an environmental review for proposed oil and gas lease Sale 193. The National Environmental Policy Act (NEPA) and the OCS Lands Act require that MMS use this process to do more to help fulfill its agency’s responsibility to oversee offshore oil and gas development. Through these Acts, Congress also has required that the Secretary of the Interior act through MMS, undertake a proactive, credible review of potential impacts to the marine and human environments affected by MBS development. These responsibilities can be met by selecting the alternative that is most able to meet the purpose and need of the proposed action while protecting the human and marine environments. In addition, under the Marine Mammal Protection Act’s standard for the protection of our marine mammal subsistence resources, MMS must analyze and implement mitigation measures that preserve the availability of bowhead whales and other marine mammals for subsistence uses. (MPMA 101a(5)(a) and (d))

Given the unique situation the agency faces in overseeing proposed development in the Arctic Ocean, the AEWC finds MMS’ proposed environmental review process inadequate. The AEWC further believes that MMS has not presented adequate alternatives. As a means of encouraging its environmental review and expediting the current process, the AEWC strongly encourages MMS to support our community's efforts to participate more fully in the process, including participation in the development of mitigation measures.

The issues our community faces as a result of OCS oil and gas activities fall into two broad categories: environmental and socio-cultural. Under federal law, MMS is responsible for working with local communities to address impacts in both of these categories. We are aware of MMS’ presence among our people as it gathers information and traditional knowledge to include in the EIS. We reside in the Draft EIS that our input will be considered at the final regulatory stage regarding this sale as others before it. Yet in northern Alaska, MMS, historically, has shown little willingness to take on the issues that must face in order to address these impacts.

With respect to environmental issues, we urge the Secretary to reject MMS’s preferred alternative IV and adopt Alternative III, which is likely to accomplish the purpose and need of the proposed action while simultaneously offering a protective buffer between oil and gas operations and the spring lead system where our villages conduct their spring bowhead whale hunts. In addition, certain of our villages are planning to conduct fall whaling, and an adequate distance between whaling activities and oil and gas activities in the Chukchi Sea will be crucial to a successful hunt and to maintaining the safety of whaling captains and crew.

With respect to socio-cultural issues, we remain adamant that MMS revise its significance thresholds, or abandon them and review impacts on a case by case basis, using the regulations of the Council on Environmental Quality on the evaluation of significance using an analysis of context and ten intensity factors.

Finally, as we review the list of mitigation stipulations that fall short of our expectations and our recommendations, we are afraid that MMS once again is prepared to make decisions that do not address our needs and fears. For example, we disagree with MMS’s characterization that the only significant adverse effect to our bowhead whale subsistence hunt, our socio-cultural systems, and environmental justice will occur in the “unlikely event” of a large oil spill. Significant adverse effects will occur as a result of routine program operations, such as exploration, construction, operations, and decommissioning of oil and gas development facilities.

We urge MMS, as always, to select the alternative and mitigation measures that will protect our marine resources and our subsistence livelihood, rather than focusing solely on the objectives of oil and gas companies in a time of soaring gas prices and record profit.

COMMENTS

I. The Secretary Should Adopt Alternative III As the Choice That Strikes the Most Effective Balance Between Development of the Resources of the Outer Continental Shelf and the Protection of Human and Marine Environments.

A. Alternative III Offers MMS The Best Chance To Serve The Purpose And Need Of The Proposed Action While Protecting The Living Marine Resources of the OCS and The Bowhead Whale Subsistence Hunt.

The purpose and need of the Proposed Action are to offer for lease areas in the Chukchi Sea OCS that might contain economically recoverable oil and gas resources. FEIS I-1. Both Alternative III and Alternative IV accomplish the purpose and need; however, Alternative III, which defers 1,785 lease blocks (Commer), from the sale offers greater protection of the human, biological and physical environments than does Alternative IV, the agency’s Preferred Alternative.

According to MMS’s “Opportunity Index,” Alternative III allows very good odds that industry will successfully produce the one commercial development that MMS envisions occurring under its Proposed Action. FEIS IV-7. Alice, Alternative III offers a greater buffer between the noise disturbance of exploration and development than does.

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Alternative IV. Fewer exploration and production wells are likely to be drilled if a smaller planning area is offered for leasing. This means fewer support vessels, less barging, fewer fixed wing and helicopter trips from offshore project sites to the mainland, and generally less activity in the Chukchi Sea.

B. MMS Ineptly Cites To A Twenty-Year-Old Biological Opinion To Support Its Choice Of Alternative IV.

MMS uses a 1987 Biological Opinion from the National Marine Fisheries Service to support its Alternative IV, the Preferred Action. This decision creates two problems for the agency’s recommendation. First, it is based on an out-dated analysis rather than the absolute science available.

Second, the agency apparently is unable to provide a cite that would allow members of the public to locate this reference, if MMS plans to recommend to the Secretary a particular set of resource management choices, the agency should be able to cite to the study that provides support for those choices.

However, the citation to the study is missing from the FEIS’s bibliography, and NMFS Administrative Office in Anchorage cannot locate the referenced study from the information. “1987 NMFS Biological Opinion on the Chukchi Sea” which is the only cite to the reader of where to look for this analysis. MMS should not make its primary resources inaccessible to the reader in this way. It leads to a loss of transparency and to situations of mistrust and anger.

II. MMS Discounts The Degree To Which Current High Oil Prices Drive The Oil And Gas Industry’s Race to the Chukchi Sea.

Throughout the FEIS, MMS maintains that industry will encounter regulatory and logistical obstacles that will reduce the likelihood that development will occur by more than 10 percent, according to MMS. [However, the Open Water Season of 2006 touched off an explosive increase in seismic exploration in the Chukchi and Beaufort Seas. The intensity continues during the 2007 Open Water Season, as Shell and other companies will spend hundreds of millions of dollars to search for oil in the waters from which we take our native foods. The future planned level of seismic activity is forecast in stark relief in the National Marine Fisheries Service’s (NMFS) and the Minerals Management Service’s (MMS) Draft Programmatic Environmental Impact Statement for seismic operations, which contemplates six seismic operations in the Chukchi Sea. It is unfathomable that companies would devote so much money and human effort into an enterprise in which they have only a 10% chance of finding and developing the resources of the OCS.]

To accommodate industry demands for access to the Chukchi Sea in 2006, MMS prepared a Programmatic Environmental Assessment (see footnote 4). The PEA, and
importance of subsistence practices in our communities, how they interconnect us, and how they are essential to our cultural identity. However, when MMS arranges a scale depicting the degree of impacts, the departure from the CEC regulations, and from reality, begins.

CQG has listed ten "intensity factors" that MMS has never analyzed with respect to the effects of oil and gas activities on our coastal subsistence way of life. MMS has listed these factors, but not used them in analysis. We tell them here, along with what we might expect MMS to consider in its analysis.

The following should be considered in evaluating intensity:

1. "Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial." As an example (and in the interest of time and space, we include only one), MMS is tasked with providing a regulatory program in which industry may exploit the OCS for oil and gas resources. This produces a rational benefit, and MMS usually notes the "benefits of local employment with oil and gas companies. But very few of these jobs are awarded to Native people. In fact, while average over-all salaries on the North Slope are relatively high, the majority of employees live below the poverty line. There is a net, adverse significant effect here that MMS does not include in composing its significance thresholds for sociocultural systems.

2. The degree to which the proposed action affects public health or safety. This is perhaps the most important of the intensity factors from the whining captains' perspective. When noise and disturbance from oil and gas activities disrupt the migration and spook bowhead whales, it is the whaling captains and crews who risk their lives to pursue the whale farther offshore. Meat spoilage in a long tow home is a significant risk, and a great waste of the animals used for oil of the whales, and the strike from our quota allotted to us by the International Whaling Commission. This "intensity factor" alone could voat much oil and gas related disturbances into significance. MMS does not provide this information in its letter to us, or in describing its approach to constructing its significance thresholds that are relevant to our people.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parks lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. We have not seen MMS discuss the importance of the cultural resource of the bowhead whale when formulating the significance thresholds. While we would discourage MMS from comparing the importance of one subsistence resource against another, the importance of the bowhead whale does exceed all others in our

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subsistence practices. The significance threshold for the bowhead whale should not be lumped into the "flexible" formula MMS has devised to encompass all resources. This is not our reality, and it should not be part of MMS's calculation of significance thresholds for our lives and our bowhead whale resource.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

There is no greater controversy in our villages than the effects of offshore oil and gas development on our bowhead whale and other marine mammal hunting and on the livelihood of our villages. This intensity factor, by itself, should qualify effects to our communities as significant.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. The risks to our human environment could not be more unique, and the risks of impacts to the bowhead whale in the Chukchi Sea, where bowhead distribution and size of habitat is uncertain, are both unique and unknown. This intensity factor should appear with great emphasis in MMS analyses and its calculation of significance thresholds.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

MMS's implementation of its regulatory program for oil and gas leasing will set precedent in the Chukchi Sea, where oil and gas exploration and development has not yet moved forward, leaving a pristine sea. MMS should address this factor in its significance threshold formula.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulative significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small components.

MMS evaluates lease sales individually. It anticipates that leases will be bought that seismic testing will occur, that exploration wells will be drilled. Bottom hooked drilling structures will be constructed, with associated noise effects on bowhead whales. Production of oil is the goal of the program, and in the Chukchi Lease Sale 193, MMS anticipates 8.4 billion barrels of oil coming out of the seabed, piped offshore via a pipeline that will make landfall somewhere near one of our villages. Helicopters, marine traffic, seismic source vessels, supply boats, fixed wing aircraft, pile driving, all will attend the process of discovering, and producing oil. These activities will occur, MMS anticipates, as a result of the Sale. In the current OCS

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Five Year Program, another lease sale is planned for the Chukchi Sea that will have similar consequences. Cumulatively, these activities are certain to affect, significantly and adversely, the marine mammals in the Chukchi Sea habitat, including our bowhead whales, and similarly to adversely affect our marine mammal subsistence hunting. MMS must acknowledge this likelihood in its significance thresholds.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. MMS's leasing activities will cause loss and possibility destruction of our cultural resources—our hunt, our livelihood, our food. This should be part of MMS's significance threshold formulation.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The bowhead whale is an endangered species. Although NMFS has issued a Biological Opinion declaring "no jeopardy" to bowhead whales, this goes to the survival of the bowhead whale. MMS's activities could have population level effects that stop short of endangering the survival of the bowhead whale population, but which slow its recovery. Pertimately, the permit process for the deck, between seismic surveying and exploratory drilling in Camden Bay, are likely to drive whales, including cow-calf pairs, from their nearshore feeding habitat. These are real effects on an endangered population of whales, and these facts should be represented in MMS's significance thresholds.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Last year, and perhaps two others before, the OCS operators engaging in seismic data collection failed to comply with monitoring requirements that were set in an incidental harassment authorization that had bearing on the validity of the G&G permit that MMS had issued to them. Ultimately one company lacked confidence by obtaining a stay of the monitoring requirement in federal court. Neither NMFS nor MMS suspended their permits of this company, even though it was in violation of federal law long before the court decision was issued. This year, we are aware that one oil company may intend to accept the financial penalty of failing to comply with an air permit from EPA, and factor it into the "cost of doing business." These are violations of federal law. At least one company this year has been referred to North Slope Borough ordinance requirements that it conduct monitoring because it disagrees with the Borough's Planning Department over the effects its activities are likely to have on marine mammals. This is potentially a violation of local law. MMS needs to
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this "mitigation" measure that will prevent it from ever being more than a representation of MMS's wishful thinking.

First, MMS places unreasonable and unjustified reliance on the CAA to solve all the potential conflicts that could arise from timing and location of oil and gas operations with respect to bowhead whaling. MMS repeatedly cites the CAA as a mitigation measure per se that will render adverse effects insignificant. Unfortunately, as we have seen this year, the CAA's carefully designed mitigation measures are useful only when companies agree to comply with and implement them. Simply, an agreement is not mitigation. The activities undertaken pursuant to the agreement may or may not be mitigation, and compliance with those activities cannot be left to the discretion of the industry.

When companies are not willing to work with us, it is up to MMS and NMFS to have adequate mitigation measures in place. MMS should not use the CAA to deem potential adverse effects "mitigated," thereby excusing itself from its own responsibility for formulating and implementing effective mitigation. This is the only form of "enforcement" that will prove truly effective. Without strong mitigation standards promulgated up-front by MMS and NMFS, the odds are very low that an effective CAA can be developed or enforced.

Second, MMS's proposed approach to handling conflicts between us and the industry in the absence of a CAA does not inspire any confidence in us and appears consciously designed to ensure that we can never expect a fair deal or effective remedy. All major decisions are in the hands of the MMS Regional Supervisor ("RS"). In the case of a conflict between us, the proposed "Step 5 process" would apparently work like this: A conflict will arise where whalers will anticipate or experience adverse effects to the whale migration so that hunting is or will become more difficult or impossible. Theoretically, the AEWC would respond by requesting that the MMS Regional Supervisor convene a group meeting. If the RS is convinced that there is a real problem, she may decide to call the meeting.

Next, our subsistence hunters would undergo an examination of the facts of our case in a hearing setting where the MMS RS - whose superiors have already approved the OCS operators' action - is the judge. The RS hears the facts from each side and determines 'the adequacy of the measures taken to prevent unreasonable conflicts with subsistence harvests.'

If, in the RS's judgment, the OCS operator is responsible for an "unreasonable" conflict, she would be put in the position of having to overrule her agency's prior decision to permit the activity she has determined causes "unreasonable conflicts." In the meantime, an entire hunting season and hundreds of tons of food can be lost. Hunting is an opportunistic activity, especially in the unpredictable ice and weather conditions of the Arctic Ocean. It is therefore unlikely that our hunters would have time to attend a hearing and argue their case until after the season is over and the harm is done.

Furthermore, Stipulation 5 and its arbitration process are set up to favor OCS operators, not us. Its standards are not quantifiable, and therefore subject to manipulation and improper rationalization. For instance, how might one quantify an "unreasonable" conflict? If our whalers must go twenty miles rather than ten miles offshore to find whales, does that cross the "unreasonable" line? Is that a decision best left to the RS? If meat is spoiled, but not the muktuk, is the disruption a "reasonable" one? If the whales are "spooky" in the whalers' judgment, and harder to catch, does that mean the operator must close down operations? Should those kinds of choices be left to the RS? The same hard questions apply to the standard of what may or may not be an "adequate measure" to prevent the "unreasonable" conflicts.

In addition to these failures of substantive standards, the we are reluctant to sit in a room with oil and gas operators and engage in a game of "he said, she said." For many of us, English is our second language, and we communicate best through our actions, not our words.

For the reasons above, we do not consider Stipulation 5 effective mitigation, and MMS should not turn to Stipulation 5 to buttress its arbitrary conclusion that adverse effects to our hunt and our communities from oil and gas operations will be resolved through the "Step 5 process."
November 24, 2010

John T. Goll
Regional Director

BOEMRE – Alaska OCS Region
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Anchorage, Alaska 99503-5820

Dear Mr. Goll:

The purpose of this letter is to provide comment on the Draft Supplemental Environmental Impact Statement for Lease Sale 193 (LS 193 Draft SEIS) in the Chukchi Sea, prepared as required by the U.S. District Court to address deficiencies in the original Lease Sale 193 Final EIS (LS 193 FEIS). The court has directed that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)5 determine whether missing information, identified by the agency itself in the LS 193 FEIS, is “essential or relevant” to making a reasoned decision regarding Lease Sale 193 and, if so, “whether the cost of obtaining the missing information [would be] exorbitant or the means of doing so unknown.” Federal Register, Vol. 75, No. 199 (October 15, 2010).

The LS 193 Draft SEIS fails to provide the Secretary of the Interior with the information required to make a reasoned choice among alternatives, including the “No Action” alternative. The document should be rescinded and prepared anew. The original LS 193 FEIS included approximately two hundred and fifty specific instances in which BOEMRE explicitly identified a lack of scientific knowledge regarding resources that could be impacted as a result of the lease sale and the reasonably foreseeable oil and gas development that could follow. In many cases, these statements recognize a fundamental lack of knowledge regarding important biological resources, including many that are vital to continued subsistence harvest (e.g., marine mammals) by communities on the North Slope. Just a few of the statements in which BOEMRE expressly noted its lack of knowledge, include the following:

- “There is uncertainty about the effects on cetaceans in the event of a large spill.”

- “Given a lack of contemporary abundance and distribution information, large spill effects on rare or unique species (including potential extinction) could occur, but would likely go unnoticed or undetected.”

BOEMRE’s LS 193 Draft SEIS is inconsistent with the Obama Administration’s stated commitment to making decisions on the basis of sound science. This commitment to sound science is the ongoing effort by another agency within the Department of the Interior, the U.S. Geological Survey (USGS), as directed by Secretary Salazar, to identify and evaluate the importance of Arctic Ocean science knowledge gaps.

As part of the Administration’s commitment to ensuring that offshore oil and gas decisions are based on science and sound information, the U.S. Geological Survey will examine and summarize what information is available about the Arctic and will identify key knowledge gaps and support long-term research to address information needs.

Remarkably, however, BOEMRE’s court-ordered LS 193 Draft SEIS concludes that none of the many noted knowledge gaps identified in the original LS 193 FEIS must be addressed to support its environmental analysis.

BOEMRE’s analysis determined that while many statements of incomplete or unavailable information were broadly known to the important issues at hand, none were essential for a reasoned choice among alternatives.6

That is, BOEMRE has concluded that environmental impacts in the planning area have been sufficiently analyzed even as the agency acknowledges that rare or unique species could be extirpated but that due to a “lack of contemporary abundance and distribution information” such an impact “would likely go unnoticed or undetected.” All of the known information regarding critical resources is too uncertain or too incorrectly analyzed to support lease sale decisions.

Of particular concern is BOEMRE’s continued reliance on manifestly inappropriate assumptions regarding the potential impact of a “large” oil spill. A realistic large-scale oil spill event has never been evaluated by BOEMRE for the Chukchi Sea. The LS 193 Draft SEIS, and the underlying LS 193 FEIS, persist in severely underestimating the potential magnitude of any oil spill impacts. This conclusion includes any meaningful evaluation of a credible large-scale spill scenario and neglects the utility of the NEPA analysis prepared to this point. The so-called “large” spill considered by BOEMRE in the original LS 193 FEIS (i.e., 1,500 – 4,660 bbl) is inconsequential in light of what is known to be a realistic spill possibility in light of the Gulf of Mexico disaster. The maximum oil spill analyzed in the LS 193 FEIS – a 4,660 bbl spill from a ruptured pipeline – is less than one tenth of the 2010 Deepwater Horizon spill (52,700 – 62,200 barrels per day). The maximum 4,600 bbl spill assumed for the Chukchi Sea in the LS 193 FEIS is less than one tenth of one percent (0.09%) of the size of the Deepwater Horizon spill (5 million barrels).7 While certainty about the exact size of a spill can not be known in advance, a disparity of multiple orders of magnitude between the BOEMRE-identified maximum spill (4,600 bbl) and a credible large-scale spill, is not reasonable. BOEMRE’s relatively small maximum spill assumption effectively cripples the evaluation of environmental impacts and prevents the Secretary of the Interior from receiving the necessary analysis required by NEPA.

The LS 193 FEIS analysis inappropriately dismissed the possibility of a blowout: “We consider blowouts to be unlikely events. Very few blowout events have resulted in spilled oil and the volumes spilled are often small… After the Santa Barbara blowout in 1989, amendments to the OCS Lands Act and implementing regulations significantly strengthened safety and pollution-prevention requirements for offshore activities.”

This analysis of the Deepwater Horizon and the widespread recognition that confidence in the regulatory oversight provided by the MMS (now BOEMRE) was thoroughly misplaced, this language seems darkly quaint. Dismissing even the possibility

[3] Mineral Management Service (MMS) at the time the Lease Sale 193 FEIS was published.

[4] President’s Action, p. 11.


[6] Unless in justifiable and the context of knowledge gaps and missing information as unimportant and “not essential to a reasoned choice among alternatives.” BOEMRE cites the “existence of other environmental policies and regulations that would preclude significant adverse effects on particular resources.” (Lease Sale 193 Draft DEIS – Appendix A). The mere existence of other laws and regulations cannot assure that significant adverse effects will be precluded. The fact that BP’s oil spill response plan for the Gulf of Mexico “ceased” as required by law is no way precluded adverse effects from the Deepwater Horizon blowout. Although it is possible to argue that the BP plan did succeed to the extent that no serious harm was harmed by the Gulf spill. Moreover, NEPA requires that the effects of alternatives be described and, if the agency relies upon mitigation to prevent or avoid adverse effects, the feasibility of such mitigation measures be described in detail. BOEMRE does not do so in the LS 193 Draft SEIS.


of a blowout in the Chukchi Sea can not be considered reasonable nor can this omission be dismissed as a mere "technical difficulty at the lease sale stage."  

Failure to evaluate the consequences of a blowout contradicts the guidance provided by the Council on Environmental Quality (CEQ) regarding NEPA analysis of offshore oil and gas development. In the August 16, 2010 report published by the Office of the President, it is stated that BOEMRE "has committed to using the following CEQ recommendations..." This includes that BOEMRE’s NEPA documents are to:  

- "provide decision makers with a robust analysis of reasonably foreseeable impacts and include an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf."  

The report notes that BOEMRE did not anticipate the possibility of a catastrophic spill as a reasonably foreseeable impact in the case of the Deepwater Horizon. The CEQ report unambiguously states:  

"BOEMRE should identify potentially catastrophic environmental consequences and accurately assess them as part of its decision making... BOEMRE will ensure that potentially catastrophic consequences will be identified, assessed and considered as part of its decision making."  

That commitment has yet to be fulfilled with regard to the analysis of Lease Sale 193.

Failure to evaluate a large-scale blowout scenario as part of the Lease Sale 193 environmental review prevents the NEPA analysis from fulfilling its essential purpose: to provide decision-makers the ability to make a reasoned choice among leasing alternatives, including the "No Action" (no lease) alternative. Moreover, while it has been argued elsewhere that "additional Environmental Impact Statements will be required at the later exploration, production, and development stages" this has not, in fact, turned out to be the case. Reasonably foreseeable impacts from a blowout from Shell’s drilling plans were not evaluated by BOEMRE prior to approval of Shell’s exploration plans for drilling in the Arctic Ocean in 2010. Shell’s most recent proposal to drill in 2011 also fails to analyze the effects of a blowout.

Failure to evaluate a large-scale blowout scenario as part of the Lease Sale 193 environmental review prevents the NEPA analysis from fulfilling its essential purpose: to provide decision-makers the ability to make a reasoned choice among leasing alternatives, including the "No Action" (no lease) alternative. Moreover, while it has been argued elsewhere that "additional Environmental Impact Statements will be required at the later exploration, production, and development stages" this has not, in fact, turned out to be the case. Reasonably foreseeable impacts from a blowout from Shell’s drilling plans were not evaluated by BOEMRE prior to approval of Shell’s exploration plans for drilling in the Arctic Ocean in 2010. Shell’s most recent proposal to drill in 2011 also fails to analyze the effects of a blowout.

It should be noted that even if a blowout scenario were to be evaluated at a later point in the permitting process, analysis of a credible, large-scale spill/blowout is needed at the stage of the lease sale in order to permit the Secretary of the Interior to make a reasoned decision among leasing alternatives, including the "No Action" alternative. While it has been argued that more information will be available at later stages of the permitting process, thus allowing the Secretary of the Interior to possibly modify oil development plans, this perspective inherently acknowledges that decisions made at the lease sale stage are fundamentally distinct from subsequent authorizations.

It is at the time of the lease sale that the decision is made as to whether or where leasing should take place while subsequent authorizations concerning exploration or development are directed at making decisions about how activities should take place. The theoretical opportunity to analyze an appropriate large-scale blowout scenario at a subsequent point in the regulatory process can not be considered a substitute or otherwise fungible in terms of satisfying the NEPA analysis required at the time of a lease sale.

The LS 193 Draft SEIS further misleads when it seeks to justify the dismissal of incomplete, missing or unavailable information:

"[T]he unlikely event of a large oil spill, it is well understood that environmental impacts could be severe. The severity of potential impacts would be nearly identical under any action alternative."13

This statement does not withstand scrutiny as the true severity of potential impact that would be caused by a credible, large-scale spill in the Chukchi Sea has never been analyzed. A maximum spill of 4,600 bbl is only a small fraction of what should be evaluated as a reasonable spill/blowout possibility. Because the LS 193 FEIS assumed an unjustifiably small oil spill, the "severity of potential impacts" has not, in fact, been considered. Again, absent this needed analysis, critical information remains unavailable to decision-makers charged with evaluating whether or where to offer leases.

The LS 193 Draft SEIS purports to address this deficiency with the assertion:

"[A]ny change in likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed."14

As noted, however, the impact analysis of the so-called "large" spill considered in the Lease Sale 193 FEIS is based upon the unreasonable assumption of an undersized spill that grossly understates possible impacts.

Analysis of a credible, large-scale spill/blowout scenario per se by BOEMRE is mandatory as a reasonably foreseeable adverse impact. Even if all of the information relevant to analyzing a "reasonably foreseeable" significant adverse impact cannot be obtained (i.e., because costs of obtaining it are exorbitant or the means to obtain it are not known) the agency:

- "shall include within the environmental impact statement the agency’s evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community."15 (emphasis added)

The regulatory definition of “reasonably foreseeable” includes “impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the realm of reason.”16 The Deepwater Horizon experience has clearly established a blowout during exploration drilling as a “reasonably foreseeable” event that would have significant adverse impacts in the Arctic Ocean. A large-scale blowout scenario should now be rigorously evaluated. To meet the regulatory standard, this analysis should evaluate the impacts of a late season blowout that continues over an extended period of time into the winter freeze up.

Conclusion

1. The recently released LS 193 Draft SEIS is not credibly responsive to the court order that BOEMRE reconsider its analysis and determine whether: a) the knowledge gaps identified by the agency are relevant or essential to making a reasoned choice using the NEPA analysis, and b) the cost of obtaining the missing information is exorbitant, or the means of doing so unclear. The LS 193 Draft SEIS should be rescinded and prepared anew.

2. The NEPA analysis, including the LS 193 Draft SEIS and the associated LS 193 FEIS, remain deficient in the absence of an analysis of a credible “large” spill. The reasonably foreseeable impact of a blowout has not been analyzed and thereby precludes a reasoned decision-making process regarding Lease Sale 193.

3. A credible large-scale blowout scenario should now be evaluated as part of the LS 193 analysis. To be meaningful, this analysis should assess impacts of a late season blowout that continues over at least 30 days17 and extending into the winter freeze up.

Sincerely,

Eric F. Myers
Director of Policy


14 Office of the President, Report Regarding the Minerals Management Service’s National Environmental Policy Act Policies, Practices and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (August 16, 2010), p. 25


17 A minimum 30-day blowout is an appropriate standard for analysis as indicated by 30 CFR 254.47.
C.F.R. § 1502.22, and it failed to analyze the potential impacts of natural gas development. Accordingly, the Court remanded the decision to the agency and directed it to conduct this analysis as required by NEPA.

I. MISSING INFORMATION ANALYSIS

It is undisputed that there are significant gaps in basic information about the Arctic Ocean and that, absent this information, it is impossible to determine the scope of potential impacts from oil and gas activities on the region’s wildlife and people. The need for more information has been acknowledged repeatedly by the Administration in President Obama’s National Ocean Policy process, in the National Marine Fishery Service’s closure of the Arctic Ocean to commercial fishing, and in Secretary Salazar’s initiation of a scientific gap analysis by the United States Geological Survey. The current draft SEIS clashes badly with the Administration’s commitment to sound science in decision-making.

In the original Chukchi Sea Lease Sale 193 EIS, BOEMRE identified literally hundreds of instances in which it lacked information about the Chukchi Sea, ranging from basic science about the presence and behavior of species in the region to information about the effects of oil and gas activities on wildlife.

BOEMRE must comply with NEPA at each stage of OCSLA offshore development process. (OCSLA) to develop an offshore oil well: (1) formulation of a five-year leasing plan by the Department of the Interior; (2) lease sales; (3) exploration by the lessees; (4) development and production. See OCSLA, 464 U.S. 312, 337 (1984). Each of the four stages presents a decision-maker with a different and distinct choice about offshore development. The five-year leasing plan is a programmatic evaluation of the nation’s outer continental shelf areas to determine whether any of those areas should be open to future lease sales and the conditions on such lease sales. See 43 U.S.C. § 1344(a). At the lease sale stage, BOEMRE must decide whether to hold the scheduled sales and, if so, under what conditions. In the third stage, BOEMRE determines whether to allow drilling on the oil leases and whether to allow the company to drill on the lease blocks for the second phase. If there is no feasible and reasonable reserve, BOEMRE would conclude that the leases should be opened for development and that a lease can be awarded.

Thus, a lease sale decision is a meaningful commitment in OCSLA’s staged offshore development process, and a meaningful NEPA analysis must provide information to the decision-maker and the public about the potential effects of oil and gas activities on the areas under consideration, and information about the effects of oil and gas activities on the biological resources of the areas under consideration for leasing is essential to making a reasonably informed decision.

A. Because the decision to sell leases is a critical decision in the offshore development process, information relevant to the resources in the area and to the effects of oil and gas activity on those resources is essential to making that decision.

Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, the information about the biological functions of the areas and the importance of those parts to the regional ecosystem is essential to this choice. See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv. 448 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2006) (information is essential if the agency cannot know if the proposed decisions are capable of being carried into effect due to lack of information). Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, the information about the biological functions of the areas and the importance of those parts to the regional ecosystem is essential to this choice. See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv. 448 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2006) (information is essential if the agency cannot know if the proposed decisions are capable of being carried into effect due to lack of information). Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, the information about the biological functions of the areas and the importance of those parts to the regional ecosystem is essential to this choice. See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv. 448 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2006) (information is essential if the agency cannot know if the proposed decisions are capable of being carried into effect due to lack of information).

B. Missing information identified in the original Lease Sale 193 EIS is essential to the lease sale decision.

In the draft SEIS, BOEMRE concludes that much of the information identified as missing in the 2007 Chukchi Sea Lease Sale 193 EIS was relevant to potentially significant effects of the lease sale.

Thus, a lease sale decision is a meaningful commitment in OCSLA’s staged offshore development process, and a meaningful NEPA analysis must provide information to the decision-maker and the public about the potential effects of oil and gas activities on the areas under consideration and the effects of oil and gas activities on the biological resources of the areas under consideration for leasing in essential to making a reasoned decision.

B. Missing information identified in the original Lease Sale 193 EIS is essential to the lease sale decision.

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The missing information that forms the basis for the Court’s remand includes the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals, and birds—which in other regions are typically the most well-studied segment of an ecosystem. The missing information includes the abundance, distribution, and life history characteristics for many of these species. The state of information about these more charismatic animals in the ecosystem is further evidence of the lack of information about the rest of the ecosystem, including the clams, worms, sea stars, and other species that are important prey for the more conspicuous species. The information that does exist is outdated and too spotty to provide an appropriate baseline for decision-making. This lack of basic information about the ecosystem’s structure and function makes it difficult to estimate the potential impacts to animals and the ecosystem. Additionally, there are substantial data gaps about the effects of oil and gas activities on marine mammals and birds. The results of this study are not yet complete, but the agency already knew that the potential effects on the ecosystem are likely to be high.

In the draft SEIS, BOEMRE introduces the possibility that the missing information is essential to making a meaningful commitment in OCSLA’s staged offshore development process, and a meaningful NEPA analysis must provide information to the decision-maker and the public about the potential effects of oil and gas activities on the areas under consideration and the effects of oil and gas activities on the biological resources of the areas under consideration for leasing in essential to making a reasoned decision.

Missing information from the first stage is addressed, and new decisions, including the production.
and Planning Group, LLC; Pearson Consulting LLC. 2010. Oil spill prevention and response in the U.S. Arctic Ocean: Unexamined risks, unacceptable consequences. Commissioned by the Pew Environment Group, U.S. Arctic Program, November 2010. Philadelphia, PA, USA, available at http://ocs.noaa.gov/20101208finalreport.pdf. Prepared for oil spills in the Arctic Ocean, BOEMRE needs information about the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice, and the changing Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the lease sale draft SEIS.

These broad areas of missing data about the basic ecology of the Chukchi Sea and the effects of oil and gas activities there underscore BOEMRE’s need to answer questions that are essential to the decision about whether, where, when, and under what conditions to lease an area for oil and gas activities. Listed below are some examples of the types of questions essential to the decision:

- Where will Pacific walrus be during summer? In 2007 and 2009, walrus haulouts on land in large numbers in northern Alaska. Prior to 2007, walruses spent summers on sea ice in the Chukchi Sea. In 2010, a number of walruses hauled out along the U.S. Chukchi coast, yet a number of walruses also used the region around Hanna Shoal, which is squarely within the Lease Sale 193 area, extensively. Without knowing where walruses will be, information about them and activity cannot be positioned to avoid incidental takes and other impacts.
- Satellite telemetry has shown that the movements of bowhead whales, beluga whales, walruses, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously anticipated. Without an understanding of which areas are crucial and why, it is impossible to identify critical areas that must be avoided by development and protected in the event of oil spills.
- How have distributions of marine birds changed since the pelagic surveys conducted in the mid-1970s to mid-1980s in the Outer Continental Shelf Environmental Assessment Program (OCSCEAP)? For birds at sea, there occurs over at least 25 years out of data in a number of changes.
- There is very little knowledge about long-term trends and variation due to climate change [CCRC 2010]. In the Proceedings of the Northern Oil and Gas Research Forum held in Anchorage in October 2008, the forum acknowledged the importance of long-term studies compared to observations made at “a single point in time” and their usefulness.

Given the reason for positing the various alternatives—to offer, among other things, different zones were proposed in part to provide different levels of protection for the Chukchi Sea Planning Area are not available”). The original EIS acknowledges further that, even though bowhead whales . . . .” Draft SEIS, App. A at 21 of 143; see also Draft SEIS at 25 of 143 (noting that “recent data on distribution, abundance, or habitat use in the Chukchi Sea Planning Area are not available”). The original EIS acknowledges further that, even though some distribution and use patterns better understood, the significance of bowhead use of the areas to the overall food requirements of the population are not clear. See Draft SEIS, App. A at 24 of 143.

The original EIS’s alternatives consisted of different sized coastal buffer zones. These different zones were examined in terms of different levels of protection for the bowhead whales. See Minerals Management Service (MMS), Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Alaska, Final EIS, OCS EIS/EA MMS 2007-026 (FEIS) at ES-7-8 (May 2007) (explaining reasons for each alternative). Instead of one alternative, Alternative IV, was developed specifically to address potential impacts of noise on marine mammals. ID at ES-8.

Because BOEMRE has not obtained any new information for this draft SEIS, it has left these and other questions unanswered, as they were in the original EIS. In light of the important decisions being made at the lease sale stage, as described above, the answer to these questions and others should be obtained at this stage.

During the remand, BOEMRE should obtain missing information to answer these and other important questions about the Chukchi Sea and the impacts of oil and gas development there. As discussed below and in the attachments, the most effective way to do this would be to engage in a comprehensive gap analysis to outline the ongoing U.S. Geological Survey effort, potentially supplemented by information from other federal agencies with expertise in the Arctic such as the National Oceanic and Atmospheric Administration, and to then undertake a comprehensive, coordinated, integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.

### 2. Missing information is essential to the choice among the alternatives identified in the original EIS.

The original EIS illustrates that the kind of information missing in the Chukchi Sea is essential to the choice among alternatives. BOEMRE “carried forward” the range of alternatives it analyzed in the original 2007 lease sale EIS in the draft SEIS. Draft SEIS at 12. It omits the importance of the missing information for choosing among these alternative. However, as several examples below illustrate, much of the missing information is essential to the reasoned choice among the original four alternatives in the 2007 analysis:

- Information about bowhead whale use of the Chukchi Sea is incomplete. The original EIS acknowledges that data on bowhead use of the Chukchi Sea are dated, provide only limited insight into how bowheads may be exposed to oil and gas activities should they occur, and “should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales . . . .” Draft SEIS, App. A at 21 of 143; see also Draft SEIS at 25 of 143 (noting that “recent data on distribution, abundance, or habitat use in the Chukchi Sea Planning Area are not available”). The original EIS acknowledges further that, even some distribution and use patterns better understood, the significance of bowhead use of the areas to the overall food requirements of the population are not clear. See Draft SEIS, App. A at 24 of 143.
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Given the reason for positing the various alternatives—to offer, among other things, varying levels of protection for the bowhead whales—information that would allow BOEMRE to analyze the importance of the deferred areas to the species is essential to the choice among those alternatives.
The original EIS for Lease Sale 193 acknowledged that information about marine and coastal birds is outdated or completely lacking for the Chukchi Sea. Draft SEIS, App. A at 4 of 143 (noting that several areas historically documented to be important for birds, as well as the entire lease sale area “lack site-specific data on habitat-use patterns, routes, and timing to assess impacts”), id., (noting that for many species, “the most recent data is between 15 and 30 years old, making accurate assessments of alternatives impossible”). Yet, “several species or species-groups have a high probability of experiencing substantial negative impacts” and “[t]he risk that several regional bird populations could experience significant adverse impacts is high” in the event of an oil spill. Id.

BOEMRE proposed one of the alternatives, Alternative III, at least in part to reduce impacts to marine and coastal birds. See FEIS at ES-8. Given the reason for the alternative, information about areas that are important to marine and coastal bird species, and information about how and when those birds use these areas, is essential to making a choice between this and other potentially less-protective alternatives.

In the face of missing information, BOEMRE was left in the original EIS to speculate about the different effects among alternatives. For example, the original EIS states that in Alternatives III and IV, “[t]he increased distance between offshore development and coastal bird habitats would conceivably decrease the percent chance of spilled oil contact, increase weathering of spilled oil prior to contact, and increase available spill response time.” FEIS at II-26, 273 (emphasis added). Id. at II-4, 45 (“The increased distance between offshore development and coastal bird habitats also would conceivably decrease the percent chance of spilled oil contacting bird habitat ...”) (emphasis added). The alternatives analysis is replete with this sort of conjunctural differentiation among alternatives. Conjectural language is used to describe different effects from oil spills on fish, fish habitat, bird habitats, other marine and coastal birds, and terrestrial mammals. FEIS at II-268-69 (Alternative III), at IV-272-73 (Alternative IV); see also id. at II-41, 45 (“Differences in noise and oil-spill effects to bowhead whales from this deferral compared to Alternative I [and Alternative III IV] are difficult to quantify, but qualitatively can be described.”), id. at II-42, 45 (“any spill that would conceivably take longer to reach and enter the spring-breeding route”) at II-44 (“The increased distance between offshore development and coastal bird habitats also would decrease the percent chance of spilled oil contacting fish resources ...”). Id. at II-41 (“[f]or theory.” Alternative III provides more protection for coastal and marine bird habitats.” Because better information would enable BOEMRE to perform an actual, rather than a conjectural, analysis of the differences among potential alternatives, it is essential to a reason choice among alternatives.

3. Missing information is essential to determining an adequate range of alternatives.

Missing information is essential to the choice among alternatives, because it is essential to the agency’s definition of an adequate range of alternatives. FEIS at II-41 (“the alternatives presented on an EIS contain a detailed statement of the "alternatives to the proposed action" 42 U.S.C. § 4332(3)(a)). The discussion of alternatives “is the environmental impact statement.” 40 C.F.R. § 1502.14. That discussion should "present[ ] a clear basis for choice among options by the decisionmaker and the public.” Id.; see City of Angoon v. Hodel, 803 F.2d 1016, 1020 (9th Cir. 1986) (“The touchstone for inquiry into whether an EIS’s selection of alternatives fosters informed decision-making and informed public participation.”) (quoting California v. Brown, 690 F.2d 755, 767 (9th Cir. 1982)). BOEMRE has chosen not to reexamine the full range of alternatives for the lease sale in the draft SEIS. Yet, “several species or species-groups have a high probability of experiencing substantial negative impacts” and “[t]he risk that several regional bird populations could experience significant adverse impacts is high” in the event of an oil spill. Id.

BOEMRE’s reasons for not to obtain any missing information are arbitrary.

BOEMRE advances five recurring excuses for its decision not to obtain a single piece of information that would be available in the remand period. A key BOEMRE reason is that missing information is not essential to the lease sale decision, because that decision is not a consequential commitment of areas to oil and gas activities. This is false. Information is essential to the lease sale decision, because that decision is not a consequential commitment of areas to oil and gas activities. Thus, information can be obtained at later stages of the OCSLA process, when the agency is evaluating exploration or production plans.

As an initial matter, this rationale ignores the agency’s practice, which has been to conduct only abbreviated environmental assessments of exploration plans and to rely heavily in that review on the information that was used to develop the alternatives in the lease sale stage. Draft SEIS at 11. This excuse is unsupported. In most instances, BOEMRE makes this argument to avoid the “detailed statement” required by the SEIS. See BOEMRE’s comments to the CEQ: “BOEMRE recommends that the environmental assessment and the environmental impact statement be prepared in a single instrument.” BOEMRE’s comments to the NOAA’s National MMS commented that the “document is designed to provide from an early stage of the process information that can be used to assist in making decisions on the merits of an action.” BOEMRE’s comments to NOAA’s National Oceanic and Atmospheric Administration’s (NOAA’s) comments to the SEIS: “For purposes of the draft SEIS the environmental assessment and the environmental impact statement will be prepared in a single instrument.”

BOEMRE also misapplied its obligation under NEPA in preparing the draft SEIS. The job of the SEIS is to inform the decision-maker and the public about the effects of the decision to offer oil and gas leases in the Chukchi Sea. To satisfy this obligation, BOEMRE must “prepare a ‘detailed statement’ covering the impact of particular actions on the environment, the alternatives the agency has chosen to evaluate, and the environmental consequences,” 42 U.S.C. § 4332(2). The SEIS at the lease sale stage reports on the “environmental consequences,” 42 U.S.C. § 4332(2). BOEMRE’s comments to NOAA’s National Oceanic and Atmospheric Administration’s (NOAA’s) comments to the SEIS: “For purposes of the draft SEIS the environmental assessment and the environmental impact statement will be prepared in a single instrument.” BOEMRE’s comments to NOAA’s National Oceanic and Atmospheric Administration’s (NOAA’s) comments to the SEIS: “For purposes of the draft SEIS the environmental assessment and the environmental impact statement will be prepared in a single instrument.”

BOEMRE also asserts that the missing information is not essential to the lease sale decision because it is not necessary to develop a detailed statement of the “effect of the decision to lease” as defined by BOEMRE. This is incorrect. The SEIS at the lease sale stage reports on the environmental consequences of the decision to lease, and the decision to lease affects the leasing process, which is the environmental consequence of the decision to lease.

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The draft SEIS also failed to include essential information that has been developed about the Chukchi Sea between the completion of the original EIS in 2007 and the present. This information is also included in attachment B. One example of an important study that is already available and provides information essential to the lease sale decision but that BOEMRE has ignored is Quakenbush, L.T., Small, R.J., and Citta, J.J. 2010. Satellite tracking of western Arctic bowhead whales. Final Report. OCS study B0806. Bureau of Ocean Energy Management, Regulation and Enforcement. 65 pp plus appendix. The study pertains to the bowhead whale—a major marine mammal for the Inupiat along the Arctic slope, and a species whose management is protected under the Marine Mammal Protection Act and Endangered Threatened Species Act. The original EIS acknowledges that “[d]ata are limited on the bowhead whale full migration trajectory through the Chukchi Sea.” Under the auspices of the study program since 1990 that BOEMRE failed to consider.  BOEMRE must now undertake a meaningful assessment of whether missing information is lacking to allow BOEMRE to determine whether oil and gas activities will have significant effects on marine mammals, for instance, there is no way to describe in any detail the effects of oil and gas activities on bowhead whales.  Additionally, the statement ignores the comparison that the decision-maker must make between the action alternatives and the no-action alternatives. It also begs the question whether, if it is true that effects are the same for all alternatives, the original EIS presented an adequate range of alternatives.

The draft SEIS, like the original Lease Sale 193 EIS, fails to assess adequately the lease sale’s potential impacts on Arctic communities and subsistence users. The draft SEIS fails to adequately take into account climate change, its scenario is unjustifiably limited, its dismissal of liquefied natural gas (LNG) tankering is unjustified, it fails to adequately analyze the impacts of natural gas production on a number of species, and it fails to analyze the potential for activities to displace subsistence users.

A. The draft SEIS fails to adequately take into account climate change.

The draft SEIS, like the original Lease Sale 193 EIS, fails to adequately assess the lease sale’s impacts in the context of Arctic climate change. It is essential that the final SEIS analyze the effects of gas development and production in light of Arctic climate change because the draft SEIS states that “the timeframe for all activities . . . could span 50 years,” and assumes that gas-related activities will occur during the latter portion of that period. Draft SEIS at 65. The Arctic at the time natural gas will be developed according to BOEMRE’s scenario will be a very different place than the Arctic of 2010.

Among the most profound changes are the loss of sea ice, the melting of permafrost, and coastal erosion. As temperatures continue to rise and precipitation patterns change, species distributions will shift, and many species will experience increased stress and decreased chances of reproduction and survival. The listing of the polar bear due to warming-related habitat loss exemplifies the changing Arctic environment. Polar bears are spending more and more time on land near their last time on ice when they hunt for prey, including seals. As a result, scientists predict that two-thirds of the world’s polar bear population could disappear by the middle of the century. The future looks similarly grim for walrus. Walrus are benthic feeders that use the ice as a platform from which to dive for food. Without sea ice, food will become much more difficult to access, leading to malnutrition and increased energy expenditures in searching for food.
The original Lease Sale 193 EIS failed to adequately take into account climate change. The EIS analyzed the proposed action against a static baseline and ignored likely changes in the Arctic climate and environment. See, e.g., FEIS at III-47–55 (establishing the baseline for bohoweak without accounting for climate change). As a result, the EIS included an incomplete analysis of climate change impacts to a number of rare and declining species, including polar bears, walrus, seals, and other marine mammals. See, e.g., FEIS at IV-145 – IV-171.

The draft SEIS makes the same error. It acknowledges that climate change is occurring. Draft SEIS at 32–33. Also, it indicates that changes in climate are irregular, making accurate projections difficult, but adds that “[c]limate change in the Arctic is projected to be larger in other areas of the globe . . . .” id. at 33. It recognizes that “[p]olar sea ice is undergoing changes in extent, thickness, distribution, age, and melt duration . . . .” id. at 34. However, the draft SEIS fails to analyze the effects of Arctic gas production and development in the context of a changed and likely stressed environment.

Scientists predict that over the fifty-year time frame of the lease sale activities, the Arctic could warm by more than three degrees Celsius as compared to a 1981 – 2000 baseline. ACTA, Arctic Climate Impact Assessment 2005, Cambridge University Press at 122 (Table 4.2), available at http://www.acia.uaf.edu/pages/scientific.html. As described above, Arctic warming will dramatically affect the Arctic environment and Arctic species. BOEMRE cannot provide a complete analysis of the effects of gas development and production without considering these changes. Thus, the final SEIS must account for the fact that in future decades the Arctic will be much different than it is today. The final SEIS’s analyses of effects to Arctic species, including marine mammals, polar bears and walrus, terrestrial mammals, and birds, should account for factors like diminished habitat, food resources, or population levels, and increased competition from species expanding their ranges into the Arctic.

BOEMRE should also analyze the impact of natural gas development’s contribution to black carbon emissions, for example from increased vessel traffic, and development infrastructure. Black carbon is generally regarded as the second most important contributor to Arctic warming after CO2. It warms the environment by absorbing solar radiation heating the atmosphere, and it darkens snow and ice after falling to earth, thus increasing absorption and reducing the reflection of sunlight and accelerating melting. EPA Ad Hoc Working Group, Current Policies, Emission Trends and Mitigation Options for Black Carbon in the Arctic Region at 7 (April 28, 2009), oilisale at http://iiasa.ac.at/rains/reports/DRAFTWhitePaper-BCArcticMitigation-280909.pdf. Emissions of black carbon from sources in Arctic regions are troubling, as Arctic emissions are far more likely to come in contact with and accelerate melt of Arctic snow and ice. See id. at 20. One recent study indicates that Arctic black carbon emissions are 10 to 100 times more important with respect to temperature change than Arctic black carbon radiative forcing than emissions outside of the Arctic. Hindman et al., Source identification of short-lived air pollutants in the Arctic using statistical analysis of measurement data and particle dispersion model output, 10 Atmos. Chem. Phys. 669 (Jan. 2010), available at http://www.atmos-chem-phys.net/10/669/2010/acp-10-669-2010.pdf. BOEMRE should analyze these effects.

Vessels transporting the LNG to market through the Bering Sea could negatively affect the polar bear and other marine mammals. The draft SEIS failed to analyze the effects of LNG tanker traffic, by arguing that the method of bringing natural gas to market was not feasible or economically attractive, even though record evidence indicates that LNG tanker traffic is not only feasible but could also be a valuable use of infrastructure. In the draft SEIS, BOEMRE continues to ignore the record evidence indicating the potential for LNG tanker traffic in the Chukchi Sea. Instead of grappling with this evidence, BOEMRE simply repeats its Lease Sale 193 EIS conclusion that LNG tanker traffic is not feasible or economically attractive. Draft SEIS at 15.

BOEMRE should analyze the effects of LNG tanker traffic. The record shows that LNG tanker traffic is a feasible option that BOEMRE has promoted and industry has shown an interest in. In the 2008 Multi-Sale EIS, BOEMRE stated that “LNG is a plausible . . . strategy to export gas from the Chukchi OCS.” Multi-Sale Draft EIS, App. E at E-6. As presented to the North Slope Borough on Lease Sale 193, BOEMRE indicated that LNG tanker traffic was a possible development scenario. Chukchi Development Presentation at 5. Further, in commenting on [BOEMRE’s] Notice of Intent to prepare the EIS for Lease Sale 193, Shell recommended that in addition to effects of a gas pipeline, LNG tanker traffic “could provide a potential development corridor as the oil pipeline discussed in the original EIS, the later time frame BOEMRE has identified for gas development and production would entail no additional seismic surveying or drilling. Indeed, this assumption is contrary to the agency’s past statements on the attractiveness and probability of gas development. In the 2008 Multi-Sale Draft EIS, BOEMRE stated that an operational gas pipeline would “encourage new exploration, development, and production of natural gas throughout northern Alaska, including the Arctic OCS.” MMS, Beaufort Sea and Chukchi Sea Planning Areas, Oil and Gas Lease Sales 209, 212, 217, and 221, Draft EIS, App. E at E-4 (November 2008) (Multi-Sale Draft EIS discussing Beaufort Sea gas). Also, in the administrative record for Lease Sale 193 BOEMRE recognized that some companies could be even more interested in gas than oil in the Chukchi Sea and the agency noted that billions of dollars in royalties and taxes could be lost if companies did not develop marginal gas projects. Email from James Craig, BOEMRE, to John Goll, Re: Chukchi PIOS at 31 (March 19, 2007). A BOEMRE evaluation of Chukchi Sea lease sale scenarios plainly stated that “including gas development in the scenario will greatly increase projected environmental impacts because the number of wells and platforms will be greater . . . .” Email from James Craig, BOEMRE, to Lance Wall, Re: My response to Shell’s request to change the Chukchi scenario at 3 (Dec. 13, 2005).

A pipeline stretching from the Chukchi Sea to the main transport hub near Prudhoe Bay may also provide an incentive to gas companies to perform additional exploration. The Chukchi Sea could become a gas province. Multi-Sale Draft EIS at 20. One recent study indicates that undiscovered gas resources in the Chukchi Sea range from 10.3-20.9 Tcf, while such resources in the Beaufort Sea range from 6.7-22.2 Tcf. While the gas may presently be less valuable than oil, the presence of a pipeline to transport gas to market could make any Chukchi Sea gas field commercially viable. This could cause companies to develop more gas, as well as oil found in the ground with the gas. See, e.g., BOEMRE’s Notice of Intent to prepare the EIS for Lease Sale 193, 72 Fed. Reg. 10,916 (March 2007) (discussing Beaufort Sea gas). Also, in the administrative record for Lease Sale 193 BOEMRE recognized that some companies could be even more interested in gas than oil in the Chukchi Sea and the agency noted that billions of dollars in royalties and taxes could be lost if companies did not develop marginal gas projects. Email from James Craig, BOEMRE, to John Goll, Re: Chukchi PIOS at 31 (March 19, 2007). A BOEMRE evaluation of Chukchi Sea lease sale scenarios plainly stated that “including gas development in the scenario will greatly increase projected environmental impacts because the number of wells and platforms will be greater . . . .” Email from James Craig, BOEMRE, to Lance Wall, Re: My response to Shell’s request to change the Chukchi scenario at 3 (Dec. 13, 2005).

Moreover, it is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future. The International Energy Agency predicts that global demand for natural gas will increase 44 percent between 2008 and 2035, and that this increase in demand

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Alaska Wilderness League, et al.–Environmental Organizations Comment
In particular, the draft SEIS does not sufficiently analyze the potential effect a gas pipeline over land could have on caribou. The agency only provides two sentences on this topic, concluding that “an elevated pipeline will not prevent caribou movements and stating that ‘[p]ipelines without adjacent roads and vehicle traffic are not likely to affect caribou movements.” Draft SEIS at 89. BOEMRE should provide a more detailed analysis of the potential for onshore activities to disturb caribou, including a review of the potential for a natural gas pipeline to delay caribou movements and the effect that would have on caribou herds and individuals.

A large pipeline stretching across the NPR-A could have important adverse impacts. For example, the Bureau of Land Management (BLM) has considered the effects of smaller pipelines—ones stretching across only part of the NPR-A—in its EIS analyzing potential effects of different management strategies for the NPR-A. BLM, Northeast National Petroleum Reserve-Alaska, Final Integrated Activity Plan/Environmental Impact Statement (November 2008) [http://www.blm.gov/ak/ceq/prop/planning/sup_genral/sup_npa/northeast/north_p_a_final_iap.html] (NW NPR-A IAP/EIS); BLM, Northeast National Petroleum Reserve-Alaska, Final Supplemental Integrated Activity Plan/Environmental Impact Statement (April 2008), available at http://www.blm.gov/ak/ceq/prop/planning/sup_genral/sup_npa/northeast/north_p_a_final_iap.html (NE NPR-A IAP/EIS). The BLM identified numerous potential adverse effects of even these much less extensive pipelines. The BLM indicates that onshore oil and gas activities, and especially roads, can displace caribou and reduce caribou densities for miles. NE NPR-A IAP/EIS at 4-161. Further, it states that “there could be reproductive consequences from extended disturbance of caribou movement during the insect-reduced season.” Id. at 4-162. This is contrary to BOEMRE’s statement in the draft SEIS that caribou are tolerant of development and its conclusion that caribou will continue to use oil and gas activities. Draft SEIS at 90. The BLM has also identified particular problems with pipelines themselves. It states that snow drifts under a pipeline can block or interrupt caribou movements. NW NPR-A IAP/EIS at IV-193. It also indicated that parallel sets of pipelines can lengthen crossing delays, NE NPR-A IAP/EIS at 4-71, as can roads that are adjacent to a pipeline, especially when there is high traffic on the adjacent roads, NW NPR-A IAP/EIS at IV-193. In some cases, caribou “may be delayed in crossing a pipeline and road for several minutes or hours in periods of heavy traffic.” Id. “[T]he energetic costs associated with such delays are unknown.” NW NPR-A IAP/EIS at IV-193.

Moreover, the final SEIS should provide a more comprehensive review of relevant research on the effects of oil and gas development on caribou. For example, in the draft SEIS, BOEMRE cites a recent study from 2006 indicating that onshore oil and gas production have not had an impact on population-level effects. Draft SEIS at 90. However, a later report from the National Research Council found that

[a] result of conflicts with industrial activity during calving and an inability to disperse with the stress of summer insect harassment, reproductive success of polar bears.  The final SEIS should include a review of these and other relevant potential impacts to polar bears, and should consider such impacts in light of the changing Arctic climate and environment.

The final SEIS should provide additional analyses of affects to walrus. BOEMRE acknowledges that “the potential for serious adverse impacts to individual or groups of walruses does exist.” Draft SEIS at 88, and has noted that the population of Alaskan Pacific walrus “are likely in decline; FEIS at III-74; however, the draft SEIS provides only a very brief analysis of potential impacts to walrus. Draft SEIS at 88. As with the EIS’s analysis for other species, it assumes that in the absence of a specific threat the polar bears and other species are affected by such activities. However, even the short analysis BOEMRE has provided this to be arbitrary. The agency states that aircraft overflights can result in mortality from trampling and the separation of cow-calf pairs, but argues that ‘BOEMRE’s misidentification requirements would preclude adverse impacts to walrus, to the extent that human safety considerations permit flying at this altitude.” Id. Thus, BOEMRE’s own analysis shows that human safety considerations may result in aircraft flying at an altitude that can startle walruses and cause walrus mortalities. In fact, low-ceiling clouds in the Arctic prevent compliance with the minimum altitude requirements with some frequency. However, BOEMRE essentially ignores this potential harm and refuses to analyze whether resulting injuries or mortalities could result in population-level effects.

BOEMRE also states that vessels can cause whales to abandon haulouts, but does not address further the potential for vessels to disturb walrus. BOEMRE should provide an analysis of the potential for vessel disturbances to harm walrus. The draft SEIS does not consider any potential disturbances to walrus. However, as discussed supra, gas production and development will require the construction of offshore pipelines and likely will result in additional exploration and development activity. BOEMRE must remedy these deficiencies by providing a complete analysis of potential affects to walrus in the final SEIS that includes a discussion of all relevant impacts.

BOEMRE also has not sufficiently analyzed the effects of gas development and production on birds. Gas development and production will require an increasing number of access roads and onshore and offshore pipelines. Draft SEIS at 86, and “could entail relatively large-scale activity.” . . . Id. at 87. BOEMRE attempts to avoid substantive analysis by stating that later analyses and permitting will provide the necessary information. The agency should analyze how the proposed development will affect individual species, including threatened and endangered species, and should not simply rely on the possibility of such analyses. BOEMRE in the draft SEIS states, “The draft SEIS also fails to consider the potential for a construction of pipeline can disturb seals, whales, and walrus, but provides only a minimal description of potential harm, and relies on later processes to prevent these harms. Id. at 87-88. This does not constitute a good faith look forward to NEPA requires. The agency must take a hard look at the potential to affect these species, but fails to analyze the relevance of this harm. The agency states that whales will avoid pipelines, but does not discuss the possibility of excluding whales from important habitat and how this may affect individuals or the species. Similarly, while the agency presumes that harm to seals and walrus can be avoided, it fails completely to consider the potential for construction activities to occur near important habitat. In the final SEIS, BOEMRE should perform a complete analysis of the potential effects of the construction of a natural gas pipeline that takes into account the locations of important marine mammal habitat and the cost of excluding animals from that habitat.

Fourth, BOEMRE fails to adequately analyze the effects of natural gas development on Arctic species.

BOEMRE has not adequately analyzed the effects of gas development and production operations will have on various Arctic species. The review of the effects of these activities provides very little data or actual analysis to support the conclusions. BOEMRE in large part attempts to avoid the need to obtain data and to perform analyses by stating that analyses at later OCSLA stages can protect health, wildlife, and the Arctic environment. This is insufficient. BOEMRE must take a hard look at the impact gas operations will have on Arctic species, including birds at the lease sale stage.

The draft SEIS fails to sufficiently consider impacts to polar bears. Significantly, the analysis fails to account for changes in the Arctic climate and ice extent and how this will affect polar bears. It states that “[f]lying the open-water season, most polar bears are not aware of the pack ice.” Draft SEIS at 83 (quoting WFS 2009 Biological Opinion). The draft SEIS also assumes that vessel-bears that are hungry and weak either on ice or in the open ocean; fleeing from a vessel may constitute a very harmful energetic cost to a weak polar bear, especially one that has already spent much time swimming in the open ocean. The draft SEIS’s analysis of disturbances to polar bears also fails to recognize that the melting ice is forcing bears to spend additional time on land, and that due to a lack of access to sea ice hunting habitat, many of these bears will be very hungry, and perhaps starving. Because oil and gas facilities may draw hungry bears, gas development and production could increase bear disturbances and human-bear encounters. BOEMRE recognizes that human-bear interactions can result in harassment of the bear, but fails to sufficiently consider the cost of such disturbances to the bear. Id. at 83-84. Of particular concern is the potential for these interactions to endanger the life of a human or a bear. For instance, a human-bear encounter may lead to injuries or deaths of either the human or an urgent need to protect a worker that results in the killing of a bear. The final SEIS should provide a comprehensive analysis of the stress and other relevant potential impacts to polar bears, and should consider such impacts in light of the changing Arctic climate and environment.

These reasons are unavailing, and BOEMRE should analyze new relevant subsistence displacement concerns in its Northeast NPR-A Supplemental IAP/EIS. BLM, Northeast National Petroleum Reserve-Alaska, Final Supplemental Integrated Activity Plan/Environmental Impact Statement (April 2008), available at http://www.blm.gov/ak/ceq/prop/planning/sup_genral/sup_npa/northeast/north_p_a_final_iap.html. Subsistence users have identified numerous reasons why they might avoid areas in response to industrial development. These reasons include a lack of cultural privacy, belief that resource are contaminated, and reduced resource productivity in an area, and physical obstacles. NEPA Murray IAP/EIS at 3-115. Natural gas development resulting from Lease Sale 193 has the potential to result in large scale and far reaching industrial activities that could displace subsistence users from vast expanses of subsistence lands as occurred during development of the Prudhoe Bay region. See Wernham, A. 2007. Impaht health and proposed Alaskan oil development: Results of the first integrated Health Impact Assessment/Environmental Impact Statement for proposed oil development on Alaska’s North Slope. Ecol Health 4:500-513. In the final SEIS, BOEMRE should analyze the potential for gas development and production to have such an effect.

III. NEW INFORMATION FROM THE DEEPWATER HORIZON SPILL

BOEMRE states in the draft SEIS that it need not consider the Deepwater Horizon spill in the Gulf of Mexico because it is beyond the scope of the remand. Draft SEIS at 16. Alternatively, BOEMRE states that the Gulf spill need not be incorporated into the Chukchi Sea lease analysis because (i) it has not changed baseline conditions in the Chukchi Sea, since it occurred in the Gulf of Mexico, (ii) it occurred in deep water and the Chukchi Sea lease sale area is in permanently shallow water, and (iii) “any change in likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed” in the original EIS. Id. These reasons are invalid, and BOEMRE should analyze new information from the spill that is still being developed by, for example, the Presidential Commission on the Deepwater Horizon Oil Spill.

NEPA compels supplemental environmental impact analyses when “there are significant new circumstances or information relevant to environmental impacts of the proposed action or its impacts.” 40 C.F.R. § 1502.4(e)(1); see also Alaska Sporting Cong., Inc. v. Minerals Manage. Serv., 223 F.3d 562, 566-567, 570 n. 9 (9th Cir. 2000). The Deepwater Horizon spill provide significant new information that requires BOEMRE to supplement its analysis of lease sale 193. See, e.g., Council on Environmental Quality, Report Regarding the Minerals Management Service’s National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (Aug. 16, 2010) at 32, available at http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ncea-nepa.pdf (stating “The BP Oil Spill constitutes significant new information and circumstances that may
require reevaluation of some conclusions reached in prior NEPA reviews and other environmental analyses and studies”). Fundamentally, the oil spill in the Gulf shows that large spills from exploration drilling can happen and that, even in the relatively benign conditions of the Gulf, they cannot be contained. These facts alone fundamentally undermine BOEMRE’s assumptions about oil spills in the original EIS. In the original EIS, for instance, BOEMRE concludes that no oil spill would occur during exploration drilling. FEIS, App. A at A-1-1-A.1-2. Any oil spill would occur only during development and production. Id. The Deepwater Horizon spill shows that, even with the latest technology, oil spills do, in fact, occur during exploration. In addition, the spills analyzed in the original EIS—a 1,500 barrel oil spill from a production facility and a 4,600 barrel oil spill from a pipeline, FEIS at IV-19—are less than 1/1000 the size of the Deepwater Horizon spill—estimated by the Presidential commission investigating the Deepwater Horizon spill at close to 5,000,000 barrels of oil. See National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, The Amount and the Fate of the Oil, Draft, Staff Working Paper No. 3 at 16 (Oct. 6, 2010). The original EIS does not analyze a large blowout spill. In light of the Deepwater Horizon, BOEMRE cannot dismiss a blowout spill as not reasonably foreseeable. In addition, BOEMRE must supplement its analysis of oil spill prevention and containment to reflect the lessons being learned from the spill and its aftermath, including the effects of dispersants.

CONCLUSION

BOEMRE should not finalize the draft SEIS in its current. With respect to missing information, BOEMRE should reassess whether there is essential missing information, taking into consideration the ongoing United States Geological Survey analysis of Arctic data gaps. It should obtain information that is essential to a lease sale decision, most effectively by engaging in a comprehensive and integrated research program. It should then prepare a revised draft SEIS that analyzes Lease Sale 193 in light of this new information. With respect to its analysis of natural gas development, BOEMRE should revise its assumptions and improve its analysis as described above. Once it has prepared an adequate and informative draft SEIS, it should make the document available for public comment. Then, the agency should consider anew in light of this new information whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

Respectfully,

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Alaska Wilderness League, et al.–Fourteen Environmental Organizations Comment


Alaska Wilderness League, et al.–Fourteen Environmental Organizations Comment


Pretelli, R.T. and M.C. Beatram. 2009. Mercury in Drilling Fluids. Alaska Sea Grant, University of Alaska Fairbanks 118-120.


List of recent studies that should be considered in the SEIS

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Relevant to addressing essential unknowns from industry-based surveys:


Alaska Wilderness League, et al.—Fourteen Environmental Organizations Comment


Noorwezgo, G., the Native Village of Savonos, the Native Village of Gambell, H.P. Huntington, and J.C. George. 2007. Traditional knowledge of the bowhead whale (Balaena mysticetus) around St. Lawrence Island, Alaska. Arctic 60(1):47-54.


Alaska Wilderness League, et al.—Fourteen Environmental Organizations Comment

Attachment C
A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning

Introduction

The United States is at a crossroads with respect to planning and decision-making for offshore oil and gas activities in the Chukchi and Beaufort seas. President Obama and the Department of the Interior (DOI) must decide whether to continue with plans and approvals that are based on outdated science and have generated controversy, litigation, and—according to the Gulf of Mexico disputes—the potential for severe environmental and social disaster. This risk is particularly high where the potential for adverse impacts is not well understood. In such cases, the DOI would have the opportunity and obligation to obtain the necessary science and use it to inform decisions now for the Beaufort Sea.

The lack of baseline information creates a significant impediment to both effective planning and decision-making. While the U.S. Commission on Ocean Policy noted that “information and policy makers need comprehensive scientific information about the ocean and its environment to make wise decisions,” the final recommendations of the Interagency Ocean Policy Task Force (OPT) call for science-based decision making and a better understanding of our ocean ecosystems, including a special emphasis on the Arctic.1 The Obama administration implemented the final OPT recommendations and has both the opportunity and the obligation to obtain the necessary science and use it to guide decisions about industrial activities.2 Deferring future leasing in the Chukchi and Beaufort seas, call for the U.S. Geological Survey (USGS) to develop Arctic seafood science in the context of Arctic Strategic Plan, and creating the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the Obama administration has taken important steps toward allowing for comprehensive science and planning. At the same time, the government is in the process of determining how to respond to the court-ordered reconsideration of the 2008-2012 Five Year Federal Offshore Leasing Program, and Congress is debating legislation that includes provisions for better science in the Arctic.

The most effective way to respond to the courts’ orders and prepare for decisions about future industrial activities is to undertake comprehensive science and planning that would provide a fundamental understanding of the marine ecosystem. This research has not been done adequately before and, much of what has been done is obsolete due to a region that is changing rapidly. While it is true that DOI and industry have undertaken significant research, those efforts have relied heavily on historic data collected under outdated plans that were only conducted in the summer, it would result in erroneous conclusions about the impacts of oil and gas activities.

Moreover, where basic information about the marine ecosystem exists, much of it is old, spotty, and too specific. For example, the Environmental Assessment for the Arctic Ocean Management Plan notes that “data were scarce for estimating the abundance and biomass of fishes in the Alaskan Arctic.3” The review of potential data sources indicated that surveys for fish have occurred over about 15-20 years, but typically over different regions. Even if those surveys over the past 40 years were combined (which would be inappropriate due to different sampling methodologies and other reasons), there are still major gaps in the U.S. Arctic Ocean shelf region that have not yet been filled. These areas include those where commercial fisheries could reasonably be expected to develop and those within lease sale areas.

Additionally, the vast majority of existing studies have been conducted in summer months. We need year-round understanding of the Arctic Ocean ecosystem. One remaining example of this is the subsident, the spectacled Eider. In the summer their population would be widely dispersed, but in the winter, the entire world’s population gather together in a small area of the northern Bering Sea. If studies on this bird were only conducted in the summer, it would result in erroneous conclusions about the impacts of activities on this species, especially if activities occurred at or near their wintering gathering area.

In addition, the Lease Sale 193 (Chukchi) and 2002 Multi-Sale (Beaufort 186, 195, 202) environmental impact statements use the same primitive model to estimate how much oil spill might travel in the marine environment. This model, which was developed in 1982, forms the basis for the estimation of potential impacts from a spill. Much of the environmental data input to the model is old, for example, current and wind information from data from 1979-1996. More sophisticated models are available and better information would be available for more effective analysis of the risks from spills.

While significant resources have been dedicated to studying particular Arctic animals and potential impacts to these animals from offshore oil and gas development, there has been a critical lack of information about the ecosystem. The only studies designed to provide the comprehensive information and understanding of the health, biodiversity, and functioning of Arctic marine ecosystems and the potential impacts of industrial activities were conducted pursuant to the Outer Continental Shelf Environmental Assessment Program (OCEAP). The information gained under that program did not initially cover the Chukchi Sea because the results have very low inter-year variability in making decisions now for the Beaufort Sea.

Studies designed to answer individual questions. Similarly, the National Science Foundation has funded significant cutting edge, hypothesis-driven basic research. While these efforts bolster our understanding of some processes in limited areas, they have not been conducted at the scale necessary to provide the holistic understanding of the ecosystem of the Arctic.24 DOI and industry have undertaken significant research, studies have already started, could be the initial step. The results of that study—which should identify some of the largest and most pressing information gaps—could almost certainly be filled in 5-7 years for approximately $20 million annually. Currentعتبرinations. The results of that study—which should identify some of the largest and most pressing information gaps—could almost certainly be filled in 5-7 years for approximately $20 million annually. Given the $2.7 billion in revenue generated from Lease Sale 193 alone and the immense risks from oil and gas activities, this cost is neither exorbitant nor unaffordable.

A comprehensive plan would provide many of the answers to the unknown identified in the court proceedings relevant to Lease Sale 193 and the current OCS leasing program. A detailed, well-designed research plan would provide the necessary information to make informed decisions about whether to allow industrial activities and, if so, under what conditions.

State of Science About the Arctic Ocean

Very little is known about Arctic Ocean, and in particular the Chukchi Sea. According to the U.S. Arctic Research Commission, the Arctic “is the least studied and most poorly understood area on Earth.”4 In particular, “The Arctic Ocean is the least well-known ocean on the planet. We know more about the topography of the planets Venus and Mars than we do about the bathymetry of the Arctic Ocean.”5 Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete.6 We recognize that the recent losses on sea ice during summer are fundamentally changing these ecosystems, but we still know little about the abundance and distribution of common species much less how the food webs work in this region.

As part of the Lease Sale 193 litigation, the plaintiffs compiled a 38-page appendix of quotations from the Environmental Impact Statement that recognize the lack of available information about the Chukchi Sea.7 These citations are explicit recognitions by DOI and NOAA that there is significant missing information about even the most basic parameters for every one of the largest and most important marine animals in the ecosystem—all fish, mammals and birds—which are critically important to the highly studied animals of an ecosystem. The missing information for these species includes abundance, distribution, and life history. This lack of basic information makes decision-making difficult, if not impossible, to determine whether there will be significant impacts to the animals and the ecosystem. The state of information about the more charismatic animals in the ecosystem is further evidence of the lack of baseline scientific information.

Since the conclusion of the OCEAP program, DOI’s studies in the Arctic Ocean have not been guided by an overarching monitoring and research plan. Instead, research priorities over the past several decades have already been guided by an assumption that enough was known about the basin. DOI, therefore, “focused on ‘topical studies in smaller areas’ rather than developing a broad-based plan that filled identified information needs.”8 These applied research questions are important and have led to a better understanding of specific issues, such as the fall herd haulout where polar bears congregate to feed.9 However, the current need for comprehensive monitoring of key parameters studied in OCEAP is now that virtually all of the information gained remains valid. Climate change has already started to dramatically alter the last 30 years and ecosystems have changed by significant factors. This makes the current research program even more relevant.

Thus, DOI stopped examining and monitoring the fundamental and, instead focused on applied research without even trying to answer those questions.10 This change of direction has a direct impact to our ability to effectively manage our natural resources. For example, the USGS has identified repeatedly both that it lacks basic scientific information and needs good information for decision making.11 On the other hand, the agency points to the fact that it has spent $530 million on research since 1965 and, therefore, has a substantial understanding of the Arctic Ocean.12 The agency also argues in court that the research undertaken gives it a sufficient basis for making decisions.13 The references in the Lease Sale 193 EIS discussed above the lack of basic information for species runs directly counter to any assertions by DOI or BOEMRE that there is a broad base of information available for the Arctic from which to make decisions.

The National Science Foundation (NSF) also has funded important basic research in the Arctic Ocean. Research has been proposed to the Arctic Ocean Management Plan (AOMP1) and has been designed to answer specific, cutting-edge scientific questions, including those about the specific impacts and feedbacks of climate change. While this cutting-edge research is important, it does not provide the basic, baseline information that is critical for making decisions, including those decisions that have the potential to change the populations change from place to place and season to season. Much of that information simple not available for the Arctic from which to make decisions.

Similarly, industry has invested in significant scientific research, some of which may address important monitoring information. Currently, however, the results of those studies are not reliable because the data from industry studies are generally not peer-reviewed and do not represent the true end result of the degree to which the information about industry research is shared varies from study to study. Given the lack of transparency and low-bias conflict of interest standards, the data from those studies have little use for making decisions. The knowledge that could potentially hinder development, there is a substantial risk of bias in the information that is shared. Unless

2 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
3 See Arctic Marine Fishery Service, Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis For The Arctic Fishery Management Plan And Amendment 29 to the Fishery Management Plan for Bering Sea/Alaskan King Crab (Oct. 7, 1999); 74 Fed. Reg. 189, 195, 102 (2002). See also
4 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
7 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
8 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
9 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
10 See S. 1562, 111th Cong. (2010).
11 Arctic FMP EA at 99.
12 See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).
13 Arctic FMP EA at 99.
14 These problems are explained in more detail in Attachment 3 to this document.
all data and methods for all research projects are made available to the public, it is impossible to give
sufficient results evidence in the decisions about oil and gas activities.
Ultimately, when considered with the long list of studies performed over the last 15 years, the 38-page
ingex of recognized unknowns about the Lease Sale 193 area is indicative of a systemic problem with
the way research is being conducted in the Arctic. As a result of the narrow focus on applied research
questions, while baseline research and monitoring is ignored, large sums have been spent to provide
information about specific issues within the Arctic, while other factors of ecosystem structure and
functioning, and effects of anthropogenic perturbations; and 4. track the ecological and societal impacts;
and 5. integrate these scientific data to identify Important Ecological Areas as well as processes and
habitats that are sensitive to vulnerability and perturbation, and furnish a basis for marine spatial
planning.
This program could easily be conducted in three simple phases over the next 5-7 years: 1) gap
analysis and planning (2011-2012), 2) research and monitoring (2013-2016), with monitoring continuing
into the future; and 3) integrating new and older information to provide decision-makers the basic
understanding needed to make effective decisions (2016-2017). Each of these phases must be informed by
local and traditional knowledge, including planning and peer-review.

Phase I: Gap Analysis and Planning
To develop a comprehensive, integrated research and monitoring program, scientists must first
understand the existing information and gaps in knowledge. Based on that information, a research program can be
devised with public input, to fill the gaps.

Phase II: Research and Monitoring
Once the information gaps are identified and a research plan devised, the research and monitoring must be
executed at the local level. As the known gaps in knowledge outlined above show, scientific research and monitoring should include:

1. Marine life assessment to provide a year-round picture of the species in each marine habitat and
their population trends; 2. Environmental monitoring to measure atmospheric and physical ocean
conditions, such as salinity and temperature, and biological and chemical factors richness and
diversity; 3. Scientific process studies to understand the way in which the ecosystem functions and is likely
to respond to stresses; 4. Studies designed to identify patterns of subsistence use and changes in well-being as well as
potential impacts from industrial activities; and 5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate science to social
impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to
better elucidate the processes that underlie the way in which the ecosystem functions.20 As demonstrated by
the OGP plan, our understanding of the Arctic and the ways in which to study them has grown
considerably since the original OCEAP.21 Studies should be coordinated and integrated to measure
multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate
the key drivers and links in the system.

Integrated research reveals relationships that are not apparent in focused single species or component
studies. For example, scientists were able to determine the fate of the Exxon Valdez oil spill using
"computational biology," a technique based on the analysis of the physical, chemical and biological
impacts of the spill on the northern Bering Sea ecosystem was shifting from moving through
small and scattered communities to open water communities.22 They were only able to do this by studying multiple aspects of the ecosystem
simultaneously, including climate indices, sea ice concentration, water temperature, salinity, and
seafood biomass. In addition to providing better information, this type of integrated research and
monitoring is more cost effective because more information is elucidated than would be from individual
studies.23

Concepcion and Shell are conducting integrated research studies in the Chukchi Sea around two
of their drilling prospects. They are simultaneously measuring physical, biological and chemical
occurrences across the Arctic, with the goal of finding patterns in marine mammals, fish, and
hypoxic areas. While they are not sharing their data publicly, the results they present are intriguing.24
Their work indicates that the Chukchi Sea is not a homogeneous region, but instead potentially has a high degree of spatial complexity.
The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean current
that in turn affect the distribution of productivity and how that productivity flows through the food web to
invertebrates, fish, birds and marine mammals.

This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic
Ocean. Concepcion and Shell’s research, however, is confined to areas around two of their drilling
prospects during the open water season. With increased drilling effort, this type of research could easily be expanded to the rest of the region and other regions. Expanding this type of research and monitoring would provide decision-makers with the complete picture needed to protect Arctic regions and their biodiversity and to explain the substantial
way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand which data sets are most important to determine how to protect them from oil and gas and other industrial activities.

20 Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact.
22 See also http://dx.doi.org/psweb/ps3008/ps2d3008/pdf.pdf; 1 p. 29-21.
23 Concepcion and Shell are conducting integrated research studies in the Chukchi Sea around two of
their drilling prospects. They are simultaneously measuring physical, biological and chemical
occurrences across the Arctic, with the goal of finding patterns in marine mammals, fish, and
hypoxic areas. While they are not sharing their data publicly, the results they present are intriguing.
Their work indicates that the Chukchi Sea is not a homogeneous region, but instead potentially has a high degree of spatial complexity.
The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean current
that in turn affect the distribution of productivity and how that productivity flows through the food web to
invertebrates, fish, birds and marine mammals. This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic
Ocean. Concepcion and Shell’s research, however, is confined to areas around two of their drilling
prospects during the open water season. With increased drilling effort, this type of research could easily be expanded to the rest of the region and other regions. Expanding this type of research and monitoring would provide decision-makers with the complete picture needed to protect Arctic regions and their biodiversity and to explain the substantial
way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand which data sets are most important to determine how to protect them from oil and gas and other industrial activities.
development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. Information that would be gathered by a comprehensive research and monitoring effort would allow for more effective consideration of alternatives and better evaluation of potential impacts.

Additionally, at the lease sale stage, BOEMRE should undertake a more detailed analysis than was conducted for the Five-Year Leasing Program, based on better information. This analysis is particularly important given the agency’s current practice of preparing an environmental assessment, rather than full EIS to evaluate proposed exploratory activities. If the agency prepares a programmatic-level analysis based on incomplete information at both the Leasing Program and Lease Sale stages, no detailed evaluation will be prepared until development is scheduled to occur. Neither OCSLA nor NEPA contemplate such a result.

Nor, as it appears to have done in the Draft SEIS for Lease Sale 193 should BOEMRE rely on analyses to be conducted by other agencies pursuant to other statutory mandates. Rather, the agency should abide Secretary Salazar’s commitment to science and lead the way toward a better understanding of the ocean ecosystem by working with other expert agencies to put in place a comprehensive research and monitoring program. The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately $100 million over 5 years. By comparison, Lease Sale 193 alone generated $2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefits, but it also poses considerable, economic and otherwise, to the benefits provided by a healthy marine ecosystem.

These cost estimates are consistent with the other programs mentioned above. The GEM program was projected to cost $120 million in 1999, and the OCSERP program was estimated to cost $23 million annually.

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in such an approach is to develop and implement a comprehensive research and monitoring program like OCSERP. We simply do not know enough now to make decisions about stewardship for the oceans and clean energy. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate; and if so, when, where and how such activities could be conducted.


DRAFT DRAFT DRAFT

October 2010

A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean

IV. Environmental Monitoring

B. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals and some fish). These assessments will provide crucial baselines for evaluating impacts of industrial development and ecosystem change.

C. Support remote monitoring by satellite and aircraft to track sea ice extent, surface albedo and ocean color in collaboration with NOAA, NASA and NSIDC.

D. Periodically update the resource assessments identified in “II” above to track ecosystem conditions and linkages and energy flow through the ecosystem, as well investigations to determine the primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.

E. Monitor detection of invasive species, including species displaced by warming seawater temperatures to the south, and exotic species introduced by industrial activities.

IV. Scientific Process Studies

A. Identify processes strongly coupled with biological production, species’ distribution and abundance, and support research that will improve understanding of them aimed at improving prediction of community responses to short- and long-term environmental stressors. This research should include identification of the species interactions that structure the biological community, which includes studies of the food web to determine linkages and energy flow through the ecosystem, as well investigations to determine the processes responsible for nutrient cycling.

B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, including processes strongly affected by transition from light limitation to nutrient limitation resulting from continued sea ice loss, effects of warmer water temperatures on growth and provisioning requirements of selected target species (especially young-of-the-year and juveniles), and sensitivity to acidification from increases in atmospheric carbon dioxide.


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October 2010

10-20-10
Consider the following within the context of the Chukchi Sea environment: the lease sale's potential impact on wildlife and subsistence. This declaration compiles information from Earthjustice staff, supported by the USA's North Slope Borough. It details ecological areas and identifies potential energy sources. The declaration aims to mitigate adverse consequences through data integration and marine spatial planning.

### RELEVANT EXCERPTS

#### VI. Data Integration and Marine Spatial Planning

A. Construct ecosystem models including a nutrient-phytoplankton-zooplankton (NPZ) model and an Ecopath model to evaluate predicted ecosystem responses.

B. Archive monitoring data in a publicly accessible database that is continuously maintained. Also, monitoring results should be periodically included in GIS maps to facilitate identification of Important Ecological Areas (IEAs) and important subsistence areas in the US Arctic Ocean and how they may change through time. Important Ecological Areas are geographically delineated areas with distinguishing characteristics that contribute disproportionately to an ecosystem’s health or are particularly vulnerable to disturbance.

C. Integrate the results of the monitoring and research described above with a marine spatial planning effort that identifies IEAs as well as all potential energy sources and their availability to markets to help minimize the likelihood of adverse consequences associated with industrialization.

#### VII. Sociological and Ecosystem Impact Studies

A. Identify historical and current patterns of land and subsistence use, and conduct a survey of social and psychological well-being in North Slope communities to document current conditions in these communities.

B. Monitor changes in patterns of land and subsistence use, and in measures of social and psychological well-being in North Slope communities affected by oil development.

C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, such as research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.
LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

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LACK OF INFORMATION ABOUT EFFECTS ON SPECIES/HABITAT

I. FISH

A. General

“Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that ice cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level.” EIS at III-32.

“Despite these previous works, several data deficiencies remain. Information of current distribution and abundance (e.g., fish per square kilometer) estimates, age structure, population trends, or habitat use areas are not available for fish populations in the northeastern Chukchi Sea. Many fish studies reporting distribution and/or abundance are 20-30 years old. Other studies are still older. For example, the only survey of demersal fishes in the region is more than 20 years old. Fish assemblages and populations in other marine ecosystems of Alaska (e.g., Gulf of Alaska, Beaufort Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years; it is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action.” EIS at III-32.

“Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-33.

“Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and area reflect a pattern of temporally and spatially irregular and disjunct sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is unknown if the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Beaufort seas are considered...
to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competition, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northwestern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are very limited; most of the surveys/studies have been performed in coastal waters landward of the landward of 200-nm isobath, with scant surveys having sampled deeper waters. . . . [B]oth population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare). . . . Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities; growth, reproduction, or survival rates within or across regional or local habitats; or productivity rates by habitat, essentially are unknown for fishes inhabiting waters seaward of the nearshore, brackish-water ecotone.” EIS at III-34 (internal citations omitted).

2. Neritic–Demersal Assemblage

“Life-history data for many of the demersal species using neritic substrates is lacking (e.g., whitespotted grenling, roundshorn sculpin, spronyhook sculpin, veteran poacher); consequently, assessing the species resilience to perturbations is not feasible until additional information becomes available.” EIS at III-35.

3. Neritic–Pelagic Assemblage

“No species of this assemblage are assessed as being of low resilience, because life-history data are lacking.” EIS at III-35.

4. The Copepagic Assemblage

“Arctic cod and Pacific sand lance are assumed to be of medium resilience to exploitation; polar cod and toothed cod are data deficient such that an assessment of resilience is not feasible with available information.” EIS at III-36.

II. MARINE MAMMALS

A. Whales

1. Bowhead Whale

“There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean.” EIS at III-45.

“Recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are lacking.” EIS at III-45.

“No data are available indicating, other than historic commercial whaling, any previous human activity has had a significant adverse impact on the current status of BCB Seas bowhead or their recovery.” EIS at III-45.

“Conservation concerns include . . . uncertain potential impacts of climate warming. . . .” EIS at III-45.

“The uncertainty of the stock structure adds some uncertainty to summaries of the status of bowheads that may be impacted by the Proposed Action.” EIS at III-45.

“[l]ife history studies have been conducted to evaluate the bowhead population size and distribution . . . data are not available that permit evaluation of this possible, speculative interaction.” EIS at III-46 (quoting NMFS’ Arctic Region Biological Opinion).

“There is little information regarding causes of natural mortality for BCB Seas bowhead whales.” EIS at III-46.

“Life is known about the effects of microbial or viral agents on natural mortality [of bowheads].” EIS at III-49.

“The amount of feeding [by the BCB Seas bowhead stock] in the Beaufort Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002).” EIS at III-49.

“The MMS-funded large-scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by Melnikov, Zelenksy, and Amann (1997), Moore (1992), Moore and Clarke (1990), and Moore, Demaster, and Day (2006). We have plotted counts of bowheads in the Chukchi Sea during these surveys (Fig III-4-4), because they visually provide limited insight into areas where bowheads may be exposed to oil and gas activities should they occur in the Chukchi Sea Planning Area.

However, we caution against over-interpretation of these data out of context of survey effort and, because these data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales; they are the best data available.” EIS at III-55.

“Data are limited on the bowhead fall migration through the Chukchi Sea before the whales move south into the Bering Sea.” EIS at III-55.

“The amount of feeding in the Chukchi Sea and Bering Strait is the fall is unknown as is the amount of feeding in the Bering Sea in the winter (Richardson and Thomson, 2002). Richardson and Thomson (2002; excerpt) concluded that: ‘. . . behavioral, aerial-survey, and stomach-content data, as well as certain energetics data . . . show that bowheads also feed widely across the eastern and central Beaufort Sea in summer and fall.’ In mid- to late fall, at least some bowheads feed in the southeast Chukchi. Detailed feeding studies have not been conducted in the Bering Sea in the winter.” EIS at III-54.

“There are locations in the Beaufort Sea and the western Chukchi Sea where large numbers of bowheads have been observed feeding in many years. However, the significance of feeding in particular areas to the overall food requirements of the population or segments of the population is not clear.” EIS at III-55.

“Recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available.” EIS at III-55.

“[l]ife-history statistics for most species covered in this assemblage are data deficient, chiefly for lack of fish surveys and studies in oceanic waters of the Alaskan Arctic.” EIS III-36.

6. Diadromous Fishes

“A number of diadromous species in the region have complicated life-history patterns that are not fully understood.” EIS at IV-61.

7. Salmon

“Little is known about the movements undertaken during the 18 months the [pink] salmon spend at sea.” EIS at III-39 (quoting Schmidt, McMillian, and Gallaway (1983)).

“Chum salmon fry, like pink salmon, do not overwinter in streams but migrate (mostly at night) out of streams directly to sea shortly after emergence. The timing of outmigration in the arctic is unknown, but occurs between February and June (chiefly during April and May) in more southern waters.” EIS at III-46.

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“Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-121.

2. Fin Whale

“The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock.” EIS at III-46. See also id. at III-56 (similar).

“There are no recent data to confirm their use or lack of use of the Chukchi Sea Planning Area, or adjacent areas to the south.” EIS at III-47.

“There is little information about natural causes of mortality (Perry, DeMaster, and Silber, 1999a). The NMFS summarized that ‘There are no known habitat issues that are of particular concern for this stock’ (Anglis and Lodge, 2002, 2005). Perry, DeMaster, and Silber (1999a:51) listed the possible influences of disease or predation as ‘Unknown.’” EIS at III-56.

“The importance of specific feeding areas to populations or subpopulations of fin whales in the North Pacific is not understood.” EIS at III-57.

“The possible influences of disease or predation and of overutilization [on fin whales] are listed [by NMFS] as ‘Unknown.’” EIS at V-28.

3. Humpback Whale

“Available information does not indicate humpback whales inhabit the Chukchi Sea OCS project area. There are no recent data to confirm their lack of use of the Chukchi Sea OCS Planning Area, or adjacent areas to the south.” EIS at III-47.

“There is no clear consensus (Calambokidis et al., 1997:6) about the population structure of humpback whales in the North Pacific due to insufficient information (Anglis and Lodge, 2002) (see further discussion in USDOI, MMS,2003a,b).” EIS at III-58.

“Anglis and Outlaw (2005) stated that: ‘There are no reliable estimates for the abundance of humpback whales at feeding areas for this stock’ (the Western North Pacific Stock) ‘because surveys of the known feeding areas are incomplete, and because not all feeding areas are known.’ There are not conclusive or reliable data on current population trends for the western North Pacific stock (Perry, DeMaster, and Silber, 1999b; Anglis and Outlaw, 2005).” EIS at III-59.

“The role of humpback whales in the North Pacific is relatively unknown, and rates have not been estimated.” EIS at III-60.

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7. Minke Whale

“There are no reliable estimates for the Alaska stock of minke whales. A provisional estimate was made for the Bering Sea of 810 individuals; however, this is not used for the Alaska stock because the entire stock’s range was not surveyed.” EIS at III-78.

B. Other Marine Mammals

1. Seals

“Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Bering/Chukchi Sea species known to be in decline. Accurate population estimates for ice seals are not available and are not readily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec., III.A.4, Sea ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec., III.A.3, Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006).” EIS at III-71.

a. Ringed Seal

“No reliable estimate for the size of the Alaska ringed seal stock is available (Anglis and Outlaw, 2005).” EIS at III-71.

b. Spotted Seal

“No reliable estimate for the size of the Alaska spotted seal stock is available (Anglis and Outlaw, 2005).” EIS at III-72.

c. Ribbon Seal

“Ribbon seals inhabit the North Pacific Ocean and the adjacent fringes of the Arctic Ocean. In Alaska, they range northward from Bristol Bay in the Bering Sea and into the Chukchi and western Beaufort seas. They are found in the open sea, on pack ice, and rarely on shorefast ice (Kelly, 1988). As the ice recedes in May to mid-July, they move farther north in the Bering Sea, hauling out on the receding ice edge, or remain ice (Burns, Shapiro, and Fay, 1981).” EIS at III-73.

“No reliable estimate for the size of the Alaska ribbon seal stock is available (Anglis and Outlaw, 2005).” EIS at III-73.

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d. Bearded Seal

“No reliable estimate for the size of the Alaskan bearded seal stock currently is available (Anglis and Outlaw, 2005).” EIS at III-74.

2. Pacific Walrus

“No reliable estimate is currently available for the size of the Alaskan stock of Pacific walrus (Anglis and Outlaw, 2005). However, available evidence indicates that the population is likely in decline (Kelly, Quakenbush, and Taras, 1999; Kochzer, 2004).” EIS at III-74. See also id. at EIS at III-76 (first sentence same).

“The population size has never been known with certainty; however, the most recent survey estimate was approximately 201,039 animals (Gilbert et al., 1992).” EIS at III-76.

3. Polar Bear

“A reliable estimate for the CBS stock of polar bears, which ranges into the southern Beaufort Sea, does not exist, and its current status is in question. In 2002, the IUCN/SSG Polar Bear Specialist Group estimated the size of the CBS population at 2000+ bears, though the certainty of this estimate was considered poor (Lunn, Schiebe, and Born, 2002).” EIS at III-84.

“Coastal areas provide important denning habitat for polar bears. Terrestrial denning areas for bears of the CBS polar bear stock are less well understood than those for the SBS polar bear stock.” EIS at IV-166. See also id. at V-36 (same).

“The maximum reproductive age for polar bears is unknown, but is likely well into their 20’s (Amstrup, 2003).” EIS at III-81.

“With the collapse of the Soviet empire in 1991, levels of illegal harvest dramatically increased in Chukotka in the Russian Far East (Amstrup, 2000; USDOI, FWS, 2005). While the magnitude of the Russian harvest from the CBS is not precisely known, some estimates place it as high as 400 bears per year, although the figure is more likely between 100 and 250 bears per year.” EIS at III-84. See also id. at V-36 (same).

“[B]ecause of the unknown rate of illegal take currently taking place, in 2006 the IUCN/SSG Polar Bear Specialist Group designated the status of the CBS stock as ‘declining’ from its previous estimate of 2000+ animals (IUCN/SSG Polar Bear Specialist Group, 2006).” EIS at III-84.
III. MARINE AND COASTAL BIRDS

1. General

“Despite the importance [for marine and coastal birds] of [Kasegaluk Lagoon, Ledyard Bay, Point Barrow, barrier islands, the spring net-trap land system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson], as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old; making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed.” EIS at IV-145.

2. Threatened Spectacled Eiders1

“In general, population demography for this species and in particular breeding information (i.e., timing of pair formation and duration of pair bonds, timing of mating, male and female dispersal rates, sex-specific estimates for natal, breeding, and molt-site fidelity, breeding propensity, non-breeding component, duckling/brood and first-year survival, etc.) is poorly understood due to a lack of long-term marking/monitoring programs and of low restighting/recapture/recovery rates.” BE at 23.

“Few data are available on the overall longevity of spectacled eiders, but similar to other eiders, they would likely be long-lived.” BE at 23.

“Recruitment rate of spectacled eiders is unknown (USFWS 1999).” BE at 25.

“Migration routes of spectacled eiders in the spring are not well known …” BE at 25.

“The summer range of non-breeding [spectacled] eiders is not known …” BE at 26.

“Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown.” BE at 27.

“The world population of spectacled eiders has declined substantially during the past 30 years, and may be continuing to decline (USFWS 1999, 2002b). Long-lived species like spectacled eiders typically do not have highly variable populations and unknown mortality factors may be undermining their ability to maintain a stable population. The causes of decline could be varied and are largely unknown …” BE at 28.

1 From Minerals Management Service, Biological Evaluation of Spectacled Eider (Somateria fischeri), Steller’s Eider (Polysticta stelleri), and Kittlitz’s Murrelet (Rissa brevirostris) for Chukchi Sea Lease Sale 193 (September 2006), incorporated by reference into the Lease Sale 193 EIS at III-61, IV-125, V-30.

3. Threatened Steller’s Eiders2

“[T]he length of time that Steller’s eiders remain paired is unknown.” BE at 13.

“Many life history aspects of Steller’s eiders (e.g., timing of pair formation, duration of pair bonds, dispersal rates, sex-specific seasonal site fidelity, first-year survival, etc.) are poorly understood.” BE at 13.

“The reason for relatively low nesting success or failure to nest by the Alaska nesting population is unknown, but may be related to predators switching to alternate prey when lemmings are in low abundance (Quakenbush and Suydam 1999).” BE at 15.

“Steller’s eider recruitment rates are unknown (USFWS 2002b).” BE at 15.

“Departure from [the Arctic Coastal Plain] to molting areas is poorly documented, but males probably begin departing as early as late June, followed by non- and failed nesting females presumably from late July – late August, and finally successful females and fledged young.” BE at 16.

“The population of Steller’s eiders molting and wintering along the Alaska Peninsula appears to be declining (USFWS 1999, 2002a). … The causes of decline could be varied and are largely unknown, but if the cause of the decline is within the marine environment, it is reasonable to conclude that the Alaska and Russia nesting populations are being affected similarly because a large portion of the Russian population winters with the Alaskan population.” BE at 18.

“Variability in the abundance of the Alaskan breeding population of Steller’s eiders is not well understood.” BE at 18.

“Williamson et al. (1986) listed Steller’s eiders as occurring in the Cape Thompson area 25 miles southeast Point Hope during surveys for Project Chariot at Ogotoruk Creek. Steller’s eiders were listed as occupying marine littoral, lacsitlune, and beach environments in order of affinity. In this

1. General

“Departure of the Chukchi Sea summer residents is unknown. …” BE at 35.

“Winter foods are unknown, but may consist mostly of pelagic euphausiids or other macroinvertebrates.” BE at 35.

“Information regarding fidelity to nesting sites is not available (Day et al. 1999).” BE at 35.

“‘Causes for the declines [in Kittlitz’s murrelets] are not well known, but likely include: habitat loss or degradation, increased adult and juvenile mortality, and low recruitment, and we believe that glacial retreat and oceanic regime shifts are the factors that are most likely causing population-level declines in this species.’ “BE at 36 (citing USFWS status review, 2004).

5. Cliff-Nesting Seabirds

a. Murres

Noting “limited data.” EIS III-62.

b. Puffins

“The current status of horned puffins in the Chukchi Sea is unknown.” EIS III-62.

“The current status of the tufted puffin in the Chukchi Sea is also unknown.” EIS III-62.

c. Black-Legged Kittiwake

“The current status of the black-legged kittiwake (Rissa tridactyla) in the Chukchi Sea is unknown.” EIS at III-63.

“The portion of [Chukchi] population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown.” EIS at III-63. See also id. at IV-142 (similar).

“Current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown.” EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

“The current status of the northern fulmar (Fulmarus glacialis) is unknown.” EIS at III-63.
The current status of the glaucous gull (*Larus hyperboreus*) in the Chukchi Sea is unknown. EIS at III-63.

7. High Arctic-Associated Seabirds
   a. Black Guillemot
      “The current status of the black guillemot (*Cepphus grylle*) in the Chukchi Sea is unknown.” EIS at III-63.
   b. Ivory Gull
      “The current status of the ivory gull (*Pagophila eburnea*) in the Chukchi Sea is unknown.
      Divoky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea.” EIS at III-64.
   c. Arctic Tern
      “The current status of the Arctic tern (*Sternula paradisaea*) in the Chukchi Sea is unknown.” EIS at III-64.

8. Tundra-Breeding Migrants
   a. Jaegers
      “The current status of [all three species of] jaegers in the Chukchi Sea is unknown.” EIS at III-64.
   b. Glaucous Gull
      “The current status of the glaucous gull (*Larus hyperboreus*) in the Chukchi Sea is unknown.” EIS at III-64.

9. Waterfowl
   a. Yellow-Billed Loons
      “Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is very little known about the coastal areas bordering the Chukchi Sea.” EIS at III-65.
      “The [yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown.” EIS at IV-140.
   b. Common Eider
      “During spring migration, the common eider (*Somateria mollissima*) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore.” EIS at III-66.
   c. Pacific Brant
      “The current status of the Pacific brant along the Chukchi Sea is unknown.” EIS at III-68.
   d. Greater White-Fronted Grease
      “The current status of greater white-fronted geese along the Chukchi Sea coast is unknown.” EIS at III-68.
   e. Lesser Snow Goose
      “Richie et al. (2006) reported that the number of snow geese nesting on the Ikpikpuk River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kukpikwak River delta colony.” EIS at III-68.

10. Shorebirds
    a. Buff-Breasted Sandpiper (species of concern)
        Noting “limited data.” EIS III-70.
    b. Bar-Tailed Godwit (species of concern)
       “The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood.” EIS at III-69.

LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

I. FISH

A. General
   1. General effects of seismic on fish
      “A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur.” EIS at II-33. See also id. at IV-51—52 (similar) and IV-74 (similar).
   2. General effects of oil spills on fish
      “Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected.” EIS at II-34. See also EIS at IV-52 and IV-74 (similar).
      “While small spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill-response. Overall, it is unclear whether, over the long-term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected.” EIS at IV-72.

B. Effects on Marine Pelagic Species
   “Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made.” EIS at IV-61.

C. Effects on Capelin
   “Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAH’s) retained in the substrate, as PAH’s in weathered oil can be biologically available for long periods and very toxic to sensitive lifestyles, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of the capelin to detecting contaminated substrates and how long the oil persists in the localized habitat.” EIS at IV-60-61.
D. Effects on Arctic Cod

“Although arctic cod can be extremely abundant in nearshore lagoonal areas, the importance of nearshore versus offshore environments to the lifecycle is not known (Craig et al., 1982). Although it is known that juvenile arctic cod associate with floating ice, it is unknown to what degree this association contributes to the development and survival of young fishers later recruiting to the breeding population. If early lifehistory stages of arctic cod were concentrated in nearshore environments, in patches in the open ocean, or under floating ice, they certainly would be more vulnerable to effects from an oil spill impacting such habitats.” EIS at IV-62.

II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

“Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur.” EIS at II-37.

“[B]ecause of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas [regarding Alt. III]. EIS at IV-42. See also id. at IV-269 (same) and EIS at IV-45 (same; re: Alt. IV).

“Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to predict with certainty what potential impacts from such development would have on threatened and endangered marine mammals.” EIS at IV-111.

“Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations.” EIS at IV-152.

“In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (IWC, 2006).” EIS at IV-162–63.

“Without historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals.” EIS at IV-156.

“Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammal populations in the project area as a result of the Proposed Action.” EIS at IV-145.

“Careful mitigation can help reduce the effects of future industrial developments and their accumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea will likely accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area. Increasing vessel traffic in the Northwest Passage, defined as the marine route between the Pacific and Atlantic oceans through the Arctic Ocean across the top of North America, which includes the Proposed Action area, increases the risks of oil and fuel spills and vessel strikes of marine mammals.” EIS at IV-145—46.

“Because very little is known about the distributions, population sizes or habitat use of marine mammals in the Chukchi Sea, it is difficult to determine if significant impacts will or will not occur to marine mammals as a result of the proposed action.” EIS at V-32.

2. Effects of Seismic and Other Noise on Marine Mammals

“Because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area.” EIS at II-37. See also EIS IV-145—146 (similar).

“Despite the increasing concern and attention noted above, there still is uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially repeated exposure to loud noise, on baleen whales.” EIS at IV-82.

“Monitor plans typically emphasize readily obtainable, short-term behavioral measures that can be directly related to disturbance factors (Bejder et al., 2004; Ketten, 2006). This is particularly the case for cetaceans typically associated with immediate behavioral responses to human activities (sound, sight, and smell).” EIS at IV-154.

“[M]onitor plans typically emphasize readily obtainable, short-term behavioral measures that can be directly related to disturbance factors (Bejder et al., 2004).” EIS at IV-154.

“The need to rely on indirect methods of assessing the environmental impact of human activity on marine mammals is a recurring problem (Inglis and Gust, 2003). Impact assessments for cetaceans typically emphasize immediate behavioral responses to human activities (sight, smell, and sound).” EIS at IV-82.

“While there is some general information available, evaluation of the impacts of noise on marine mammal species, particularly on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1998; NRC, 2003, 2005). This is particularly true for baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physiological effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; Ketten, 1998).” EIS IV-87.

“Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency.” EIS IV-87.
“Repeated long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. Ketten (1998) stated that age-related hearing loss in humans is attributed to the accumulation of permanent threshold shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown.” EIS at IV-88.

“There are no data on which to determine the kinds or intensities of sound that could cause a [temporary threshold shift, TTS] in a baleen whale.” EIS at IV-88.

“Little data are available about how, over the long term, most marine mammal species (especially large cetaceans) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source.” EIS at IV-89.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to be used for interspecies communication. However, because real knowledge of sound sensitivity is lacking, we believe it is prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in interspecific communication.” EIS at IV-89.

“It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise.” EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

“There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . on oil spills on cetaceans calves.” EIS at IV-82.

“There are no data available to MMS that definitely link even a large oil spill [associated with seismic surveys] with a significant population-level effect on species of large cetaceans.” EIS at IV-103.

“Data are not available that would permit evaluation of the potential for long-term sublethal effects [from oil spills] on large cetaceans.” EIS at IV-115.

“[T]he potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects.” EIS at IV-115.

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repeated exposure to loud noise, on baleen whales. There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of either noise or oil spills on cetacean calves. Lastly, and importantly, there are not data sufficient to characterize the current seasonal and annual use of the Chukchi Sea Planning Area by bowhead whales and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales. Thus, it is difficult to predict exposure in some parts of the area where the action could occur and to understand fully the potential effects of any exposure.” EIS at IV-82.

a. Effects of seismic and other noise on bowhead whale

“Uncertainty exists about the potential effects of seismic surveys on bowhead whales (especially on calf survival and growth and female reproduction) in the Chukchi Sea due to a lack of current data about their use of the Proposed Action Area during periods when seismic surveys could be occurring. What is known, however, is that the observed response of bowhead whales to seismic survey noise varies among studies. Some of the variability appears to be context specific (i.e. feeding versus migrating whales) and also may be related to the whales’ reproductive status and/or sex or age.” EIS at B-35.

“Bowhead responses to drilling noise at different distances depending on the types of platform from which the drilling is occurring. Data indicate that many whales can be expected to avoid an active drillship at 10-20 km or possibly more.” EIS at B-36. See also id. at IV-194 (similar).

“The long-term response of bowheads to production facilities located at the southern end of the migration corridor is unknown.” EIS at B-36.

“The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowhead whales to production facilities farther than gravel islands located at the southern end of the migration corridor is unknown.” EIS at IV-194 (internal references omitted).

“There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur. . . .” EIS at IV-82.

“More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales.” EIS at IV-82.

“Data are not sufficient to determine sex, age, or reproductive factors that may be involved in [bowhead] response to vessels. We are not aware of data that would allow us to determine whether females with calves tend to show avoidance and scattering at a greater, lesser, or at the same distances as other segments of the population.” EIS at IV-109.

With whales, even when unusual changes in abundance occur following an event such as the EVOS (as with the disappearance of relatively large numbers of killer whales from the AB pod in Prince William Sound) (Dahlheim and Matkin, 1994), interpretation of the data is uncertain or is of uncertain controversy due to the lack of supporting data, such as oiled bodies or observations of individuals in distress (and, in that case, the existence of a viable alternate explanation of the probable mortality). Thus, the potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-115. See also id. at IV-117 (fatter two sentences similar).

“It is not clear how large crude oil would remain on a free-ranging cetacean’s skin once it was oiled.” EIS at IV-117.

“The potential effect of crude oil on the function of the cetacean blowhole is unknown.” EIS at IV-118. See also id. at IV-159.

“The effects of an oil spill on cetacean newbomws or other calves and the potential effects of contact or detection of spilled oil by near-term, or post-partum females are not known.” EIS at IV-121.

“The potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. However, observations of cetaceans behaving in a lethargic fashion or having labored breathing has been documented in more than one species, including in gray whales after the EVOS, in which large numbers of individuals were subsequently found dead.” EIS at IV-158.

“The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, reduced immune function, reduced reproduction or longer dependency periods) effects on large cetaceans from a large oil spill essentially is unknown. There are no data on large cetaceans adequate to evaluate the probability of sublethal effects. EIS at IV-160.

“The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial.” EIS at IV-161.

2. Bowhead Whale

“There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur; where leases will be let; where a spill could occur; where production platforms and pipelines may be based; etc. More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially...
The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. EIS at IV-194.

"Noise associated with ships or other boats potentially could cause bowheads to alter their movement patterns or make other changes in habitat use. Clapham and Brownell (1999) summarized that "...effects of ship noise on whale behavior and ultimately on reproductive success are largely unknown." EIS at V-23.

"[Recent monitoring studies indicated that] most fall migrating whales avoid an area with a radius about 20-30 km around a seismic vessel operating in nearwater; however, there are no data that indicate that such avoidance is long-lasting after cessation of the activity." EIS at V-25.

b. Effects of oil spill on bowhead whale

There is uncertainty about the effects on bowheads (or any large cetacean) from the event of a large oil spill. EIS at II-36.

The potential effects to bowheads of exposure to [polycyclic aromatic compounds, PACs] through their food are unknown. Because of their extreme longevity, bowheads are vulnerable to incremental long-term accumulation of pollutants." EIS at IV-103. See also id. at IV-119 (same).

"In the Biological Opinion for Federal oil and gas leasing and exploration by the MMS within the Alaskan Beaufort Sea and its effects on the endangered bowhead whale, the NMFS (2001:51) stated that: 'It is difficult to accurately predict the effects of oil on bowhead whales (or any cetacean) because of a lack of data on the metabolism of this species and because of inconclusive results of examinations of baleen whales found dead after major oil releases.' EIS at IV-103.

"There is great uncertainty about the potential effects of ingestion of spilled oil on bowheads, especially on bowhead calves. Decreased food assimilation could be particularly important in very young animals, those that seasonally feed, and those that need to put on high levels of fat to survive their environment." EIS at IV-118.

"It is not known if bowheads would leave a feeding area where prey was abundant following a spill." EIS at IV-118.

"The factors associated with the presence of [large aggregations of bowhead whales] are not yet clear. It is not known if they would leave the area heavily contaminated with crude oil." EIS at IV-121.

"Primarily because of the uniqueness of the bowhead and its apparently obligate use of spring lead and polynya as its migratory path between wintering and summering grounds, MMS is uncertain of the potential severity of impact should a large oil spill occur within such a system, especially if spring migration were underway and hundreds of females were calving in or near those leads." EIS at IV-121.

c. Effects of past activity on bowhead whale

"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation area." EIS at V-20.

"There is insufficient data to make reliable predictions of the effects of Arctic climate change on bowhead whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, ice research buoys, aerial and geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

d. Cumulative effects on bowhead whale

"[Data on other potential perturbations (e.g., past seismic surveys and oil spills) are not sufficient to clearly know the level of effects [on bowheads].] EIS at V-20.

"Whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected." EIS at V-20.

"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation area." EIS at V-20.

"There are insufficient data to make reliable predictions of the effects of Arctic climate change on bowhead whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, ice research buoys, aerial and geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

1. Beluga Whale

"A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV.C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown." EIS at IV-161.

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

4. Humpback, Fin, and Other Balaen Whales

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"No studies are available specific to the effects of seismic survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on grey and minke whale behavior as a result of seismic activity." EIS at IV-151.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking." EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

"[I]t is difficult to predict the impact of a large spill on either humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would be not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-122.

"There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age." EIS at IV-161.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

"There are no records of humpbacks killed or injured in the fisheries in which fishers self report (Angliss and Lodge, 2002), but the reliability of such data is unknown." EIS at V-29.

"The impacts of pollution and habitat degradation [on humpback whales] due to coastal development are not known." EIS at V-30.

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"In conclusion, there is uncertainty about effects on bowheads (or any large cetacean) in the event of a large oil spill. There are, in many years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area. If a large amount of fresh oil contacted a significant portion of such an aggregation, effects potentially could be greater than typically would be assumed and we cannot rule out population-level effects if a large number of females and newborn or very young calves (as this would be in spring) were contacted by a very large amount of fresh crude oil." EIS at IV-125.

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"It is not known what effects an oil spill would have on bowhead whales, but it is likely that some whales would experience temporary, nonlethal effects from the oilsing of skin, inhaling hydrocarbon vapors, ingesting oil contaminated prey, fouling of their blubber, losing their food source, and temporary displacement from some feeding areas." EIS at IV-216–217.

"Limited monitoring data prevent effective assessment of cumulative subsistence-resource damage; resource displacement; changes in hunter access to resources; increased competition; contamination levels in subsistence resources; harvest reductions; or increased effort, risk, and cost to hunters. Limited data also limit our assessment of the effectiveness of mitigation measures." EIS at V-46.

c. Effects of past activity on bowhead whale

"Available data . . . are inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior." EIS at V-25.

Also, "we cannot adequately assess potential effects on patterns or durations of bowhead habitat use. Because of the inadequacy of the data on activities, and because of the limitations inherent in studying large baleen whales, MMS was not able to assess whether there were any adverse health effects to individuals during the period of relatively intensive seismic survey activity in the 1980's." EIS at V-25.

"However, data are inadequate to fully evaluate potential impacts on whales during this period, including the duration of habitat use effects or numbers and types of individuals that did not use high-use areas because of the activities." EIS at V-27.
C. Other Marine Mammals

1. Seals

“It is uncertain how seismic surveys might impact seal-food resources in the immediate vicinity of the survey.” EIS at IV-147.

In the context of seals: “Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS at IV-147.

“Little information is known about oil-spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest.” EIS at IV-217 (internal references omitted).

2. Walrus

a. Effects of seismic

There is “no data available to evaluate the potential response of walruses to seismic operations. EIS at IV-148.

“Quantitative research on the sensitivity of walruses to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walruses.” EIS IV-148.

“Although the hearing sensitivity of walruses is poorly known, source levels are thought to be high enough to cause temporary hearing loss in other species of pinnipeds.” EIS at IV-148.

“Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walruses to seismic operations.” EIS IV-148.

3. Polar Bears

a. Effects from oil spills

“With the limited background information available regarding large oil spills in the offshore arctic environment, the outcome of a large oil spill is uncertain.” EIS at IV-165.

III. MARINE AND COASTAL BIRDS

A. Impacts Generally

“Several areas historically documented to be important to marine and coastal birds in Safe 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high.” EIS at IV-132.

“The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown.” EIS at IV-132.

“Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas include Kuskokwim Lagoon, Ledyard Bay, Prudhoe Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed.” EIS at IV-145.

1. Noise impacts on marine and coastal birds

“Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown.” EIS at IV-127.

“The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for birds at the Deadhorse airport indicating that some individuals tolerate frequent disturbance associated with the proposed lease operation would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences.” BE at 38 (emphases added).

“Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate.” BE at 44.

Ledyard Bay Critical Habitat Areas: “The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but could be in important staging or molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in these areas during the prolonged migration period ultimately may influence the survival of the spectacled eiders (Petersen et al. 1999).” BE at 47.

“The behavioral response of eiders to aircraft overflights is unknown; some spectacled eiders next and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences.” BE at 38 (emphases added).

“Collisions with aerial and maritime traffic on the North Slope may negatively impact eiders.” BE at 38 (emphases added).

“Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas include Kuskokwim Lagoon, Ledyard Bay, Prudhoe Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult.” EIS at IV-127.

“Several areas historically documented to be important to marine and coastal birds in Safe 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult.” EIS at IV-132.

b. Cumulative effects

“It is unknown if exposed adult[ birds] could become permanently sterilized [due to exposure to oil].” EIS at IV-133.

B. Impacts to Threatened Spectacled and Steller’s Eiders

“Though impacts of oil spills [on Kittlitz’s murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999).” BE at 37.

C. Impacts to Kittlitz’s Murrelets

“Clearly, there is concern for regarding the long-term survival of the [Kittlitz’s Murrelet] and the potential negative impacts of offshore oil and gas development, however, management decisions are difficult given the lack of available information.” BE at 36-37.

“Though impacts of oil spills [on Kittlitz’s murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999).” BE at 37.
announced several changes to improve its analyses and decisions, most notably with respect to
As an initial matter, we note that the analysis in the draft SEIS is not consistent with the
information regarding environmental consequences of oil and gas activities within the lease sale
Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS). Unfortunately,
Energy Management, Regulation and Enforcement (BOEMRE) draft Supplemental
The Pew Environment Group appreciates the opportunity to comment on the Bureau of Ocean
Dear Director Goll:
Re: Chukchi Sea Lease Sale 193 Draft Supplemental Environmental Impact Statement
November 29, 2010
VIA EMAIL
John Goll, Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99505-5820
BOEMREPublicComments@boemre.gov

The Pew Environment Group appreciates the opportunity to comment on the Bureau of Ocean
Energy Management, Regulation and Enforcement (BOEMRE) draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS). Unfortunately, the draft SEIS does not provide the “hard look” at the environmental impacts of Lease Sale 193 required by the National Environmental Policy Act (NEPA) because it fails to include necessary information regarding environmental consequences of oil and gas activities within the lease sale area. Thus, we request that BOEMRE prepare a revised draft SEIS that fully addresses the issues presented below.

The draft SEIS was prepared in response to a July 21, 2010 order of the Alaska federal district in Native Village of Point Hope v. Salazar. In that case, plaintiffs challenged the adequacy of the Final Environmental Impact Statement (FEIS) prepared by BOEMRE for the nearly 30 million acre Chukchi Sea Lease Sale 193. The court concluded that the FEIS analysis of environmental impacts of oil and gas activities in the Chukchi Sea lease sale area was deficient, and required the agency to rectify those flaws in a supplemental EIS. Specifically, the court ordered BOEMRE to (1) analyze the environmental impact of natural gas development, and (2) determine whether missing information identified by BOEMRE in the FEIS was essential or relevant to the agency’s decision making as required under NEPA regulation 40 CFR 1502.22; then (3) determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. Our comments focus on the draft SEIS’ assessment of the relevance and need for information that was identified in the FEIS as missing or incomplete.

As an initial matter, we note that the analysis in the draft SEIS is not consistent with the Department of Interior’s offshore oil and gas program reforms that have been adopted in response to the Deepwater Horizon oil spill in the Gulf of Mexico. The Secretary of Interior has announced several changes to improve its analyses and decisions, most notably with respect to

E. Impacts on Shorebirds

“Dunlins are another prominent species in Kasegaluk Lagoon and Peard Bay in late summer and
fall. As with other species of shorebirds and waterfowl, a spill during periods of peak abundance
could impact large numbers of dunlins. Less is known about the numbers, timing, and patterns of
habitat use of Kasegaluk Lagoon and Peard Bay by bar-tailed godwits but, given their recent
population declines, effects of an oil spill could be particularly important.” EIS at IV-144.

D. Impacts on Waterfowl

1. Impacts on Yellow-Billed Loons

“Yellow-billed loons in the Chukchi Sea are at particular risk [from environmental perturbations
such as disturbance, habitat alterations, and oil spills] due to their low numbers and low
reproductive rate. The species is little studied and basic biological information (such as the
seasonal distribution of immature and non-breeding yellow-billed loons) is unknown. Additional
research could improve our understanding of the vulnerabilities of the yellow-billed and other
loons using nearshore areas of the Chukchi Sea and western Beaufort Sea.” EIS at IV-140-41.

2. Impacts on Common Eiders

“The number of [common eiders] that could be affected [by oil spill] at sea during spring or fall
migration is unknown.” EIS at IV-142.

NEPA compliance and with respect to ensuring that decisions are based on sound science as
detailed in the September 29, 2010, Secretarial Order No. 3305. In addition, the Department’s
September 1, 2010 Outer Continental Shelf (OCS) Safety Oversight Board report provided
recommendations to strengthen permitting and environmental stewardship. The report
highlighted concerns with BOEMRE’s failure to fulfill its dual mandate to lease offshore lands,
yet also to protect the environment and cultural resources. The Alaska Region must ensure their
recommendations and reforms are implemented in all new decisions, including its draft SEIS for
the Chukchi Sea. To date, the Alaska Regional office of BOEMRE has failed to do so.

NEPA and OCSLA Require Missing or Incomplete Information be Included in the SEIS
BOEMRE was ordered to supplement the FEIS it prepared for Lease Sale 193 by reassessing the
extent and relevance to decision making of missing information about the environmental impacts
of offshore oil and gas activities in the Chukchi Sea. In preparing the draft SEIS, BOEMRE must
comply with NEPA’s obligation to make a “hard look” at environmental impacts, just as it must in
preparing an initial FEIS. The draft SEIS fails to do so.

The draft SEIS purports to respond to the court’s order to meet the requirements of NEPA
regulation 40 CFR 1502.22(7) by determining whether missing information in the FEIS is relevant to
assessing potentially significant effects of oil and gas development in the Chukchi Sea, and
whether the missing information is essential to a reasoned choice among the FEIS alternatives.
The purpose of that regulation is to require agencies to gather all information necessary to make a
decision, but to allow it to move forward in cases where information might not be relevant to
the decision to be made or if the cost of obtaining the information is exorbitant. BOEMRE has not
taken seriously its obligation to make a decision informed by science, and to gather whatever
missing scientific information is needed, but has instead undertaken a paper exercise, simply
cataloging the hundreds of statements in the FEIS regarding missing information and then
concluding that the addition of any of this information is not necessary in the decision-making
process.

BOEMRE’s primary rationale for its assertion that the information is not essential at the lease
sale stage is that the decision is not a consequential commitment of the area to oil and gas
activities and information can be obtained at later stages of the Outer Continental Shelf Lands
Act (OCSLA) process, when the agency is evaluating exploration or production plans. This


Once incomplete or unavailable information regarding a foreseeable significant adverse effect is
disclosed in an EIS, NEPA regulation 40 CFR 1502.22 requires that: “If the incomplete information
relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among
alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the
information in the environmental impact statement.” Thus, the focus of the regulation is on obtaining
information and including it in the EIS.
reasoning misconstrues OCSLA, and also overlooks longstanding BOEMRE practice to conduct only abbreviated environmental assessments at the exploration plan stage and instead to rely heavily on the lease sale EIS analysis. This practice is necessitated by OCSLA, which requires the Secretary of the Interior to approve exploration plans within 30 days, constraining BOEMRE’s ability to undertake an environmental review at that stage beyond the brief environmental assessment (EA) that, as a matter of practice, it prepares at the exploration stage.

More significantly, BOEMRE’s reasoning ignores the nature of the decision to be made at each stage of oil and gas development. BOEMRE’s lease sale stage decision that the agency makes the decision about whether, where and how oil and gas activities will occur within a particular portion of the outer continental shelf. Once the leases are issued, the agency’s ability to alter or cancel them is limited. OCSLA authorizes the Secretary to suspend or cancel a lease or permit only if oil and gas activities threaten to cause serious harm or damage to life, property, the environment, or national security or defense. At the exploration plan stage, the decision is whether to approve a plan that outlines the exact location, timing and equipment to be used to explore for productive deposits of oil and gas. The decision at the development and production stage is similar. In both cases, while OCSLA establishes stages for development of oil and gas resources in the outer continental shelf, the decision about whether to allow that activity to go forward occurs at the lease sale stage and the decisions at later stages are simply refinements of the lease decision and BOEMRE cannot change the decision about whether to authorize oil and gas activity absent unusual circumstances. Thus, BOEMRE must have complete information about the environmental effects of the lease sale stage before it decides whether to authorize oil and gas activities. This thorough understanding of the existing environment and the potential consequences of development within that environment is essential not only to determining whether to authorize oil and gas activities but also to identify any mitigation measures to minimize potential environmental impacts.

Information Identified as Missing or Incomplete in the FEIS and draft SEIS is Essential to Making Decisions Regarding the Lease Sale

BOEMRE also concludes that missing information is not relevant or essential to a choice among alternatives because the impacts under all of its alternatives are essentially the same. This rationale does nothing to support its position but instead suggests that its range of alternatives is inadequate, further complicating flaws in the FEIS. Much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, where, and under what conditions to offer oil and gas leases in the Chukchi Sea.

Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread across the Chukchi Sea, and this lack of information has been widely acknowledged (e.g., CRCC 2010, MBC 2007). Table 1 depicts by category the types of essential missing basic data about the Chukchi Sea ecosystem.

<table>
<thead>
<tr>
<th>Type of Essential Need (or gap in knowledge)</th>
<th>Explanation</th>
<th>Example of Essential Need or gap in knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic</strong></td>
<td></td>
<td>Zooplankton, benthic organisms, fish.</td>
</tr>
<tr>
<td><strong>Abundance</strong></td>
<td></td>
<td>Zooplankton, Ophiuroids, crab, fish, ice seals.</td>
</tr>
<tr>
<td><strong>Spatial coverage</strong></td>
<td></td>
<td>Steller’s Eider, Arctic Fox.</td>
</tr>
<tr>
<td><strong>Type of Essential Need (or gap in knowledge)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temporal coverage</strong></td>
<td></td>
<td>Invertebrates, fish, birds surveyed in nearshore environments.</td>
</tr>
<tr>
<td><strong>Seasonal coverage</strong></td>
<td></td>
<td>Invertebrates, benthic organisms, fish, polar bear, seabirds.</td>
</tr>
<tr>
<td><strong>Spatial scale</strong></td>
<td></td>
<td>The Outer Continental Shelf Environmental Assessment Program (OCSEAP) which occurred in the 1970s-1980s is a good mid-scale survey that has not occurred in recent years.</td>
</tr>
</tbody>
</table>

Another type of missing information is data about the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the Deepwater Horizon Gulf of Mexico oil spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur (Nuka 2010). For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information on the physical environment and the unique challenges it faces to offshelf oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in the environment with sea ice, the varying temperatures of the ice throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the draft SEIS.

BOEMRE Failed to Include in the FEIS and draft SEIS Available Analyses and Studies

BOEMRE completed this draft SEIS without obtaining and incorporating information from relevant Department of Interior Arctic Ocean science initiatives. Those efforts, though not currently complete, would contribute to a more thorough analysis of environmental impacts in the draft SEIS. Specifically, BOEMRE failed to take advantages of— or even acknowledge— the ongoing analysis by the U.S. Geological Survey (USGS) to identify information gaps in the Arctic Ocean as related to decisions about OCS activity that was ordered by the Secretary of the Interior on March 31, 2010. That analysis will be completed in April 2011. The draft SEIS also appears to have been developed in isolation from an assessment BOEMRE is undertaking specifically to address missing information about the Chukchi Sea (MBC 2007). This Chukchi OCS Offshore Monitoring in Drilling Area (COMIDA) effort by BOEMRE is intended to “characterize the Chukchi Sea ecosystem in order to detect and distinguish future changes resulting from oil industry activities and other anthropogenic and natural activities prior to oil and gas exploration activities” (MBC 2007). The COMIDA effort is supposed to look at data results and provide monitoring recommendations from an ecosystem perspective, and to obtain baseline data before oil and gas activity, including exploration begins in the Chukchi Sea. While COMIDA has a promise of providing sufficient information to assist the agency in making informed decisions, the agency is not using the information gained from this research effort to inform its decisions regarding if, when, where and how oil and gas activities might occur in the Chukchi Sea.

Moreover, BOEMRE could have— and should have— included additional information in the draft SEIS that has become available in the two years since the draft was completed.

Attachment 1 is a list of references that include relevant and essential information that should be incorporated into a revised draft SEIS.

One example pertains to the bowhead whale—an important marine mammal for the Inuit along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the Endangered Species Act. The FEIS acknowledges “data are limited on the bowhead whale full migration through the Chukchi Sea before the whales move south into the Bering Sea.” And that “recent data sets are needed to determine whether or not the Chukchi Sea Planning Area are not available.” In the draft SEIS (Appendix A) BOEMRE...
responded that: “While there will always be some lag between environmental change and available data that reflects that change, BOEM (formerly MMS) has conducted or commissioned extensive study bowl size of the Chukchi Sea, and a general understanding of the bowlhead distribution, abundance, and habitat use is known.” The important and very pertinent research to which the agency refers was finalized in July of this year, and made publicly available on their website during the fall of 2010 (Quakenbush et al. 2010). The draft SEIS goes on to say “Existing information is sufficient to support sound scientific judgment and reasoned managerial decisions, especially during the earlier stages of OCSLA review, which are necessarily more programmatic in nature. Furthermore, the missing information pertains to potential impacts equally applicable to each action alternative, meaning that additional information on this subject is not likely to be useful to decision making at this stage. Overall, this incomplete information is not exemplary of a reasoned choice among alternatives.” However, this is not necessarily the case, as Quakenbush et al. (2010) identified important corridors for migration and important feeding areas that should be excluded from the lease sale or at least considered essential information.

The alternatives considered by BOEMRE in the draft SEIS all have the same impacts, with the exception of no action – indicating that the range of alternatives is too narrow. Ecologically sensitive areas must be identified and protected. Areas within an ecosystem are not equal in biological and ecological terms, some areas are more important than others to the ecosystem or human populations. Identification of important ecological areas based on essential habitats and functions in the Arctic ecosystem along with traditional cultural activities, can be an important step toward ensuring ecosystem functionality. The ecologically and culturally sensitive areas in the Arctic Ocean should be removed from the leasing process.

The draft SEIS also fails to include all of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska. For example, Attachment 2 documents peer reviewed literature produced by the Environmental Studies Program since 1990 that was not considered, but relevant to the FEIS and subsequent draft SEIS. The Alaska Annual Studies Plan Final FY 2011 notes that since the conception of the Environmental Studies Program in 1973 more than $350 million has funded studies in Alaska across 15 planning areas (BOEMRE 2010). Since much time and effort went into these studies, it is for BOEMRE’s responsibility to consider the results and implications of these study results, particularly as they may contribute to some of the essential unknown information about species and habitats as well as the effects of oil and gas exploration and development on these species and habitats.

Traditional Knowledge Can Be Used to Fill Gaps in Information

Some of the information that was identified in the FEIS and draft SEIS as missing or incomplete could be satisfied in part by incorporating local and traditional knowledge. Local and traditional knowledge, a different but equally valid knowledge system will help expand our understanding of the Arctic and can supplement and enhance existing knowledge. Indigenous peoples who have lived in the Arctic Ocean region for millennia have developed a wealth of knowledge about the region. They depend on local plants and animals for food, clothing and shelter, and have learned a great deal about the species they use and see. In recent years, a substantial amount of research has focused on traditional knowledge in the Arctic. Major projects such as the Arctic Council’s Arctic Climate Impact Assessment (ACIA 2004) have incorporated traditional knowledge in efforts to understand what is taking place in the region. Nonetheless, there is much more to be done to make the knowledge of Arctic peoples more widely available, such as incorporating traditional knowledge in management processes that directly impact people, including in this EIS process. Co-management organizations and institutes of public governance are one means of incorporating not just knowledge but the holders of that knowledge in the decision-making process. Greater involvement by Arctic peoples in the governance of their regions and communities allows their knowledge to benefit modern institutions. These approaches can help in the development of long-term solutions to economic and environmental challenges in the Arctic.

Documenting knowledge in a report, however, is just one step towards fully incorporating what Arctic peoples have learned over generations. A report about traditional knowledge may put certain facts and observations before a larger audience but using that knowledge appropriately entails the wisdom than many people associate with traditional perspectives. We have attached a bibliography with selected references that should help provide guidance and provide examples of situations where traditional knowledge has been effectively utilized (Attachment 3). Traditional knowledge can help fill some of the gaps in the draft SEIS as well as guide future efforts to collect necessary information.

BOEMRE Must Employ a Holistic Ecosystem-Based Approach to Research

We recognize and acknowledge that research has been and is currently being conducted in the Chukchi Sea by various U.S. government agencies, and by industry (e.g., BOEMRE 2010, Funk et al. 2007). These studies are important and contribute to our baseline knowledge and understanding of the Chukchi Sea ecosystem. However, the existence of such research does not necessarily mean that it is relevant or complete to sufficiently inform the decisions about whether, where, when, and how oil and gas activity should occur in the Chukchi Sea. A large quantity of research cannot substitute for relevant research.

Existing scientific studies have been undertaken in an uncoordinated basis without an overarching purpose for the information or a clearly identified goal to advance knowledge of Chukchi Sea ecosystems. Specifically, many of the current scientific studies are focused on specific drilling lease sites that are of interest to industry. They provide information about physical and biological aspects (e.g., species) for a small area within a larger ecosystem for a limited time period. To be useful to leasing decisions, longer-term studies must be undertaken in order to provide an understanding of the variability of species over time. Moreover, the current piecemeal approach to science currently practiced by BOEMRE in its Environmental Studies Program Annual Study Plan, is not adequate. Narrow studies are undertaken by contractors responding to a request for proposal (RFP) with no coordinated analysis and synthesis of that information. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea.

BOEMRE has used the same flawed segregated approach that it uses in its research to its assessment of missing information in the draft SEIS. The agency has reached the conclusion that none of the missing information is essential to decision making by addressing each statement of missing information and drawn on the work of other agencies.

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List of references that are missing from the FEIS and SEIS and should be considered as essential

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Relevance to addressing essential unknowns about narwhal:........................................... 4
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Relevance to addressing essential unknowns about gray whales:

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Relevance to addressing essential unknowns about seabirds:

Relevance to addressing essential unknowns about fish and invertebrates:

Relevance to addressing essential unknowns for lower trophic level species and communities:

Relevance to addressing essential unknowns about ecosystem biodiversity:

Pew Environment Group Comment


Pew Environment Group Comment


Pew Environment Group Comment


Pew Environment Group Comment


Noongorok, G., the Native Ilage of Savononga, the Native Ilage of Gambell, H.P. Huntington, and J.C. George. 2007. Traditional knowledge of the bowhead whale (Balana mysticetus) around St. Lawrence Island, Alaska. Arctic 60(1):47-54.

Selected References for Traditional Knowledge (TK)

- Shows similarities and differences between and within TK and scientific knowledge.

- Shows TK is an affordable and reliable alternative to scientific study in many instances.

- Review of what TK is all about, how it fits with resource management

- Use of fishers’ knowledge to explore ecology of herring, especially adding time depth to available record.

- Physical scientists working with local residents to better understand coastal currents, ice formation, etc.

- What traditional stories can add to understanding of glacier movements and change.

- TK can provide detailed local information.

- TK can add to available science, supplementing what is known from biological studies.

- TK to illuminate patterns of sea ice use and impacts of climate change.

- Fishers’ knowledge applied to ecological questions.

- Combining TK and remote sensing to show scientific merit of indigenous classifications.


Noungwook, G., the Native Village of Savoonga, the Native Village of Gambell, H.P. Huntington, and J.C. George. 2007. Traditional knowledge of the bowhead whale (Balena mysticetus) around St. Lawrence Island, Alaska. Arctic 60(1):47-54
- Results of a TK study, published as an ecology paper. Discusses methods by which TK is acquired and transmitted within a community (as well as methods for documenting TK).

- Method for gathering fishers’ knowledge relevant to ecosystem understanding.

- Comparison of TK and scientific views, demonstrating convergence of understanding.

- Results of TK and field ecology study, in which TK added time depth and detailed understanding of ecosystem interactions to explain current observations and trends.

- Results of TK study, showing how much it can add to ecology.

- How TK can be applied to fisheries ecology and management.
TWS's Position on Offshore Drilling in the Chukchi Sea

TWS opposes platform-based offshore drilling in the Arctic Ocean including the Chukchi Sea at this time. It is premature to move forward with offshore drilling without:

1. Adequate scientific information on marine and potentially affected coastal resources (baseline data).
2. The baseline data needed for marine and coastal spatial planning.
3. Sufficient spill cleanup capabilities and infrastructure in place, and
4. BOEMRE promulgating needed regulations and ensuring sufficient drilling oversight via adequate enforcement mechanisms, government accountability and transparency, and other measures.

Each of these points is discussed below. TWS believes the stakes are high regarding offshore drilling in the Chukchi at this time. Should there be a spill on the scale of the Deepwater Horizon tragedy, globally important marine food webs, habitat for iconic species like polar bears, and social and economic values sustaining vibrant indigenous communities likely would be adversely affected.

Baseline Data: The Arctic Ocean is one of the least studied and most poorly understood ecosystems in the world. Baseline data on Arctic Ocean ecology are critical because they allow decision-makers and the public to decide whether or not to use particular resources at risk and, if there is a major spill, to quantify damages to those resources. Without such data, decision-makers and the public cannot make informed choices about offshore drilling as they do not know the likely risks or true sensitivities of the area.

The non-profit organization Oceana has done an excellent job describing the scientific and policy rationale for more baseline data on the Chukchi Sea, including the relatively small cost of collecting these data. In its October 20, 2010 DRAFT document entitled A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning (see Appendix 1), this draft includes the following important and relevant paragraph:

The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately $100 million over 5 years. By comparison, Lease Sale 193 alone generated $2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life of native communities, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefits, but it also poses considerable risks, economic and otherwise, to the benefits provided by a healthy marine ecosystem. (p. 9)

The data needs identified by Oceana regarding the Chukchi Sea are essential for the science-based decision-making embraced by the Obama Administration. These needs clearly are not exorbitant in cost, particularly in light of the scale of potential oil and gas development in the Chukchi.

Unfortunately, the authors of BOEMRE’s draft SEIS have taken an extremely narrow view of data needs. In Appendix A of the draft SEIS entitled “Analysis of Incomplete or Missing Information,” BOEMRE notes the numerous statements from the 193 FEIS containing “incomplete or unavailable” information on marine and potentially affected coastal resources. BOEMRE states, however, that despite the large amount of incomplete or unavailable information “its analysts were generally able to complete thorough analyses and drew informed conclusions from the information available.” How is this possible? It is only possible by accepting BOEMRE’s conclusion that the incomplete or unavailable information was not “essential to a reasonable choice among alternatives” (Draft SEIS Appendix A, p. 1, emphasis in original). If one accepts BOEMRE’s position that the alternatives in the FEIS are unnecessarily and inappropriately indistinguishable with respect to potentially affected resources which TWS does not, then more ecological data likely would not change BOEMRE’s conclusions. In the other hand, more data on whale presence or rare fish species in particular areas would alter the alternatives in the FEIS and the SEIS for example, that type of information absolutely would be relevant to decision-makers and the public.

While TWS agrees that not all impacts of development can be definitively known, it makes no sense to not evaluate those we can assess. In the draft SEIS, BOEMRE has made an unjustifiable choice to not consider new or additional data that might be relatively inexpensive and easy to justify, including not utilizing any or all the relevant studies completed since the FEIS. As BOEMRE knows, the U.S. Geological Survey will complete a study early next year of scientific gaps in Chukchi Sea data – a major step forward. TWS would certainly like to see this type of data be funded at a non-exorbitant cost before finalizing its SEIS.

Marine and Coastal Spatial Planning: Currently, public lands undergo planning processes which provide appropriate use for all or portions of protected lands while our oceans undergo no such processes. The Final Recommendations of the Interagency Ocean Policy Task Force report, July 19, 2010, are a first step toward remedying that deficiency which results in inadequate environmental protection of the nation’s oceans. The baseline data that would be collected for the Chukchi under Oceana’s proposal could be used, among other things, to identify marine and coastal ecological “hotspots” (i.e., areas of high biological productivity or importance, including areas of cultural importance) which should be provided with increased protections from industrial and other activities that could harm them.

Among the Task Force’s National Priority Objectives are two that are extremely relevant to the Chukchi:

1. Coastal and Marine Spatial Planning: Implement comprehensive, integrated, ecosystem-based coastal and marine spatial planning and management in the United States” and
2. “Identifying Critical Arctic Areas: Address environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes” (p. 6).

Page 7.4 of the Task Force report provide details on a proposed implementation framework for marine and coastal spatial planning, including the Task Force’s goals to have all plans completed by 2015.

Spill Cleanup Capability and Infrastructure: The Deepwater Horizon spill and its ongoing investigations demonstrate incontrovertibly that major oil spills from offshore drilling occur (even among the most well-funded endeavors), that some spills cannot be prevented as there is no fail-safe mechanism for every situation, and that cleanup of more than a minimal amount of oil once it is in the ocean or onshore is difficult if not impossible. And those problems existed in a temperate environment with lots of infrastructure. The Arctic, in contrast, has extremely adverse weather and light conditions outside of summer and virtually no shore-based infrastructure currently including Ice Coast Guard facilities, so no communities so everything would have to be air or boat, little housing for cleanup workers, etc.

On November 10, 2010, the Pew Environment Group published a peer-reviewed technical report entitled Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unsampled Risks, Unacceptable Consequences. This well-researched report describes the numerous difficulties of Arctic spill response including the need for: .

Arctic oil spill trajectory modeling when ice is present.
Testing of spill response technologies in Arctic conditions. However, we need to develop a “response gap” analysis for the percent of time that Arctic environmental conditions prevent the use of oil spill cleanup equipment (e.g., waves, preventing boom use, ice preventing mechanical recovery, etc.).

Infrastructure gaps to be assessed and addressed, and

Credible worst-case scenario analyses, especially following what we know from the Deepwater Horizon spill (i.e., prior to that spill, BOEMRE considered blowouts unlikely which is no longer a viable position).

TWS supports the recommendations in the Pew report and its associated Policy Recommendations and asks BOEMRE to address these recommendations in its response to comments for the draft SEIS.

Needed Regulations and Oversight: Without an adequate regulatory framework and effective enforcement and public transparency, BOEMRE is a toothless overseer of drilling operations and cannot prevent major oil spills. According to the FEIS:

Over the life of the hypothetical development and production that could follow from the lease sale, other effects are possible from events, such as a large, accidental oil spill or natural gas release. We estimate the chance of a large spill greater than or equal to 1,000 bbl occurring and entering offshore waters is within a range of 33-51% (ES-4).

A 33-51% likelihood of a major oil spill shows that both the industry and its regulators currently tolerate a very high level of risk - imagine if there was that high a likelihood of a crash during the lifetime of an airplane. If so, would anyone fly?

During the one-month period following the Deepwater Horizon spill, I helped formulate the recommendations to the President issued in the DOI report entitled Increased Safety Measures for Energy Development on the Outer Continental Shelf. These recommendations for regulatory upgrades are only a beginning. It’s likely that the investigations and research following the spill will present additional statutory, regulatory, and oversight recommendations. As many of the regulatory recommendations will require research and public notice and comment, it likely will take several years – perhaps as long as 5-10 years – until they are all fully enacted (and by then, changes in the industry might require additional regulatory measures...). Additionally, BOEMRE needs to obtain the funds from Congress for adequate inspectors and enforcement personnel – it could take several years before BOEMRE has sufficient staffing.

As someone who has worked on pipeline safety issues for approximately 15 years, I know that government accountability and transparency is essential to ensure good performance by regulatory agencies. Thus, it will be important for BOEMRE in future years to post extensive user-friendly and authoritative information on releases and their causes as well as information on its inspections, its enforcement actions, and its real-time monitoring of offshore operations. Of course, these activities also will take years to implement fully.

Chukchi Sea Spill Modeling and the Risk of Blowouts

According to the FEIS, “For purposes of analysis, we modeled one large spill of either 1,500 bbl (platform spill) or 4,000 bbl (pipeline spill)” (p. ES-4). While this information is not addressed in the draft SEIS, it should be because we now know as a result of the Deepwater Horizon spill that blowouts are not unlikely. And we know as a result of the 2009 Montara oil platform blowout off the coast of Australia, the 1979 Ixtoc oil platform blowout in the Gulf of Mexico, and the 1985 and 1989 Bligh waters blowouts in the Gulf of Mexico, blowouts are not unlikely. And we know as a result of the 2009 Montara oil platform blowout off the coast of Australia, the 1979 Ixtoc oil platform blowout in the Gulf of Mexico, and the 1985 and 1989 Bligh waters blowouts in the Gulf of Mexico.

The Need to Differentiate Arctic Offshore Drilling from Lower 48 Offshore Drilling

While offshore drilling technologies are similar wherever they may be used, there are several key reasons why BOEMRE needs to treat Arctic drilling differently than Gulf of Mexico drilling and drilling elsewhere in the Lower 48. As discussed above, there is inadequate baseline data in the Chukchi and the conditions for cleanup are far tougher than in the Gulf, including the current inability of operators to provide effective cleanup in broken ice conditions. Moreover, the long periods of cold and darkness in the Arctic can result in increased worker safety concerns from fatigue and other causes. The Oil Spill Commission learned that in the case of the Deepwater Horizon certain critical supplies were not ordered or as they would take too long to arrive – the supply situation would be much worse in the Arctic, likely increasing the drilling risks.

Additionally, the Arctic is more pristine and its resources seemingly more critical to coastal community residents since those in Arctic Slope villages have fewer alternatives for supplies than those living in Gulf communities. For all these reasons, there is a greater need for precautionary decision-making before allowing drilling in the Arctic as compared to drilling in the Gulf.

Problems with the Draft SEIS Public Hearing Process

Finally, TWS would like to express its concerns with the draft SEIS public hearing process. In addition to hearings in Arctic communities taking place immediately prior to and on election day which should not have the case as it limited the participation of the interested public, the Anchorage public hearing on November 9 had a number of problems. The hearing room was too small to accommodate the crowd, and many people were forced to stand. There was no microphone, thus making it very difficult to hear those who testified. Indeed, BOEMRE asked those who testified face the audience rather than the agency officials present at the meeting. BOEMRE did not allocate time equally among those who testified – some speakers were permitted to testify for much longer than their allotted two minutes while others were cut off after that time. Last, BOEMRE did not provide all those who signed up to testify an opportunity to testify, distorting the meeting down at exactly ten o’clock. BOEMRE needs to meaningfully and respectfully engage and hear testimony from the interested public at its hearings in the future.

In conclusion, the quick development of the draft SEIS document and its lack of new analysis – as requested by the Court – greatly concerns TWS. We continue to hope that BOEMRE will differentiate itself from its predecessor agency MMS and choose a more thoughtful, science-based approach to drilling in the Chukchi, an approach that recognizes and addresses the many current problems with offshore drilling in the Arctic. Thank you very much for your consideration of these comments.

Respectfully submitted,

Lois N. Epstein, P.E.
Engineer and Arctic Program Director

The Wilderness Society

Appendices:

1. Michael Bronwicz, BOEMRE Director, Alan Thurall, Ph.D., BOEMRE Science Advisor

2. Ken Etzel, DOI Senior Advisor for Alaska Affairs

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A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning

Introduction

The United States is at a crossroads with respect to planning and decision-making for offshore oil and gas activities in the Chukchi and Beaufort seas. President Obama and the Department of the Interior (DOI) must decide whether to continue with plans and approvals that are based on inadequate science and have generated controversy, litigation, and— as the blowout in the Gulf of Mexico demonstrates—the potential for environmental and social disaster. This document and the attachments provide a path forward that would use a comprehensive, integrated scientific research and monitoring plan to fill the gaps identified by scientists and courts and provide the necessary baseline information from which to make effective decisions.

At the heart of the controversy about offshore drilling in the Arctic is the widely acknowledged lack of scientific information about the Arctic Ocean. While we do know that the Arctic Ocean is important to life in coastal communities, has regions of high productivity that support varied ecosystems with iconic species of wildlife, helps regulate the planet’s weather and climate, and is changing rapidly, scientists know very little about how the Arctic Ocean functions or the ways in which it might respond to stressors from industrial activities. The lack of baseline information about the marine ecosystem was one of the bases for court decisions invalidating the 2007-12 Five Year Leasing Program and Lease Sale 193 in the Chukchi Sea. Without this understanding, it is not possible to comply with statutory and regulatory mandates that were established to help ensure responsible stewardship of resources, including the Outer Continental Shelf Lands Act (OCSLA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA)

Moreover, the lack of baseline information creates a significant impediment to both effective planning and preparedness. The U.S. Commission on Ocean Policy asked as a principle task, “Ocean managers and policy makers need comprehensive scientific information about the ocean and its environment to make wise decisions.” The final recommendations of the Interagency Ocean Policy Task Force (OPTF) call for science-based decision making and a better understanding of our ocean ecosystems, including a special emphasis on the Arctic.” The Obama administration implemented the final OPTF recommendations and has both the opportunity and obligation to obtain the necessary science and use it to guide decisions about industrial activities.” By deferring future leasing in the Chukchi and Beaufort seas for five years calling for the U.S. Geological Survey Arctic (USGS) gap analysis, committing to science in the NOAA Arctic Strategic Plan, and creating the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the Obama administration is taking steps toward allowing for comprehensive scientific planning and policy. At the same time, the government is in the process of determining how to respond to the court-ordered re-evaluation of Lease Sale 193 and the 2007-12 Five Year Leasing Program, and Congress is debating legislation that includes provisions for better science in the Arctic.

The most effective way to respond to the courts’ orders and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This research has not been done adequately before, and much of what has been done is decades out of date in a region that is changing rapidly. While it is true the DOI and industry have undertaken significant research, these efforts have been narrowly focused, applied


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Since the conclusion of the OCSAP program, DOI's studies in the Arctic Ocean have not been guided by an overarching monitoring and research plan. Instead, research priorities over the past several decades have been guided by an assumption that enough was known about the Arctic. In fact, studies are often conducted in specific areas to answer specific questions, while baseline research and monitoring is ignored, large sums have been spent to provide answers to specific questions, and efforts have focused on what species live there, how many of them are there, and do those activities on this species, especially if activities occurred at or near their winter gathering area.

Ultimately, when considered with the whole list of studies performed over the last 15 years, the 38-page index of recognized unknowns about the Lease Area 193 area is indicative of a systemic problem with the way research is being conducted in the Arctic. The results of this problem, along with the fact that there is an ongoing and future need for research, is that there is a significant information gap that exists across the Arctic.

To provide the basic information required to protect the resources of the Arctic, including the subsistence way of life, and to guide decisions about oil and gas and other industrial activities, a new comprehensive research and monitoring program should:

1. integrate existing scientific data to give a more holistic picture of what is known and conduct an analysis of the gaps in information to determine the most pressing research and monitoring needs;
2. conduct a comprehensive catalogue of identified species, populations and habitats, including seasonal migrations;
3. track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways;
4. secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem structure and function and effects of anthropogenic perturbations;
5. study potential ecological and sociological impacts; and
6. integrate these scientific data to identify Important Ecological Areas as well as processes and habitats that are sensitive and vulnerable to perturbation, and furnish a basis for marine spatial planning.

This program could easily be conducted in three simple phases over the next 5-7 years. I) gap analysis and planning (2011-2012), 2) research and monitoring (2013-2016, with monitoring continuing into the future); and 3) integrating and updating information and make decision-makers the basic understanding needed to make effective decisions (2016-2017). These phases must be informed by local and traditional knowledge, including planning and peer-review.

Phase I: Gap Analysis and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information gaps and research needs for Arctic species. This information should be used to develop a research and monitoring program.

Phase II: Research and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information gaps and research needs for Arctic species. This information should be used to develop a research and monitoring program.
Phase I: Research and Monitoring

Once the information gaps are identified and a research plan devised, the research and monitoring must be executed. As the known gaps in knowledge outlined above show, scientific research and monitoring should include:

1. Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact. The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean currents in scope and covers major, fundamental components of the ecosystem. A comprehensive research and monitoring program, rather than sole research will build this foundation of knowledge most efficiently.

2. The new program would provide the answers to the unknown identified in the Lease Sale 193 litigation by virtue of providing a basic understanding of the marine ecosystem. The missing information is broad and covers major, fundamental components of the ecosystem. A comprehensive research and monitoring program, rather than sole research will build this foundation of knowledge most efficiently.

3. In addition, having this basic information will avoid the problem that has arisen in the Gulf of Mexico, where development occurred with scant attention to the status of the ecosystem beforehand. As a result, we find ourselves wondering what was lost following development or an industrial accident because we did not evaluate what was there to begin with. Further, comprehensive, integrated research and monitoring could prevent that from happening in the Arctic, and a comprehensive understanding of the ecosystem can drive response and restoration activities should an industrial accident occur.

Meeting Legal Requirements and Policy Goals

As explained above, an integrated, comprehensive research and monitoring program would be the most effective way to provide the baseline necessary to make informed decisions about offshore oil and gas activities in the Arctic. Such a plan would build on the commitments to science already made by the administration and would be the most effective way to resolve the ongoing litigation and controversy.

Federal courts have invoked the 2001-2007 Five-Year Leasing Program Environmental Statement of Policy (EIS) for Lease Sale 193 in the Chukchi Sea. While the decisions rest on different grounds, the lack of scientific information about the Arctic Ocean. In the 2001-2007 Five-Year Leasing Program that lack of scientific information resulted in an arbitrary analysis of the relative environmental sensitivity of marine areas. In the Lease Sale 193 context, the court found that the agency had not complied with a Council on Environmental Quality regulation. The regulation requires the agency to determine “whether missing information identified by the agency was relevant or essential” and then failing to determine “whether the cost of obtaining the missing information was exorbitant or the means of doing so unknown.”

DOE has issued a draft proposed 2007-12 Five-Year Leasing Program and a Draft Supplemental EIS for Lease Sale 193. Neither document fully accounts for the missing information or makes an effort to put in place the necessary interdisciplinary, integrated research and monitoring. Both, however, are drafts, and DOE still has the opportunity to move forward in this way.

As explained above, there are 38 pages of references to scientific unknown made by DOE and NOAA in planning for Lease Sale 193. The agency has an affirmative duty to get this information, including by performing research itself when necessary, before further economic development. This information is significant, essential, or important where without the information the agency cannot accurately assess the effects of various alternatives, the extent of certain problems, or the need for particular proposed programs.

Basic scientific information is essential at the lease sale stage. It is when BOEMRE evaluates alternatives about the size of the sale, affected areas, and other limitations that may affect exploration and development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. In addition, as demonstrated by the Shell oil spill a development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. In addition, as demonstrated by the Shell oil spill incident (2010) and others, the potential for an industrial accident could result in significant impacts to the environment.

5. Documentation of local and traditional knowledge.
6. Studies designed to identify patterns of subsistence use and changes in well-being as well as the potential impacts from industrial activities; and
7. Documentation of local and traditional knowledge.

6. Studies designed to identify patterns of subsistence use and changes in well-being as well as the potential impacts from industrial activities; and
7. Documentation of local and traditional knowledge.

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1. Marine life assessment to provide a year-round picture of the species in each marine habitat and their population
2. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biogeochemical factors, such as productivity and community richness and diversity
3. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses
4. Studies designed to identify patterns of subsistence use and changes in well-being as well as the potential impacts from industrial activities; and
5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate science to social impact studies, and to the extent possible, it should be comprehensive enough to better elucidate the processes that underlie the way in which the ecosystem functions. As demonstrated by the Shell EPM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCSMAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities.22 They were only able to do this by studying multiple aspects of the ecosystem simultaneously, including climate indices, sea ice concentration, water temperature, salinity, and seafloor biomass. In addition to providing better information, this type of integrated research and monitoring is more cost effective because more information is elucidated than would be from individual studies.

Consoco/Phillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing.23 Their work indicates that the Chukchi Sea is not a homogenous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea appears to affect sea ice concentration and productivity, such that if in effect the distribution of productivity and how that productivity flows through the food web to higher trophic levels.

This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic Ocean. Conoco/Phillips’ and Shell’s research, however, is confined to areas around two of their drilling prospects during the open water season. While this research provides an early look at how this research could easily be expanded to the rest of the region and other seasons. Expanding this type of research and monitoring would provide decision-makers with the complete picture needed to protect Arctic ecosystems and the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

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1. Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact.
2. Whether the cost of obtaining the missing information was exorbitant or the means of doing so unknown.
3. The benthic topography of the Chukchi Sea appears to affect sea ice concentration and productivity, such that
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7. The benthic topography of the Chukchi Sea appears to affect sea ice concentration and productivity, such that

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in this way in such an approach is to develop and implement a comprehensive research and monitoring program like those that have been developed in the UK, Norway, and clean and clean line. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate and if so, where, when and how such activities could be conducted.

Notes

3. Id.
4. An outline for such a plan for the Arctic Ocean is included in Attachment 1.
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B. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals and some fish). These assessments will provide crucial baselines for evaluating impacts of industrial development and ecosystem change.

III. Environmental Monitoring

A. Establish a network of fixed monitoring stations to track physical forcings and local biological responses. This station network should be patterned along the lines of the National Science Foundation’s Long Term Ecological Research Network (LTER) and NOAA’s oceanographic buoys adapted to the US Arctic Ocean, with sampling stations allocated to both the Chukchi and Beaufort seas. These stations will measure physical factors in the ocean including temperature and salinity, acidity, alkalinity and nutrients as functions of seawater depth, along with current profiles at strategically chosen locations; atmospheric factors including surface temperature, wind speed and direction, insolation, gas composition, and particulate density and composition; and biological factors such as primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.

B. Support remote monitoring by satellite and aircraft to track sea ice extent, surface albedo and ocean color in collaboration with NOAA, NASA and NSIDC.

C. Establish a systematic process for incorporating LTK for early detection of unanticipated ecosystem change, and for review by LTK experts for accuracy and completeness.

D. Periodically update the resource assessments identified in “II” above to track ecosystem responses to climate change and industrialization.

E. Monitor detection of invasive species, including species displaced by warming seawater temperatures to the south, and exotic species introduced by industrial activities.

IV. Scientific Process Studies

A. Identify processes strongly coupled with biological production, species’ distribution and abundance, and support research that will improve understanding of them aimed at improving prediction of community responses to short- and long-term environmental stressors. This research should include identification of the species interactions that structure the biological community, which includes studies of the food web to determine linkages and energy flow through the ecosystem, as well investigations to determine the processes responsible for nutrient cycling.

B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, including processes strongly affected by transition from light limitation to nutrient limitation resulting from continued sea ice loss, effects of warmer water temperatures on growth and provisioning requirements of selected target species (especially young-of-the-year and juveniles), and sensitivity to acidification from increases in atmospheric carbon dioxide.

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A. Conduct a comprehensive gap analysis to determine what scientific research is currently being done and what additional information is needed.

II. Marine Life Assessment

A. Conduct a comprehensive survey of species occupying each marine habitat, including communities in the benthic, pelagic and littoral zones, and ice-associated communities. Whenever feasible these surveys should be conducted seasonally to identify migrations and patterns of periodic habitat use.

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V. Sociological and Ecosystem Impact Studies

A. Identify historical and current patterns of land and subsistence use, and conduct a survey of social and psychological well-being in North Slope communities to document current conditions in these communities.

B. Monitor changes in patterns of land and subsistence use, and in measures of social and psychological well-being in North Slope communities affected by oil development.

C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, such as research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling mud, routine discharges, and other emissions on the ecosystem.

VI. Data Integration and Marine Spatial Planning

A. Construct ecosystem models including a quantitative nutrient-phytoplankton-zooplankton (NPZ) model and an Ecopath model to evaluate how predicted ecosystem responses compare with data observed from the monitoring programs. Identified inadequacies will highlight areas requiring further research.

B. Archive monitoring data in a publicly accessible database that is continuously maintained. Also, monitoring results should be periodically included in GIS maps to facilitate identification of Important Ecological Areas (IEAs) and important subsistence areas in the US Arctic Ocean and how they may change through time. Important Ecological Areas are geographically delineated areas with distinguishing characteristics that contribute disproportionately to an ecosystem’s health or are particularly vulnerable to disturbance.

C. Integrate the results of the monitoring and research described above with a marine spatial planning effort that identifies IEAs as well as all potential energy sources and their availability to markets to help minimize the likelihood of adverse consequences associated with industrialization.
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Atorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA

NATIVE VILLAGE OF POINT HOPE, et al.,

Plaintiffs,

v.

DERK KEMPThORNE, Secretary of the Interior, et al.,

Defendants,

and

SHELL GULF OF MEXICO, INC., and
CONOCOPHILLIPS COMPANY,

Intervenor-Defendants.

Case No. 1:08-cv-00004-RRB

I, Erik Grafe, hereby declare:

1. I am one of the attorneys representing Plaintiffs Native Village of Point Hope, et al., in this action. I submit this declaration in support of Plaintiffs’ opening brief.

2. Attached to this declaration as Attachment A is a compendium of statements made by the Minerals Management Service (MMS) in its Final Environmental Impact Statement (EIS) for the Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) (May 2007). This contains statements in the EIS acknowledging missing information about the Chukchi Sea environment and the potential effects of the lease sale 193 on wildlife and subsistence. This declaration was compiled by an Earthjustice staff member under my direct supervision and reviewed by me.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 29th day of January, 2009.

________________________
ERIK GRAFE

EXHIBIT 129

ATTACHMENT A

COMPENDIUM OF LEASE SALE 193 EISs UNKNOWNS

LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

B. Individual Species and/or Species Assemblages
   1. Primary Arctic Fish Assemblages
   2. Neritic-Demersal Assemblage
   3. Neritic-Pelagic Assemblage
   4. The Cryopelagic Assemblage
   5. Oceanic-Demersal Assemblage
   6. Diadromous Fishes
   7. Salmon

II. MARINE MAMMALS

A. Whales
   1. Bowhead Whale
   2. Fin Whale
   3. Humpback Whale
   4. Gray Whale
   5. Beluga Whale
   6. Harbor Porpoise
   7. Minke Whale

B. Other Marine Mammals
   1. Seals
      a. Ringed Seal
      b. Spotted Seal
      c. Ribbon Seal
      d. Bearded Seal
   2. Pacific Walrus
   3. Polar Bear

III. MARINE AND COASTAL BIRDS

1. General
2. Threatened Spectacled Eiders
3. Threatened Steller’s Eiders
4. Kittlitz’s Murrelets
5. Cliff-Nesting Seabirds
   a. Murres
   b. Puffins
   c. Black-Legged Kittiwake
6. Beering Sea Breeders and Summer Residents
   a. Northern Fulmar
   b. Short-Tailed Shearwater
   c. Auklets
7. High Arctic-Associated Seabirds
   a. Black Guillemot
   b. Ivory Gull
   c. Arctic Tern
8. Tundra-Breeding Migrants
   a. Jaegers
   b. Glacous Gull
9. Waterfowl
   a. Yellow-Billed Loons
   b. Common Eider
   c. Pacific Brant
   d. Greater White-Fronted Geese
   e. Lesser Snow Goose
10. Shorebirds
    a. Buff-Breasted Sandpiper
    b. Bar-Tailed Godwit

LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

I. FISH

A. General

1. General effects of seismic on fish
information gathered by the last surveys remains an accurate and precise description of arctic environmental perturbations. Establishing a current, accurate, and precise baseline is critical to irregular and disjunct sampling. Such disorganized sampling and data reporting greatly

Additionally, other surveys over the years and area reflect a pattern of temporally and spatially stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea.

The same is true for other dated studies. It is possible that they no longer accurately and precisely portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea.

LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

“Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that we cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level.” EIS at III-32.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northeastern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are very limited; most of the surveys/studies have been performed in coastal waters landward of the landward of 200-m isobath, with scant surveys having sampled deeper waters. . . . [R]obust population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare). . . . Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities, growth, reproduction, or survival rates within regional or local habitats; or productivity rates by habitat, essentially are unknown for fishes inhabiting seaward of the nearshore, brackish-water ecotone.” EIS at III-34 (internal citations omitted).

2. Neritic-Demersal Assemblage

“Life-history data for many of the demersal species using neritic substrates is lacking (e.g., Gulf of Alaska, Bering Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years; it is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action.” EIS at III-32.

Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-33.

“Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and area reflect a pattern of temporally and spatially irregular and disjoint sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is unknown if the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Bering seas are considered to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northeastern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

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5. Oceanic-Demersal Assemblage

“Life-history statistics for most species covered in this assemblage are data deficient, chiefly for lack of fish surveys and studies in oceanic waters of the Alaskan Arctic.” EIS III-36.

6. Diadromous Fishes

“A number of diadromous species in the region have complicated life-history patterns that are not fully understood.” EIS at IV-61.

7. Salmon

“Little is known of the movements undertaken during the 18 months the [pink] salmon spend at sea.” EIS at III-39 (quoting Schmidt, McMillan, and Gallagher (1983)).

“Chum salmon fry, like pink salmon, do not oversummer in streams but migrate (mostly at night) out of streams directly to sea shortly after emergence. The timing of outmigration in the arctic is unknown, but occurs between February and June (chiefly during April and May) in more southern waters.” EIS at III-48.

II. MARINE MAMMALS

A. Whales

1. Bowhead Whale

“There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean.” EIS at III-45.

“Recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are lacking.” EIS at III-45.

“No data are available indicating that, other than historic commercial whaling, any previous human activity has had a significant adverse impact on the current status of BCB Seas bowheads or their recovery.” EIS at III-45.

“Conservation concerns include: . . . uncertain potential impacts of climate warming . . .” EIS at III-45.

“The uncertainty of the stock structure adds some uncertainty to summaries of the status of bowheads that may be impacted by the Proposed Action.” EIS at III-45.

“[I]f whales become more ‘skittish’ and more highly sensitized following a hunt, it may be that their subsequent reactions, over the short-term, to other forms of noise and disturbance are heightened by such activity. Data are not available that permit evaluation of this possible, speculative interaction.” EIS at III-46 (quoting NMFS’ Arctic Region Biological Opinion).

“There is little information regarding causes of natural mortality for BCB Seas bowhead whales.” EIS at III-49.

“Little is known about the effects of microbial or viral agents on natural mortality [of bowheads].” EIS at III-49.

“The amount of feeding [by the BCB Seas bowhead stock] in the Bering Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002).” EIS at III-49.

“The MMS funded large-scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by Mel’nikov, Zelensky, and Aina (1997), Moore (1992), Moore and Clarke (1990), and Moore, DeMaster, and Dayton (2000). We have plotted counts of bowheads in the Chukchi Sea during those surveys (Fig. III-B-4), because they visually provide limited insight into areas where bowheads may be exposed to oil and gas activities should they occur in the Chukchi Sea Planning Area.

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However, we caution against over-interpretation of these data out of context of survey effort and, because these data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales; they are the best data available.” EIS at III-51—55.

“Data are limited on the bowhead fall migration through the Chukchi Sea before the whales move south into the Bering Sea.” EIS at III-51.

“The amount of feeding in the Chukchi Sea and Bering Strait in the fall is unknown as is the amount of feeding in the Bering Sea in the winter (Richardson and Thomson, 2002). Richardson and Thomson (2002:xviii) concluded that . . . behavioral, aerial-survey, and stomach-content data, as well as certain energetics data . . . show that bowheads also feed widely across the eastern and central Beaufort Sea in summer and fall.” In mid- to late fall, at least some bowheads feed in the southwest Chukchi. Detailed feeding studies have not been conducted in the Bering Sea in the winter.” EIS at III-54.

“There are locations in the Beaufort Sea and the western Chukchi Sea where large numbers of bowheads have been observed feeding in many years. However, the significance of feeding in particular areas to the overall food requirements of the population or segments of the population is not clear.” EIS at III-55.

“Recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available.” EIS at III-55.

“Importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales.” EIS at IV-82.

“Bowheads are not randomly distributed throughout the Proposed Action area. The extent of use of particular habitats varies among years, sometimes considerably; therefore, it is difficult to predict, in advance of a given year, exactly how bowheads will use the entire area that is available to them. Some aspects of their habitat use are poorly understood. For example, current data are not available on which to typify the current summer use of the northern Chukchi Sea by bowheads. For example, in the Beaufort Sea in some years, large aggregations of bowheads near Smith Bay have been observed during MMS’ Bowhead Whale Aerial Survey Program (BWASP) surveys at the beginning of September. It is unclear if these animals are early migrants that have come from the east, if they summered in the northern portions of the Beaufort Sea and came south, or if they entered from the Chukchi Sea and never migrated east. . . It is important to note that the Chukchi Sea data are not recent (1979-1991) and thus should not be interpreted as indicating current patterns of bowhead use of the Chukchi Sea.” EIS at IV-101.

“We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined.” EIS IV-102 (similarly at EIS at IV-105).

“Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-121.

2. Fin Whale

“The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock.” EIS at III-46. See also id. at III-56 (similar).

“There are no recent data to confirm their use or lack of use of the Chukchi Sea Planning Area, or adjacent areas to the south.” EIS at III-47.

“There is little information about natural causes of mortality (Perry, DeMaster, and Silber, 1999a). The NMFS summarized that ‘There are no known habitat issues that are of particular concern for this stock’ (Angliss and Lodge, 2002, 2005). Perry, DeMaster, and Silber (1999a:51) listed the possible influences of disease or predation as ‘Unknown.’” EIS at III-56.

“The importance of specific feeding areas to populations or subpopulations of fin whales in the North Pacific is not understood.” EIS at III-57.

“The possible influences of disease or predation and of overutilization [on fin whales] are listed [by NMFS] as ‘Unknown.’” EIS at V-28.

3. Humpback Whale

“Available information does not indicate humpback whales inhabit the Chukchi Sea OCS project area. There are no recent data to confirm their lack of use of the Chukchi Sea OCS Planning Area, or adjacent areas to the south.” EIS at III-47.

“There is no clear consensus” (Calambokidis et al., 1997:6) about the population stock structure of humpback whales in the North Pacific due to insufficient information (Angliss and Lodge, 2002) (see further discussion in USDAI, MMS, 2003a,b).” EIS at III-58.

“Angliss and Outlaw (2005) stated that: ‘There are no reliable estimates for the abundance of humpback whales at feeding areas for this stock’ (the Western North Pacific Stock) ‘because surveys of the known feeding areas are incomplete, and because not all feeding areas are known.’ There are not conclusive or reliable data on current population trends for the western North Pacific stock (Perry, DeMaster, and Silber, 1999b; Angliss and Outlaw, 2005).” EIS at III-59.

“Causes of natural mortality in humpbacks in the North Pacific are relatively unknown, and rates have not been estimated.” EIS at III-60.
4. **Gray Whale**

“[E]xisting information is insufficient to understand the dynamics of gray whales and offshore Chukchi Sea habitat relationships, quantity and quantity dynamics and distribution of prey resources, or the capability of habitat to support (carrying capacity) long- and short-term whale use.” EIS, Vol. II, AC 019-076.

“The relationship between the expanding gray whale population to amphipod community dynamics is unknown but is of considerable interest.” EIS at V-35.

5. **Beluga Whale**

“Understanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures. Late-summer distribution and fall-migration patterns are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005).” EIS at IV-163. See also id. at III-77 (second sentence same).

“Based on recent telemetry studies on eastern Chukchi belugas, it is likely that members from both stocks occur in similar places and at similar times during the fall migration although the significance of this is unknown (Suydam, Lowry, and Frost, 2005).” EIS at III-76.

“Winter food habits of belugas are largely unknown . . ..” EIS at III-77.

Belugas generally are associated with ice and relatively deep water throughout the summer and autumn, which may reflect their preference for feeding on ice-associated arctic cod (Moore et al., 2000). Late-summer distribution and fall-migration patterns are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005).” EIS at III-77.

6. **Harbor Porpoise**

“The harbor porpoise inhabits shallow, coastal areas in temperate, subarctic, and arctic waters of the Northern Hemisphere (Read, 1999). In the North Pacific, harbor porpoises range from Point Barrow, Alaska to Point Conception, California (Gaskin, 1984). In Alaska, three separate stocks have been recommended, although there is insufficient biological data to support the designation at this time.” EIS at III-78.

7. **Minke Whale**

“There are no reliable estimates for the Alaska stock of minke whales. A provisional estimate was made for the Bering Sea of 810 individuals; however, this is not used for the Alaska stock because the entire stock’s range was not surveyed.” EIS at III-78.

8. Other Marine Mammals

1. **Seals**

“Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Bering/Chukchi Sea species known to be in decline. Accurate population estimates for ice seals are not available and are not easily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec. III.A.4, Sea Ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec. III.A.3, Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006).” EIS at III-71.

a. **Ringed Seal**

“No reliable estimate for the size of the Alaska ringed seal stock is available (Angliss and Ollason, 2003) . . ..” EIS at III-71.

b. **Spotted Seal**

“No reliable estimate for the size of the Alaska spotted seal stock is available (Angliss and Ollason, 2005).” EIS at III-72.

c. **Ribbon Seal**

“Ribbon seals inhabit the North Pacific Ocean and the adjacent fringes of the Arctic Ocean. In Alaska, they range northward from Bristol Bay in the Bering Sea and into the Chukchi and western Beaufort seas. They are found in the open sea, on pack ice, and rarely on shorefast ice (Kelly, 1988). As the ice recedes in May to mid-July, they move farther north in the Bering Sea, halting out on the reeding ice edge and remanent ice (Bums, Shapiro, and Fay, 1983). Seal distribution throughout the rest of the year is largely unknown; however, recent information suggests that many ribbon seals migrate into the Chukchi Sea for the summer months (Kelly, 1988).” EIS at III-73.

“No reliable estimate for the size of the Alaska ribbon seal stock is available (Angliss and Ollason, 2005).” EIS at III-73.
“Variability in the abundance of the Alaska breeding population of spectacled eiders is not well understood (USFWS 1999).” BE at 28.

“The Alaskan and Russian populations of spectacled eider were listed as a threatened species on 9 June 1993 (USFWS 1993). Although the factors that caused these declines are unknown, a number of potential contributory factors have been identified. These, or other still-unidentified threats, have increased mortality above the rate of reproductive replacements. No data are available to show whether similar trends have affected the breeding population in Russia where as many as 40,000 pairs traditionally nested.” BE at 29.

3. Threatened Steller’s Eiders

“[T]he length of time that Steller’s eiders remain paired is unknown.” BE at 13.

“Many life history aspects of Steller’s eiders (e.g., timing of pair formation, duration of pair bonds, dispersal rates, sex-specific seasonal site fidelity, first-year survival, etc.) are poorly understood.” BE at 13.

“The reason for relatively low nesting success or failure to nest by the Alaska nesting population is unknown, but may be related to predators switching to alternate prey when Lemmings are in low abundance (Quakenbush and Suydam 1999).” BE at 15.

“Steller’s eider recruitment rates are unknown (USFWS 2002b).” BE at 15.

“Departure from the [Arctic Coastal Plain] to molting areas is poorly documented, but males probably begin departing as early as late June, followed by non- and failed nesting females presumably from late July to late August, and finally successful females and fledged young.” BE at 16.

“The population of Steller’s eiders molting and wintering along the Alaska Peninsula appears to be declining (USFWS 1999, 2002a).” BE at 15. "The causes of decline could be varied and are largely unknown, but if the cause of the decline is within the marine environment, it is reasonable to conclude that the Alaska and Russia nesting populations are being affected similarly because a large portion of the Russian population winters with the Alaskan population.” BE at 18.

“Variability in the abundance of the Alaskan breeding population of Steller’s eiders is not well understood.” BE at 18.

“Williamson et al. (1986) listed Steller’s eiders as occurring in the Cape Thompson area 25 miles under Project Chariot at Ogotoruk Creek. Steller’s eiders were listed as occupying marine littoral, laumafite, and beach environments in order of affinity. In this study, marine littoral waters extended seaward 2 miles from shore. Steller’s eiders were listed as present from June 1 through October 4 and uncommon, but possibly breeding in the area. It is not known if Steller’s eiders still nest in this area.” BE at 20-21.

4. Kittlitz’s Murrelet

“The Kittlitz’s murrelet (Brachyramphus brevirostris) is one of the rarest and least understood seabirds in North America. There is limited life history information on the Kittlitz’s murrelet (i.e., age at first breeding, nest success, hatching success, fledging success, first-year survival, survival to breeding age, proportion of breeding females, proportion of non-breeders, periodic non-breeding, etc.) and mechanisms of population regulation. The limited information available for this species and research on the closely-related marbled murrelet suggests a K-selected life history strategy.” BE at 33.

“The longevity of the Kittlitz’s murrelet is unknown . . .” BE at 33.

“Age to maturity in Kittlitz’s murrelets is unknown . . .” BE at 33.

“Little is known about the reproductive strategy of Kittlitz’s murrelet because nesting sites are difficult to find (Day et al. 1999) .” BE at 33.

“Annual breeding effort is poorly understood, but is considered highly variable.” BE at 33.

“Spring migration for Kittlitz’s murrelets in the Chukchi Sea is unknown . . .” BE at 34.

“Little is known about Kittlitz’s murrelet recruitment . . .” BE at 34.

“Annual adult survival has not been estimated . . .” BE at 34.

“Though there is some evidence for long-term population declines for Brachyramphus murrelets (van Vliet and McAllister 1994. Ralph et al. 1995, Kuletz et al. 2003), Day et al. (1999) argued that evidence for major population declines for the Kittlitz’s murrelet was equivocal. In large part, their conclusion stems from the fact that historical population estimates are lacking (but see Ishihara and Kessel 1973, Agler et al. 1998, Kendall and Agler 1998).” BE at 34.

“Fall migration in the Chukchi Sea population of Kittlitz’s murrelet is unknown . . .” BE at 35.

“Post-breeding distribution of Kittlitz’s murrelet is poorly understood, but is likely farther offshore than pre-breeding season.” BE at 35.

“Winter distribution of Kittlitz’s murrelet is poorly understood, but is probably pelagic.” BE at 35.

5. Cliff-Nesting Seabirds

a. Murres

Noting “limited data.” EIS III-62.

b. Puffins

“The current status of horned puffins in the Chukchi Sea is unknown.” EIS III-62.

“The current status of the tufted puffin in the Chukchi Sea is also unknown.” EIS III-62.

c. Black-Legged Kittiwake

“The current status of the black-legged kittiwake (Rissa tridactyla) in the Chukchi Sea is unknown.” EIS III-63.

“The portion of [Chukchi] population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown.” EIS at III-63. See also id. at IV-142 (similar).

“The current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown.” EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

“The current status of the northern fulmar (Fulmarus glacialis) is unknown.” EIS at III-63.

b. Short-Tailed Shearwater

“The current status of the short-tailed shearwater (Puffinus tenuirostris) in the Chukchi Sea is unknown.” EIS at III-63.

c. Auks

“The current status of parakeet (Cyclorchynchus purpurocaeruleus), least (Austlia petolla) and crested (A. cristatea) auklets in the Chukchi Sea is unknown.” EIS at III-63.

7. High Arctic-Associated Seabirds

a. Black Guillemot

“The current status of the black guillemot (Cepphus grylle) in the Chukchi Sea is unknown.” EIS at III-63.

b. Ivory Gull

“The current status of the ivory gull (Pagophila eburnea) in the Chukchi Sea is unknown. Dvovsky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea.” EIS at III-64.

c. Arctic Tern

“The current status of the Arctic tern (Sterna paradisaea) in the Chukchi Sea is unknown.” EIS at III-64.

8. Tundra-Breeding Migrants

a. Jaegers

“The current status of [all three species of jaegers] in the Chukchi Sea is unknown.” EIS at III-64.

b. Glau Wes Gull

“The current status of the glaucous gull (Larus hyperboreus) in the Chukchi Sea is unknown.” EIS at III-64.
9. Waterfowl
   a. Yellow-Billed Loons
      “Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is very little known about the coastal areas bordering the Chukchi Sea.” EIS at IV-65.
      “The [yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown.” EIS at IV-140.
   b. Common Eider
      “During spring migration, the common eider (Somateria mollissima) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore.” EIS at IV-66.
      c. Pacific Brant
      “The current status of the Pacific brant along the Chukchi Sea is unknown.” EIS at III-68.
   d. Greater White-Fronted Geese
      “The current status of greater white-fronted geese along the Chukchi Sea coast is unknown.” EIS at III-68.
   e. Lesser Snow Goose
      “Ritchie et al. (2006) reported that the number of snow goose nesting on the Rulkikuk River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kukpook River delta colony.” EIS at III-68.

10. Shorebirds
   a. Buff-Breasted Sandpiper (species of concern)
      Noting “limited data.” EIS III-70.
   b. Bar-Tailed Godwit (species of concern)
      “The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood.” EIS at III-69.

LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

I. FISH
   A. General
      1. General effects of seismic on fish
         “A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur.” EIS at IV-53. See also id. at IV-51—52 (similar) and IV-74 (similar).
      2. General effects of oil spills on fish
         “Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected.” EIS at IV-54. See also EIS at IV-52 and IV-74 (similar).
         “While small spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill-response. Overall, it is unclear whether, over the long-term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected.” EIS at IV-72.
   B. Effects on Marine Pelagic Species
      “Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made.” EIS at IV-61.
   C. Effects on Capelin
      “Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAHs) retained in the substrate, as PAH’s in weathered oil can be biologically available for long periods and very toxic to sensitive life stages, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of the capelin to detecting contaminated substrates and how long the oil persists in the localized habitat.” EIS at IV-60-61.

“Also unknown are the distribution and abundance of spawning sites used by capelin in the Alaskan Arctic.” EIS at IV-63.

D. Effects on Arctic Cod
   “Although arctic cod can be extremely abundant in nearshore lagoonal areas, the importance of nearshore versus offshore environments to the lifecycle is not known (Craig et al., 1982). Although it is known that juvenile arctic cod associate with floating ice, it is unknown to what degree this association contributes to the development and survival of young fishes later recruiting to the breeding population. If early lifehistory stages of arctic cod were concentrated in nearshore environments, in patches in the open ocean, or under floating ice, they certainly would be more vulnerable to effects from an oil spill impacting such habitats.” EIS at IV-62.

“The North American population of bar-tailed godwits (Limosa lapponica baueri) breeds in western and northern Alaska. Postbreeding bar-tailed godwits move to staging grounds along the Bering Sea Coast and then apparently fly nonstop 11,000 km to New Zealand. Recent counts conducted at both breeding and nonbreeding sites provide evidence of a serious and rapid population decline (McCaffrey et al., 2006), but the cause of the decline is unknown.” EIS at III-69.
II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

“Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur.” EIS at IV-117.

“[B]ecause of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas [regarding AII, BII] EIS at IV-142. See also id. at IV-269 (same) and EIS at IV-45 (same, re; Alt. IV).

“Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to determine with certainty what potential impacts from such development would have on threatened and endangered marine mammals.” EIS at IV-111.

“Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations.” EIS at IV-152.

“In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (NWC, 2006).” EIS at IV-162–63.

“[W]hen historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals.” EIS at IV-156.

“Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammals in the project area as a result of the Proposed Action.” EIS at IV-145.

“Careful mitigation can help reduce the effects of future industrial developments and their acccumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an unknown health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans [temporary threshold shift, TTS].” EIS at IV-146. EIS at IV-86.

“Data are not available that would permit evaluation of the potential for long-term sublethal effects on baleen whales or the impacts of sound on them, especially the large baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physiological effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; NRC, 2003, 2005). This is particularly true for baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physiological effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; Ketten, 1998).” EIS at IV-86.

“Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency.” EIS at IV-87.

2. Effects of Seismic and Other Noise on Marine Mammals

“Because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area.” EIS at IV-137.

“Despite the increasing concern and attention noted above, there still is uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially on the long-term, cumulative consequences of increasing noise in the world’s oceans from multiple sources (NRC, 2005, 2010). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral “take equivalents”. These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2015) are qualitatively incorporated in MMS analysis.” EIS at IV-86.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown . . . .” EIS IV-89.

“Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS IV-147.

3. Effects of Oil Spills on Marine Mammals

“There are few post-spill studies with sufficient details to reach firm conclusions about the effects, especially the long-term effects, of an oil spill on free-ranging populations of marine mammals.” EIS at IV-115.

“Repeated long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. Ketten (1998) stated that age-related hearing loss in humans is related to the accumulation of permanent-threshold-shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown.” EIS at IV-87.

“There are no data on which to determine the kinds or intensities of sound that could cause a [temporary threshold shift, TTS] in a baleen whale.” EIS at IV-88.

“Little data are available about how, over the long term, most marine mammal species (especially large cetaceans) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source.” EIS at IV-88.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to correspond to baleen whale vocalization. However, because real knowledge of sound sensitivity is lacking, we believe it prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in intra- and interspecies communication.” EIS at IV-89.

“It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise.” EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

“There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . oil spills on large cetaceans.” EIS at IV-82.

“There are no data available to MMS that definitely link even a large oil spill [associated with seismic surveys] with a significant population-level effect on a species of large cetacean.” EIS at IV-105.

“Data are not available that would permit evaluation of the potential for long-term sublethal effects from [oil spills] on large cetaceans.” EIS at IV-115.

“[T]he potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency period), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects.” EIS at IV-115.
With whales, even when unusual changes in abundance occur following an event such as the EVOS (as with the disappearance of relatively large numbers of killer whales from the AB pod in Prince William Sound) (Dahlheim and Matkin, 1994), interpretation of the data is uncertain or often controversial due to the lack of supporting data, such as oiled bodies or observations of individuals in distress (and, in that case, the existence of a viable alternate explanation of the probable mortality). Thus, the potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-115. See also id. at IV-117 (latter two sentences similar).

It is not clear how long crude oil would remain on a free-ranging cetacean’s skin once it was oiled.” EIS at IV-117.

The potential effect of crude oil on the function of the cetacean blowhole is unknown.” EIS at IV-118. See also id. at IV-159.

The effects of an oil spill on cetacean newborns or other calves and the potential effects of contact or detection of spilled oil by near-term, or post-partum females are not known.” EIS at IV-121.

[The potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. However, observations of cetaceans behaving in a lethargic fashion or having labored breathing has been documented in more than one species, including in gray whales after the EVOS, in which large numbers of individuals were subsequently found dead.” EIS at IV-158.

The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, reduced immune function, reduced reproduction or longer dependency periods) effects on large cetaceans from a large oil spill is essentially unknown. There are no data on large cetaceans adequate to evaluate the probability of sublethal effects. EIS at IV-160.

The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial.” EIS at IV-161.

2. Bowhead Whale

There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur; where leases will be let; where a spill could occur; where production platforms and pipelines may be based; etc. More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially on bowhead whales.” EIS at IV-82.

The factors associated with the variability [of bowhead responses to drillships and other noise] to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowhead whales in the summer.” EIS at IV-101.

“Data on reactions of bowheads to helicopters are limited.” EIS IV-100.

It is clear that if 2D/3D seismic surveys impacted areas of the spring lead and polynya system during the spring migration, impacts could potentially be biologically significant. We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined.” EIS at IV-102.

The second situation for possibly larger than typical impacts exists in the Chukchi Sea in the summer (e.g., late September on) as whales migrate both towards the Asian coast and toward the Bering Strait. Insufficient data exist to determine the current migration paths or the numbers of whales that might be deflected from those paths. Data are also not available to determine how intensively bowheads feed during the summer migration in the Chukchi Sea or whether large aggregations exist in certain places due to prey resources.” EIS at IV-103.

The factors associated with the variability [of bowhead responses to drillships and other noise] are not fully identified or understood.” EIS IV-105.

“Data on reactions of bowheads to helicopters are limited.” EIS IV-100.

While it is clear that seismic activity may overlap with bowhead use of the Chukchi Sea during fall migration, it is highly uncertain about the likely extent of overlap between seismic activity and bowhead whales in the summer.” EIS IV-101.

During fall migration, available, but dated, data indicate that overlap is likely to be greatest in the main migration pathways, one heading nearly directly to the Bering Strait, and the other heading west from Barrow towards Wrangel Island.” EIS at IV-101-102.

“[T]he potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans is essentially unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-160.

The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial.” EIS at IV-161.

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“The probability of such effects. EIS at IV-115. See also id. at IV-117 (latter two sentences similar).
“Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-121.

“In conclusion, there is uncertainty about effects on bowheads (or any large cetacean) in the event of a large oil spill. There are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area. If a large amount of fresh oil contacted a significant portion of such an aggregation, effects potentially could be greater than typically would be assumed and we cannot rule out population-level effects if a large number of females and newborns or very young calves [as this would be in spring] were contacted by a very large amount of fresh crude oil.” EIS at IV-125.

“Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic.” EIS at IV-121.

“It is unknown what effects an oil spill would have on bowhead whales, but it is likely that some whales would experience temporary, nonlethal effects from the oiling of skin, inhaling hydrocarbon vapors, ingesting oil contaminated prey, fouling of their baleen, losing their food source, and temporary displacement from some feeding areas.” EIS at IV:16–17.

“Limited monitoring data prevent effective assessment of cumulative subsistence-resource damage; resource displacement, changes in hunter access to resources; increased competition; contamination levels in subsistence resources; harvest reductions; or increased effort, risk, and cost to hunters. Limited data also limit our assessment of the effectiveness of mitigation measures.” EIS at V-46.

c. Effects of past activity on bowhead whale

“Available data . . . are inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior.” EIS at V-25.

Also, “we cannot adequately assess potential effects on patterns or durations of bowhead habitat use. Because of the inadequacy of the data on activities, and because of the limitations inherent in studying large baleen whales, MMS was not able to assess whether there were any adverse health effects to individuals during the period of relatively intensive seismic survey activity in the 1980’s.” EIS at V-25.

“However, data are inadequate to fully evaluate potential impacts on whales during this period, including the duration of habitat use effects or numbers and types of individuals that did not use high-use areas because of the activities.” EIS at V-27.

4. Humpback, Fin, and Other Baleen Whales

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

“Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited).” EIS at IV-151.

“No studies are available specific to the effects of seismic-survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on gray and minke whale behavior as a result of seismic activity.” EIS at IV-151.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking.” EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

“[IS] is difficult to predict the impact of a large spill on other humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would be not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sub lethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects.” EIS at IV-122.

“There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age.” EIS at IV-161.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

“There are no records of humpback killed or injured in the fisheries in which fishers still report (Angliss and Lodge, 2002), but the reliability of such data is unknown.” EIS at V-29.

“The impacts of pollution and habitat degradation [on humpback whales] due to coastal development are not known.” EIS at V-30.

“Cumulative effects on bowhead whale

 “[Data on other potential perturbations (e.g., past seismic surveys and oil spills) are not sufficient to clearly know the level of effects [on bowheads].]” EIS at V-20.

“Whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected.” EIS at V-20.

“There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation.” EIS at V-20.

“There are insufficient data [to make reliable predictions of the effects of Arctic climate change on bowhead whales].” EIS at V-22 (quoting Angliss and Lodge 2002:174).

“If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and or injury due to interactions with fishing gear, possibly injury and or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects.” EIS at V-22.

“Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990’s, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, vessel traffic, construction, geotechnical borehole drilling, aircraft surveys, and hunting).” EIS at V-22.

3. Beaglo Whale

“A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV.C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown.” EIS at IV-161.

“Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited).” EIS at IV-151.

C. Other Marine Mammals

1. Seals

“It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey.” EIS at IV-147.

“In the context of seals: “Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS at IV-147.

“Little information is known about oil-spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest.” EIS at IV-217 (internal references omitted).

2. Walrus

a. Effects of seismic

“There is no data available to evaluate the potential response of walruses to seismic operations. EIS at IV-148.

“Quantitative research on the sensitivity of walruses to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walruses.” EIS IV-148.

“Although the hearing sensitivity of walruses is poorly known, source levels are thought to be high enough to cause temporary hearing loss.” EIS IV-148.

“Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walruses to seismic operations.” EIS IV-148.

3. Polar Bears

a. Effects from oil spills

“With the limited background information available regarding large oil spills in the offshore arctic environment, the outcome of a large oil spill is uncertain.” EIS at IV-165.
b. Cumulative effects

“Quantitative data are lacking that specifically addresses the potential cumulative impacts of development on polar bears and the effects of disturbance related to human activities on polar bear habitat use, as well as recruitment and survival (Perham, 2005). There also is a high degree of uncertainty regarding the spatial scope of potential Industry activities on the Alaskan OCS.” EIS at IV-36. See also id. at V-52 (same).

III. MARINE AND COASTAL BIRDS

A. Impacts Generally

“Several areas historically documented to be important to marine and coastal birds in Sale 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species-groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high.” EIS at II-37.

“The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown.” EIS at IV-132.

“Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas are Kasegaluk Lagoon, Ledyard Bay, Prudot Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed.” EIS at IV-145.

1. Noise impacts on marine and coastal birds

“Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown.” EIS at IV-127.

“Few studies have assessed the effects of seismic surveys on marine birds and waterfowl.” EIS at IV-127.

2. Oil impacts on marine and coastal birds

“There are several areas historically documented to be important to marine and coastal birds in the proposed lease sale area. These areas, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult.” EIS IV-126.

b. Impacts to Threatened Spectacled and Steller's Eiders

“The behavioral response of eiders to aircraft overflights is unknown; some spectacled eiders nest and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences.” BE at 38 (emphases added).

“Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate …” BE at 44.

Ledyard Bay Critical Habitat Areas: “The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but could be in important staging and molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in those areas during the prolonged migration period ultimately may influence the survival of the spectacled eiders (Peterson et al. 1999).” BE at 47.

“The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for eiders within the Critical Habitat Area are also largely unknown.” BE Addendum at 1.

C. Impacts to Kittlitz’s Murrelets

“Clearly, there is cause for concern regarding the long-term survival of the [Kittlitz’s Murrelet] and the potential negative impacts of offshore oil and gas development; however, management decisions are difficult given the lack of available information.” BE at 36-37.

“Though impacts of oil spills [on Kittlitz’s murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Boy et al. 1999).” BE at 57.

See note 1.

See note 1.
The model does not consider interactions with suspended particulate matter, which is crucial for the evaluation of potential impacts from a spill. Because the environmental assessments for the exploration drilling proposed for the Beaufort and Chukchi Seas in 2010 assume that no large spill will occur, they do not contain any additional modeling of, or evaluation of potential effects from, a spill. The model used in the environmental impact statements suffers from substantial deficiencies:

- The model assumes that spilled oil is a point—it does not account for spreading of spilled oil, for the possibility that different parcels of a spreading oil slick may travel along different trajectories, or that these parcels may re-converge at locations distant from the spill origin, all of which are important aspects of the behavior of actual oil spills.

- Much of the environmental data input to the model is old—particularly current and wind information, which is from 1979-1996. Much has changed in the Arctic since then, and better information should be available.

- The model cannot account for the presence of sea ice. It assumes that shorefast ice exists for part of the year and that the ice “masks” the shore, which means that no oil could reach the shore.

- The model divides the leased area into a series of quadrants. Within each quadrant, it predicts that a spill could occur from a number of locations. It treats a spill from each location as equally likely and then provides an estimate of likelihood that a spill from each quadrant would reach land. This method biases the calculation in two ways. Some of the locations are further from land than others, so the model understates the likelihood of spilled oil from one of the closer locations reaching shore. Also, a spill is not equally likely from each location—Shell only wants to drill at some of them.

- The SINTEF model used to evaluate weathering effects on spilled oil is independent of the model used to estimate trajectories, making it impossible to evaluate effects related to, for example, the increasing propensity of oil to sink as it weathered.

- The model does not consider interactions with suspended particulate matter, which is crucial for determining the propensity of spilled oil to sink, thereby affecting the benthic community which is especially important in Arctic coastal marine ecosystems.

- More sophisticated and appropriate models that address the defects listed above have been available for over a decade.

In September 1979, a two-day blowout occurred at Shell’s Kulluk offshore platform in Alaska. Cleanup was not attempted due to 80-90% moving ice floes in Cook Inlet.

1985. Gas blowout at Grayling offshore platform which shut down production.

1987-88. Gas blowout at Steelhead offshore platform occurred while drilling an oil production well in December 1987. Fire burned for one week. While drilling the relief well, another blowout occurred in June 1988. The relief well was completed in August 1988.

1989. A frozen valve on Amoco’s Anna offshore platform caused a spill of over 20,000 gallons of crude. Cleanup was not attempted due to 80-90% moving ice floes in Cook Inlet.

As some of you also may have done, I woke up at 5 am yesterday and today to watch the Oil Spill Commission’s two days of hearings in DC on the causes of the BP Deepwater Horizon tragedy. BOEM Director Bromwich today noted the extreme sensitivity of the Arctic environment and its marine resources and their importance to subsistence, as well as the region’s spill cleanup challenges. On a technical level, the two days of hearings made clear how well-financed drilling companies nevertheless could:

1. Misinterpret data from a key well integrity test,

2. Decide not to utilize potentially critical well components known as centralizers because they would take too long to arrive, a delivery situation that would be much worse in the Arctic, and

3. Not take actions that would have mitigated much of the tragedy, e.g., using the platform’s diverter system.

What these hearings demonstrate is that no matter how good the regulatory oversight— and everyone acknowledges that BOEM needs regulatory improvements—there will be insufficient but highly tragic spill events. This information, combined with a clear need for collection and analysis of scientific data on the Arctic’s marine resources, demonstrate that BOEM is not ready at this time to proceed with offshore drilling in the Chukchi. BOEM should not rush through this EIS process like a student rushing to complete a term paper.

Hello. My name is Lois Epstein and I am the Arctic Program Director for The Wilderness Society or TWS. I am a licensed engineer in Alaska and I have spent over 20 years working on oil and gas technical and policy issues as a consultant and as an employee of non-profit organizations. I’ve served on federal advisory committees for U.S. DOT on pipeline safety and for U.S. EPA on petroleum refining, and I was a technical advisor on the report to the President in May 2010 which contained recommendations on increasing offshore drilling safety. I am not opposed to oil and gas production in Alaska—my role at TWS is to ensure that oil and gas drilling is done well and in appropriate locations.
November 30, 2010
Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820

Attn: Chukchi Sea Draft SEIS

Dear Sirs,

We encourage you to reaffirm Lease Sale 193. We are confident that the SEIS is adequate and the oil and gas production from Sale 193 will be done pursuant to adequate environmental safeguards.

Alaska and our nation need the employment and economic benefit that this Lease Sale will provide. Further, our nation will benefit from the oil and gas that is produced.

Sincerely,

Owen Graham
Executive Director
Alaska Forest Association
Suite 200
111 Stedman Street
Ketchikan, Alaska 99901
The SEIS considers the most viable natural gas development and production scenario for Chukchi leases – including use and potential expansion of existing (due to oil development and production) infrastructure and an overland gas pipeline transportation system – in the context of the alternatives analyzed (and evaluated to the satisfaction of the Court) in the Final EIS for the related oil-spill response plan. Prior to conducting any drilling operations, the lessee seeking to engage in such actions must submit for BOEM review an exploration or development plan, as appropriate. BOEM is then required under NEPA to review the exploration plan, determine that natural gas development and production would have no significant adverse impacts. For resource categories such as marine and coastal birds and archaeological resources, potential impacts would be avoidable or reduced through avoidance and mitigation and compliance with existing construction protocols and law.

Also important in the lease is the fact that what is at issue is a lease sale. The OCS Lands Act establishes a four-stage process for planning, leasing, exploration and production of oil and gas resources in Federal waters. Under this process, an OCS lease authorizes a lessee to engage only in “auxiliary activities” that do not harm the environment pending further review and approvals. BOEM approval is required prior to any exploration, development or production activities within a lease block. Leases seeking to engage in such actions must submit for BOEM review an exploration or development plan, as appropriate. BOEM is then required under NEPA to prepare an Environmental Assessment (“EA”) and/or an EIS. Proposed plans are evaluated for compliance with applicable regulations, lease stipulations and other requirements, including the adequacy of the related oil-spill response plan. Prior to conducting any drilling operations, the lessee is also required to submit and obtain approval for an Application for Permit to Drill (“APD”).

AOGA agrees with BOEM’s conclusion that new information regarding the Deepwater Horizon incident is not relevant to the analysis of natural gas development and production in the Chukchi Sea OCS, and that analysis of such an oil spill is not within the scope of the District Court’s order. Since the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring is unlikely. In addition, even if the Court’s order required reconsideration of potential impacts related to production of oil, the information available on the Deepwater Horizon spill would not require any analysis in the SEIS because of the differences between the Gulf of Mexico and the Chukchi Sea cited in the SEIS, including the fact that the Chukchi Sea Planning Area is predominantly shallow water.
environmental impacts and footprints for infrastructure for oil and gas development projects. Advancements in 3-D and 4-D seismic technology allow industry to focus their "targets," reducing impacts even more. Moreover, there has never been an oil spill caused by a blowout from offshore exploration and production drilling in state and federal waters off Alaska or the Canadian Arctic.

Finally, Alaska’s North Slope and OCS are now perhaps the most studied energy basins in the U.S. In the past decade alone, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi Seas. All told, at least $500 million has been spent on more than 5,000 independent studies since 1973.

AOGA strongly urges the Secretary to affirm Chukchi Sea Lease Sale 193, as recommended by the SEIS. The leases issued under Sale 193 were sold only after an exhaustive environmental analysis, and the specific concerns the District Court raised about the Final EIS for the sale are adequately addressed by the SEIS. Failure to affirm Lease Sale 193 would allow the moratorium on exploration and development of Alaska’s OCS to continue, harming Alaska’s economy and the nation’s energy security, without a corresponding benefit to the environment.

If you have any questions on these comments, please do not hesitate to contact me.

Sincerely,

KATE WILLIAMS
Regulatory Affairs Representative
API AND NOIA COMMENTS
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

Alaskan oil and gas operations have been a proving ground for technologies that have steadily evolved both the footprint and the impacts of exploration and production activities by the industry undersea. Over 30 years of oil production at Prudhoe Bay and other fields on the Alaska North Slope, producers have systematically advanced technology in drilling, engineering, in-situ and air transport, offshore construction to equip platform and supply ships, telecommunications, and geophysical surveying operations. Many of the members of API and NOIA are engaged in operations and support of operations for the exploration and production of oil and natural gas resources in U.S. Arctic regions. In Alaska, the oil and natural gas industry has proven itself to be a critical partner in the development of the Arctic, and it remains our understanding of the Arctic environment that is as fragile as it is remote and challenging.

The SEIS is intended to fulfill the requirements imposed by the U.S. District Court for Alaska to provide a new analysis in accordance with the court’s 30 July 2010 order remanding the ROE/ME’s Lease Sale 193 Final EIS (181). This order directed ROE/ME to address three concerns: (1) Analysis Page 1 of 4

API AND NOIA COMMENTS
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

the environmental impact of annual gas development to supplement what was held to be too limited a focus of the FISB to create oil development plans (G) determine whether existing information identified by ROE/ME in the FISB for oil development plans was sufficient to support an essential recovery under 48 C.F.R. §821.122 and (H) to determine whether the costs of obtaining the missing information was appropriate, or the means of doing so in a timely manner.

We believe that the FISB addressed the purpose set forth by the Court. It documents extensive communications with various federal agencies and the State of Alaska in the course of performing environmental review. It examines the most viable natural gas development scenarios that could result from development of oil and gas leases offered in Sale 193. It considers the impacts from natural gas development in the context of the oil resource development alternatives that were evaluated in the satisfaction of the Court in the FISB for Sale 193. It makes the logical assumption that forecasted natural gas development and production in the Sale 193 area would make use of offshore facilities considered in terms of crude oil development scenarios for Sale 193. The SEIS considers natural gas development scenarios that identify deliverability areas along the coastward edge of the Chukchi Shelf Area. Those deliverability areas, should they be implemented, would affect the type and severity of potential impacts to the offshore and shoreward environments from development based upon the size and location of the deliverable areas.

In the course of examining each impact category – including water-quality, air-quality, fish resources and habitat, threatened, endangered and other marine mammals, resident and seasonal birds, wetlands and shoreline vegetation, subsistence resources and impacts to native communities – it finds impacts from natural gas development to be insignificant to those from development of oil and gas resources, and capable of being addressed by adequately designed mitigation measures. The SEIS properly recognizes that the risk from impacts to oil spills can be controlled by prevention measures that ROE/ME will continue to its routine of operational safety and pollution prevention measures described in a lease operator’s permit application, and that the effects of small spills are likely to be localized. This does not discount the risk of spills, but it places the risk in an operational and regulatory context appropriate for review under the National Environmental Policy Act (“NEPA”). The SEIS notes the authority of state regulatory agencies over exploration, construction, and transportation facilities that may be utilized for development of oil and natural gas resources on the OCS. The SEIS also notes the requirements for best available and safe technologies, for marine and safety review and inspections, and for detailed spill contingency plans.

In turn, the SEIS supports a determination that impacts to the environment from development of natural gas resources in the Sale 193 area are capable of being prevented by a combination of sound operating practices, compliance with regulations, and appropriate regulatory oversight, and of being mitigated should any issues arise. The SEIS supports a determination that the effects on Arctic communities from potential development of resources on the Sale 193 leases would have direct and indirect consequences on social and cultural organization and cultural practices for those communities but would not lead to social systems overall. In recent decades the communities of the Alaskan Arctic have experienced significant social change and has expanded to accommodate to do, but they are not without capability and leadership to address the challenge of social change for the benefit of the natives and their traditions. Development of oil and natural gas resources of the region, will not only provide important benefits to the economy of the United States and the State of Alaska, but it can also provide jobs, revenues and benefits to the Arctic communities as well.

AP AND NOIA COMMENTS
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

Thank you for considering these comments. If you need additional information, please contact Richard Range at 202-426-3057.

Very truly yours,

Richard L. Range
Senior Policy Advisor, Upstream
API

Jeffrey Vedder
Director, Government Relations
NOIA
November 22, 2010
John Gill, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3849 Centerpoint Drive, Suite 380
Anchorage, Alaska 99508

Re: Support for Chukchi Sea Draft SEIS & Lease Sale 193

Dear Mr. Gill:

On behalf of Consumer Energy Alliance (CEA), I appreciate the opportunity to submit the following comments to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). CEA is in support of the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

CEA is a nonprofit, non-partisan organization committed to working with elected leaders, affected stakeholders, and consumers to help create a robust energy policy and maintain stable energy prices. We support improved domestic and global energy security and provide information on expanding the use of all energy resources, including oil, natural gas, and alternative energy, as well as increasing energy efficiency. CEA has more than 100 affiliated organizations, including energy suppliers and producers, manufacturers, small businesses, and community organizations, as well as a nationwide network of almost 300,000 consumer-advocates.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Therefore, CEA urges the federal government to carefully weigh all environmental considerations against the need to ensure our domestic energy security as well as boost U.S. economic growth and stability.

It is important that the federal government brings Alaska’s vast and natural resources back online. Jobs in Alaska and across the nation depend on the opportunity to oil and gas production and exploration.

BOEMRE’s comments and information to the court’s DSSIS is based upon its expertise and knowledge (see Appendix A at 1-4). We also agree with BOEMRE’s findings in Appendix A.

Very sincerely yours,

David E. Holt
President

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November 30, 2010

ConocoPhillips Alaska, Inc. Comment

November 29, 2010

ConocoPhillips Alaska, Inc. Comment

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ConocoPhillips comments are based upon its expertise and knowledge (see Appendix A at 1-4). We also agree with BOEMRE’s findings in Appendix A. As detailed in Appendix A, all of the incomplete and missing information is either not relevant or not essential to a reasoned choice among alternatives in the context of this oil and gas lease sale of the multi-step Outer Continental Shelf Lands Act process and in light of other available information.

While BOEMRE is to be generally commended for its DSSIS analysis, ConocoPhillips has the following suggestions:

1. BOEMRE should more explicitly acknowledge that there is a very substantial body of data and information that exists regarding baseline conditions, and the impacts of oil and gas activity in the Chukchi Sea. The appendix is the appeal leading to the renewed ("Appliants") have mischaracterized the record for purposes of litigation and to mold public perception. The Applicants argue that the Chukchi Sea is an area where almost nothing is known, and into which there is an unspoken rush to engage in oil and gas resource development. In this context, while it is appropriate for BOEMRE to acknowledge and address information gaps, it is in the interest of fair and balanced public discourse and agency rulemaking, it is also responsible for BOEMRE to expressly acknowledge the full extent of the data that is available.

The DSSIS does not address a number of studies available from many federal agencies, the University of Alaska Coastal Marine Institute, State of Alaska agencies, the North Slope Borough, and the National Science Foundation. Further, in addition to research conducted by SNOMEX, the oil and gas industry has conducted or funded ecosystem-based baseline studies on physical oceanography and water quality, biological oceanography such as the benthic and planktonic communities, water chemistry (ocean acidification), coastal and marine birds, marine mammals, fishery, sensitive biological resources, chemical characterization of sediment and biota, and the acoustic environment. The oil and gas industry has provided funding to local governments and marine mammal commissioners to collect additional data, including tagging studies on ice forms, beluga whales, and walruses, and to compile traditional ecological knowledge from hunters and citizens on bowhead whales and polar bears. The Chukchi Sea offshore monitoring in drilling season ("COMADA") program is funded by BOEMRE and collects baseline data for environmental effects analysis and monitoring. The BOEMRE database for the Chukchi Sea area lists over 900 citations for studies in the Chukchi Sea.

2. BOEMRE should more explicitly acknowledge that there is a very substantial body of highly reliable data and information that exists regarding the reasonably foreseeable probable environmental impacts of oil and gas activities in the Alaska Arctic OCS. In addition to the studies described above, the decades of remotely monitored and reported oil and gas activity on the North Slope of Alaska and in the adjacent Beaufort Sea provide a huge body of information, knowledge and expertise regarding the probable environmental effects of oil and gas activities in the Alaskan Arctic. Monitoring activities by entities such as the Alaska Department of Fish & Game, the BLAI, the NSI and oil and gas licensees have included censuses (since the 1979’s), shore, water and upland birds (Colville River Delta since 1992, NPR-A since 1999), tundra morsen (since the 1980’s in the Kuparuk River unit area), and numerous fish and lakes (Colville River Delta and NPR-A). This information provides significant support for sound scientific
November 30, 2010
Page 5

B.0.1 Summary of Impacts: Alternative 1 – Proposed Action (page 20, ¶ 2)

Highlight: The assumption that oil and gas development could have significant impacts to belugas whales and/or walruses is not provided in or supported by the DSEIS. The DSEIS should also recognize that during the exploration phases, which would be conducted during open water periods, the belugas whales are not in the area and, as of the case of the Eastern Beaufort, St. Lawrence, Bering, and Beaufort Sea, the Belugas Whales are not in the Arctic Ocean. Arctic 543:237-245 (citation in the DSEIS at page 137).

Under the Threatened and Endangered Marine and Coastal Birds subsection, and other Y5 sections, there is no mention of the Yellow-Billed Loons. Like the Kalaallit, the Eastern Yellow-Billed Loon is a candidate species under the ESA. In the last chapter under Consultation, BOEMRE does include consultation for Yellow-Billed Loons.

B.0.1 Terrestrial Mammals (page 21)

Comment: It is important to mention that terrestrial mammal population potential impacts are tied primarily to the development and production stages of oil and gas activity. Exploration efforts are conducted offshore and do not include pipeline construction, ice roads, gravel roads, and permanent construction facilities.

Comment: The statement that terrestrial mammals will be displaced by 4 km of pipelines and roads is unsupported in the DSEIS. It appears that the distance identified in literature for avoidance of roads by caribou was [copyright year] (by [copyright owner] in 2003) has been applied more broadly than the scientific data and literature support.

Comment: In the last paragraph on this page, BOEMRE should reference the ARTSG census of caribou herds, and in particular the Central Arctic Herd, to support this statement. Since the beginning of tracking these animals in the 1970s, their numbers have been up and down, most recently on the upturn, to 60,000 animals in 2008. This is the main herd that occupies and migrates through the North Slope of Alaska annually.

B.0.1.1 Subsistence-Harvest Patterns (page 22, last ¶)

Comment: ConocoPhillips suggests that the community of Kotzebue should be added to the list of communities included, although Kotzebue is located at a greater distance. Its residents rely on the same animals that move through the areas of focus. ConocoPhillips suggests that the community of Kotzebue should be added to the list of communities included, although Kotzebue is located at a greater distance. Its residents rely on the same animals that move through the areas of focus.

B.0.1 Sociocultural Systems (page 23)

Comment: The claim that subsistence is based on social disruptions is that is not the case. The subsistence is based on the cultural and social values that the community holds. The subsistence is based on the cultural and social values that the community holds. This statement is supported by scientific studies and community surveys.
not supported. The references for such an assertion should be given or the statement should be deleted.

Section IV.C.6 – Threatened and Endangered (page 85, last ¶)

Comment: The DEIS states that fixed wing aircraft are used to support OCS pipeline construction as “whole spotters.” Fixed wing aircraft support would be used for personnel and/or materials transport to the onshore logistics center, but not to offshore locations. It has not been proposed to use fixed wing aircraft as spotter planes. Moreover, the risks involved in sending manned aircraft at a distance offshore to monitor marine mammals will most likely result in other approaches being used. It is recommended that BODEMB remove this reference from the document as it is speculative and contrary to anticipated activities.

IV.C.17 Environmental Justice (page 101, ¶ 1)

Comment: The DEIS states “Metabolic health effects may occur if substance users became unavailable or unreliable for use, if substance-foods were displaced from the diet by increased availability or affordability of store-bought foods, or if substances were displaced as a primary source of nutrition because of cultural change.”

Linking availability and affordability of store-bought foods to negative metabolic health effects appears to presume that alternative food sources would necessarily result in unhealthy dietary choices. However, the availability of affordable non-substance foods does not equate to poor health. On the contrary, availability of fresh produce which could result in the incorporation of fruits and vegetables into the local diet would likely improve overall health. We see not suggesting that the unavailability of substance foods is desirable. What we are indicating here is that the statement made in the DEIS – that diversification of diet would result in adverse health effects – is premised upon an assumption that is not warranted by the facts.

IV.C.17 Environmental Justice (page 101, ¶ 3)

Comment: The DEIS states: “Sale 193 natural gas development and production could contribute to various ambient and ongoing localized and regional effects on social pathology (assault, alcohol and drug abuse, domestic violence, suicide, and homicide).”

The elements of social pathology listed above are well documented elements of NHB village life (i.e., these social issues already exist). The connection drawn between oil and gas activities as the source of the stated effects, or as a source of worsening effects, is neither supported by existing facts nor a fair assessment of the complex causes of social pathology in North Slope communities.

Comment: The DEIS states: “The most important sources of impact would include: influx of temporary residents into hostic villages, leading to cultural conflict and the potential for alcohol and drug importation.” Alcohol and drug issues already exist, and are not the result of oil and gas exploration or development work being present. Villages in other areas of Alaska where no oil or gas exploration or development has occurred suffer from these social issues as well. The supposition that influx of industry personnel will increase importation is not supported by fact. The oil industry has a zero tolerance for drugs and alcohol and monitors compliance to this standard rigidly, with firing and personnel. It is possible, that an industrial presence would increase the availability of drugs and alcohol as employment opportunities with oil and gas industry companies would only be available to alcohol-free and drug-free applicants.

Comment: The DEIS states “The most important sources of impacts would include: . . . Potential local and regional well increases in income and employment, leading to a general stabilization of social pathology. An important caveat is that increased income disparity, to the extent that it occurs, may tend to increase community tension and may thus worsen these problems.” The apparent underlying assumption that community tension does not exist in a subsistence culture is not supported by fact. Moreover, employment opportunities as a result of industrial development could provide opportunities for equalization not currently available. Any employer, whatever oil and gas industry related or not, would bring about the same tension, and other tensions already exist as exemplified by social issues in villages.

IV.C.17 Environmental Justice – Conclusions (page 103)

Comment: The DEIS states: “Increased travel, the introduction of new populations, and the influx of visitors and temporary workers from outside the North Slope region related to Sale 193 natural gas development and production represents a potential source of infectious disease transmission, including sexually transmitted diseases, respiratory diseases, and other infections, to local residents.” The assumption that industrial workers bring an increased threat of sexually transmitted and respiratory diseases is not supported by fact in the DEIS. For example, the incidence of respiratory disease is actually higher among the indigenous population of the North Slope than the typical industrial population.
MAP Consulting, LLC Comment

First and foremost - Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. Sale 193 is critical to Alaska’s future economy and the nation’s long-term energy security.
Do NOT Rescind the leases. Doing so would allow a de facto moratorium on exploration and drilling. This action will greatly harm Alaska’s economy and discourage future industry investment, without a corresponding benefit to the environment.
The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the United States.
The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refit the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
Oil and gas production resulting from Sale 193 will occur under the world’s highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
Industry has committed to unprecedented provisions for prevention and spill response, that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geological of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
There has never been a blowout in the Beaufort and Chukchi Seas – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than $72 billion over the next 50 years.

MAP Consulting, LLC

907-529-9119
mpease@acsalaska.net
Dear Mr. Goll:

As a former Alaskan, I support the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

I believe the draft supplemental EIS released by the federal government addresses all concerns expressed by the U.S. District Court in Alaska, and I hope the federal government will approve the responsible development of the Chukchi’s abundant oil and natural gas resources.

It is important that the federal government allows access to Alaska’s vast oil and natural gas resources. Doing so provides jobs for Alaskans at a time when the economy needs help. A study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska. Total payroll is estimated to be $72 billion (2007) over the 50-year period.

In addition, new offshore oil and gas development in Alaska will stimulate America’s economic recovery by generating thousands of new, high-paying jobs throughout the Lower 48. Some examples would be the steel and pipe manufacturers in the Midwest, coastal shippers, companies that produce advanced computer technology in California and Seattle and the skilled labor force for pipeline construction and maintenance.

Please move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi. By doing so, you are paving the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing, which is desperately needed as the amount of oil running through TAPS is declining.

Sincerely,

Hillary McIntosh
President
North Pole Economic Development Corporation

BOEING

The U.S. District Court in Alaska has raised concerns about the development of America’s Chukchi Sea that have been adequately addressed in the draft supplemental Environmental Impact Statement that was released by the federal government. The court ruled valid concerns on behalf of Alaskans, and now that those concerns have been answered, it’s time that we do the right thing and allow the lease holders an opportunity to develop their leases.

Tens of thousands of jobs and billions of dollars in payroll over the next generation are at stake. Boosting oil and gas development in Alaska will not only help the Alaskan economy but will help to improve economic conditions all over our country. During a time when our country is struggling to keep everyday Americans’ heads above water financially, why wouldn’t our nation invest in job creation? Whether developing the oil and gas fields directly or working in a support capacity, people in Alaska and across the United States are looking for opportunities to improve their lives. Oil and gas development creates good paying jobs, period.

Closer to home in North Pole, our two local refineries, Flint Hills Resources and Petro Star, Inc. rely on a supply of crude through the Trans-Alaska pipeline to keep their refineries running. Today’s crude oil comes out of the pipe at around 40 degrees Fahrenheit and must be heated significantly to even refine the crude oil. This is costly by a line running at less than 60% capacity. Responsible development of the Alaska’s Chukchi Sea will give us an opportunity to put more crude oil in the pipeline which will deliver a warmer crude to our North Pole Alaska refineries thereby saving significant energy that is expended today heating our crude oil so it may be refined.

I hope to see the beginning of responsible oil and gas development in the Chukchi Sea that will allow Alaska and our nation to move forward towards energy independence and away from a deeper reliance on foreign oil. My children and all future generations are depending on us to make the right decisions now to give them the gift of abundant and clean energy, creating good jobs, which will produce a stronger United States and an Alaska that is able to take better care of itself without further reliance on the federal government.

Sincerely,

Howard “Buzz” Otis
Executive Director
North Pole Economic Development Corporation
North Pole Economic Development Corporation Comment

Chukchi Lease Sale 193. We offer the following points for your consideration:

- Beaufort and Chukchi Sea Outer Continental Shelf energy resources – specifically Price-Gregory International supports the exploration and development of Alaska’s
- Gentlemen: 
  - Subject: Support for Alaska OCS Development / OCS Lease Sale 193
  - Reference: Chukchi Sea Draft SEIS
  - Attention: Regional Director, Alaska OCS Bureau
  - Bureau of Ocean Energy Management, Regulation and Enforcement
  - Anchorage, Alaska 99510

- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.

- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.

- Oil and gas production resulting from Sale 193 will occur under the world’s highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.

- Without question we need to focus our energy production, conservation and efficiency efforts inside our own country. We also need to transition to alternative energy sources and reduce our dependence on foreign oil. This transition, however, will take time, and domestic resources offer us the best opportunity to bridge that gap. They will allow us to increase our energy independence and national security and decrease the amount of money we transfer to foreign economies. Development of Alaska’s OCS and North Slope resources offer us the best opportunity to realize this goal.

- The Chukchi Sea is considered the most prospective unexplored offshore basin in the country. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

- According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than $72 billion over the next 50 years.

- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.

- Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future.

- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.

- There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.

- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.

- Demand for energy is continuing to rise and the U.S. requires continued development of America’s oil and gas resources as the nation transitions to the new energy sources of the future.

- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

- Without question we need to focus our energy production, conservation and efficiency efforts inside our own country. We also need to transition to alternative energy sources and reduce our dependence on foreign oil. This transition, however, will take time, and domestic resources offer us the best opportunity to bridge that gap. They will allow us to increase our energy independence and national security and decrease the amount of money we transfer to foreign economies. Development of Alaska’s OCS and North Slope Gas resources offer us the best opportunity to realize this goal.

Very truly yours,

PRICE-GREGORY INTERNATIONAL, INC.

Will Chinn
Project Development Manager
It is important to note that not all questions and concerns regarding oil and gas exploration and development can possibly be answered and met. Not all risks can be eliminated. If the federal government insists that every concern and risk be eliminated, then it must be prepared to import virtually all the oil the nation requires to meet future needs. It must then also accept the consequences of a much heavier reliance on foreign oil, including soaring trade deficits, a weaker and more vulnerable economy, and compromised national security. Put another way, failure to move forward with OCS development in Alaska will put the state economy at risk, as well as the nation's security.

OCS oil and gas development is absolutely critical to Alaska's future economy. With the Trans-Alaska Pipeline System (TAPS) now running at one-third capacity, exploration blocked in the Arctic National Wildlife Refuge (ANWR), and the national oil and gas production relying on foreign oil, Alaska needs to expand its domestic energy production. TAPS could be uneconomic to operate at some point in the next decade. Between ANWR, NPR-A and the OCS, there could be nearly 40 billion barrels of oil in place. By comparison, 16 billion barrels of oil have been produced on state lands across the North Slope in 33 years. The sustainability of TAPS and Alaska's economy will largely depend on some combination of oil production from these federal areas, which represent the nation's largest remaining proven recoverable reserves of oil and gas, and on Alaska's ability to transport this oil to markets.

The responsible development of potentially immense oil and gas on the North Slope would be a positive step forward in meeting the energy needs of the nation. New federal oil and gas development on Alaska's North Slope and off Alaska's coast would contribute significantly to the nation's energy supply over a long period of time. New federal oil and gas development would not only add significantly to the nation's energy security, but it would also provide significant economic benefits to Alaska and the nation as a whole.

The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than $500 million to study energy basins in America. The North Slope and the offshore are now perhaps the most studied energy basins in America.
I. Natural Gas Exploration and Production Scenario

Shell supports BOEMRE's determination of the most likely natural gas development and production scenario in the Draft SEIS. BOEMRE is correct that it is reasonable to expect economic considerations will restrict any natural gas exploration and production to projects coincident with and subsequent to oil exploration and development.

The Draft SEIS undertakes an analysis of the impacts to be expected from the natural gas development and production scenario, comparing those impacts to those already analyzed for the oil production scenario. Shell believes the analytical framework used is proper and careful, enabling BOEMRE to identify all reasonably foreseeable impacts associated with the natural gas development and production scenario.

To assist BOEMRE with preparation of the Final Supplemental Environmental Impact Statement, Shell offers the following comments on the analysis of the natural gas development and production scenario:

1. In the Description of the Environment, BOEMRE often states that analysts reviewed "additional information" for natural gas development and production and concluded that, for the given resource under discussion, "this information" would not change the analysis or offer conclusions discussed under environmental consequences in Chapter 4. See, e.g., Draft SEIS at 36 (addressing new information related to water quality). In light of the court's remand instructions regarding unknown information, Shell is concerned that BOEMRE's conclusions about additional information, when formatted in this way, are unnecessarily vague. In other cases, BOEMRE specifically identifies the new information analyzed: See, e.g., Draft SEIS at 35 (describing new information related to sea ice for natural gas production). Shell suggests that BOEMRE identify the new information reviewed in all cases, where there is no new information available, state that no new information is available.

The Draft SEIS could be read to be inconsistent in its treatment of well control events. In Section II.C.3, discussing issues considered but not analyzed, BOEMRE determines that information regarding the Deepwater Horizon incident is not relevant to the Draft SEIS because, inter alia, "any change in the likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed." Draft SEIS at 16. Shell agrees with BOEMRE's analysis on this point, as discussed below in Section III of these comments. However, as drafted, this sentence could be read to indicate that the Deepwater Horizon incident could affect or change prior analysis of the likelihood of a well control event in the Arctic. In Section IV.B.5, the Draft SEIS addresses the potential for natural gas releases, including the potential for a loss of well control. This section does not reference the Deepwater Horizon incident, other than to adjust the analysis of the likelihood of a loss of well control event, or to explain why the analysis done in the 193 FEIS remains valid. Shell suggests that BOEMRE address this issue, which affects the natural gas development and production scenario and is therefore proper within the scope of the remand.

2. On page 41 there is a broken cross-reference.

II. Limited Remand is Proper

Shell supports BOEMRE's decision to restrict its review on remand to only those topics identified by the court. Shell also believes it was proper for BOEMRE to consider whether information from the Deepwater Horizon incident should or should not impact the remand analysis. Shell concurs with BOEMRE's conclusion that, because the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring during the natural gas development and production scenario is unlikely. Draft SEIS at 16. Thus, Shell believes that BOEMRE reasonably did not include current information from the Deepwater Horizon oil spill incident in its remand analysis of the natural gas production scenario.

Shell further agrees with BOEMRE that, even if the remand were broad enough to include analysis of potential impacts related to the production of oil, current information from the Deepwater Horizon incident does not warrant additional analysis of those issues on remand. Draft SEIS at 16. Shell agrees with BOEMRE that the differences between the Gulf of Mexico and the Chukchi Sea cited in the Draft SEIS make it unlikely that current information from the Deepwater Horizon would be relevant to impacts from a potential oil spill in the Chukchi Sea. In particular, Shell notes that the impacts of a catastrophic spill have already been analyzed in the Arctic. See Final Environmental Impact Statement - Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 193, and 202. Thus, supplemental analysis to review the potential impacts of a spill such as the Deepwater Horizon is unnecessary because the analysis already exists.

IV. Timely Issuance of Final SEIS

Earlier this year, President Obama announced the Administration's renewed intention that oil and gas exploration at existing Beaufort and Chukchi Sea leases move aggressively forward, stating that "we'll continue to support development of leased areas off the North Slope of Alaska," among other areas, and noting that, "given our energy needs, in order to sustain economic growth and produce jobs, we must keep our businesses competitive, we're going to have to harness tremendous sources of fuel even as we ramp up production of new sources of renewable, homegrown energy."2 In an announcement the same day, Interior Secretary Salazar amplified that "[t]he Administration strategy supports exploratory drilling in the Chukchi and Beaufort Seas in the Arctic Ocean."3 Here, BOEMRE undertook a thorough evaluation of all the relevant issues pursuant to its obligations under the Outer Continental Shelf Lands Act and NEPA, and it should issue its final finding without further delay.

As BOEMRE is aware, successful exploration is a prerequisite to further oil and gas development projects. Every delay in the exploration of these leases therefore reduces industry's opportunity to find other viable oil deposits and to bring its leases into production. Delay will also jeopardize

hundreds of jobs and contracts for local Alaskans who have been engaged to support industry activities. For example, for its 2010 season, SGOMI and its affiliate Shell Offshore Inc. (“SOI”), which holds leases in the Beaufort Sea, contracted with approximately 80 local Alaskan businesses, including many native-owned businesses, to provide a wide range of services associated with its 2010 Chukchi and Beaufort Sea Exploration Plans (“2010 EPs”) such as engineering, consulting, communications, inspection and testing, emergency response, transportation, catering, information technology, and related services. These businesses collectively earned more than $127 million before the 2010 season was shut down.

SGOMI and SOI invested a substantial amount of time and money in its 2010 EPs. But their ability to continue to invest in drilling plans for 2011, as well as future seasons, is significantly hampered by the present uncertainty regarding oil and gas exploration activities in the Arctic Outer Continental Shelf. In fact, if certainty on whether such activities will be allowed to occur in 2011 is not achieved very soon, I do not believe that SOI or SGOMI will incur the additional substantial costs necessary to prepare for a 2011 season that ultimately may not be allowed. I therefore urge prompt agency action to close-out this remand.

Sincerely,

Peter E. Slaiby
Vice President, Shell Alaska

Dear Mr. Goll:

This is an identification page from a letter sent to John Goll, Regional Director, Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement, 3801 Centerpoint Drive, Suite 500, Anchorage, AK 99503, regarding the Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska's Resources.

The letter expresses support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska, even though the letter writer has no direct benefit from this activity, other than the belief that it is beneficial to the citizens of the United States to develop energy resources domestically and reduce their dependence on foreign supplies for strategic and economic reasons.

The letter writer, Paul W. Britt, President of TEXPLORE, Inc., 1001 McKinney St., Suite 802, Houston, TX 77002, 713-651-0004, 281-494-3155, strongly urges that the federal government move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska, even though he has no direct benefit from this activity, other than the belief that it is beneficial to the citizens of the United States to develop energy resources domestically and reduce their dependence on foreign supplies for strategic and economic reasons.

The letter writer believes that offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, advanced computer technology in California and Seattle, and union labor for pipeline construction and maintenance.

The letter writer strongly urges the federal government to move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi Sea, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.
General Public
Good day to you all. My name is Ramon G. Agnasaga, Agnias my insipciuous name, husband of Linda Lee, Sunnaastravik, father of six and grandfather of two. I live in Ugungis, Wainwright Alaska on the Arctic coast, I have lived here in Wainwright since 1982, before that I lived in Karl, Pt. Lay Alaska which is further down the coast from here, and between the villages is icy Cape, Goyapigqik, Namagnruk, are the Inupiat names that I know this place as. This is the area of my ancestors the Utqiagvikpimiat, named after the river that flows down the Brooks Range to the Kasegaluk Lagoon then into the Arctic Ocean, into the area that will be directly affected by the activity is bound to take place due to the quest for fuel that drives our nation. I have hunted this region since I was able to walk, from Cape Sabine through the Delong Mountains and through the headwaters of the Colville, Utqultipart, Kachapugqik, Kukullak, Kevlak, Avvikuluk rivers. I have also hunted on the Arctic ocean off the coasts in the area to be affected. I have seen how the climate has changed over the past 20 to 25 yrs, and already a challenge that we as people and also animals that inhabit the region are facing, this is probably the most challenging dilemma that we are all faced with now. All of the Mammals, migratory birds, fish, and “we” the “Minority” as commented in the draft plan that was drafted, the Inupiat people all up and down the coast and beyond our own shores, and also the food chain, will be exposed to an activity not seen in the region even before. We all do not know where this will lead, or even if we have a choice, but it is said, as we all have a right to voice our opinions, even if it might not be deemed as important. For I once will not say whether or not that this will be all good for the region and the Inupiat people or not, as I write earlier this has not been done here before. We probably all, at a point some time in our lives thought twice about something that will directly affect the way we live our lives, what can occur if we do not prepare. I believe that if the exploratory drilling does occur and if the projected amount of oil and gas is really there, there will be a frenzy of more activity, with other oil and gas companies, and also other countries that are also in need of oil, will be very interested in the findings of the exploratory drilling wells. And that will bring a whole new perspective to the table that definitely might be out of our control unless we prepare for it. We need to have concerns addressed, and answers and solutions in place before the proposed activity can occur. Thank you for your time in reading this.

Although I consider myself leaning more towards environment, I am realistic that oil will always be needed. However, that does not mean we can be irresponsible with the lives of Americans. Saying oil doesn’t believe in the climate crisis is not licence to be irresponsible with the resources of the planet. We have a responsibility to future generations and that has nothing to do with believing in what the climate is or is not doing.

The problem is greed, refusal to change and implement change, leaders that are out of touch with mainstream Americans, leaders that do not care about regular Americans that cannot buy representation, and a large amount of irresponsible attitudes of our leaders.

We really need a leader. We really need a leader to come forth and say, ENOUGH! It is time to return to basic American Values, honor, loyalty, respect, and working to do things for THE COMMON GOOD OF ALL. Somewhere that Ideal has been lost and trampled with several others mostly and uniquely American values. THE COMMON GOOD OF ALL. Lastly, it is wrong to destroy the Arctic that belongs to the next generations of America. There seems to be too much arrogance, egotistical ideals, self-serving and self-serving practices, that HONOR destroys the Arctic that belongs to the next generations of America. There seems to be too much arrogance, egotistical ideals, self-serving and self-serving practices, that HONOR destroys the Arctic that belongs to the next generations of America.

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has determined that despite huge gaps in information about bowhead whales, polar bears, walrus and pretty much all living things in the Arctic, it was not a mistake to sell the Chukchi Sea off to the highest bidders in 2008.

This conclusion is simply wrong. Drilling in the Arctic is too risky. The Arctic is already weakened and fragile because of the warming climate. What’s more, there is simply no technology to clean up oil in broken ice conditions. There is no way to mobilize even a fraction of the resources required for the Gulf disaster in the remote Arctic. And a large oil spill could mean the difference between survival and extinction for struggling Arctic species.

Unfortunately, your draft supplemental EIS does not come anywhere near addressing these problems of critical importance. Your draft supplemental EIS does not satisfy your obligation to protect America’s Arctic, and it does not comply with the law. In order to comply with the law, you must analyze the substantial gaps in scientific information contained in the current EIS and make a good faith effort at obtaining information that is realistically attainable. And most importantly, you must not allow drilling to go forward unless you have the scientific knowledge to say that drilling in the Arctic is safe.

I am geology major at FAU in Boca Raton. I also minor in GIS. I am aware of the steps the current EIS and make a good-faith effort at obtaining information that is necessary, and their solutions must be followed.

I do not think this is unreasonable. I think this is a smart beginning; it would improve your time in reading this.
Robert Laliberté
Chukchi Sea Draft SEIS
Bureau of Ocean Energy Management, Regulation, and Enforcement
Alaska OCS Region
BOEM REALPublicComment@boemre.gov

Subject: Chukchi Sea Draft EIS

Dear Mr. Laliberté:

Please cancel Chukchi Sea lease sale 193. I have been involved with onshore oil and gas development for the past ten years and have been to the Arctic coast. Oil and gas development does not belong in such a sensitive and fragile ecosystem as the Arctic Ocean. The time to prevent an environmental tragedy is now, prior to leasing. Once leases are issued it is too late despite all the stipulations, mitigations, and good intentions of regulators when permitting development. Believe me, I've spent the last four years participating in an effort to create an environmentally responsible oil and gas management plan in another fragile ecosystem, that should not have been leased, it cannot be done.

One of the reasons that the Alaska District Court remanded the original EIS was for more information. The supplemental EIS still lacks sufficient information for making an informed decision.

The recoverable reserve is unknown and speculative. The purpose and need statement makes it clear that the recoverable reserve is unknown; "offer for lease areas in the Chukchi Sea Planning Area of the Alaska Outer Continental Shelf (OCS) that might contain economically recoverable oil and gas resources." The extent of the reservoir should be known before determining the lease area. Don’t make a large geographic area available for oil and gas simply because it may avoid political controversy, i.e. not precluding a potential use. I’ve seen this happen too many times, and once an area is leased it is too late. This is exactly what has happened in my region. An entire intermountain basin was made available for oil and gas as the managers were certain development would remain in the traditional conventional oil fields. Low and behold, new technologies made previously overlooked reservoirs economically feasible for development. Now we're dealing with development proposals in some extremely fragile ecosystems, which cannot be reclaimed. These fragile ecosystems never should have been leased, please do not repeat this mistake.

Polar bear critical habitat was designated by the US Fish and Wildlife Service on November 24, which includes the lease sale area. The EIS essentially postpones polar bear consultation until time of development. Impacts to polar bears must be considered now, at leasing, waiting until development is too late. The EIS promises that consultation will be reinitiated when critical habitat is defined. Now that critical habitat has been defined, the EIS should be put on hold (or better yet cancelled) and full formal consultation reinitiated, not incremental consultation.

The summary of impacts (pgs. 18-24) is too generic and subjective providing insufficient information for an informed decision. As a decision maker is unlikely to read the entire EIS and will instead concentrate on the summary I believe that the summary is sufficient for making an informed decision. Impacts are discussed in subsection terms such as "no significant effects" but there is no definition of the impact categories, i.e. "risk of a large oil spill is low." What is low? "Any increase in concentrations of criteria pollutants would be small, local, and temporary." Please define small, local, and temporary, which unless defined, are left open for interpretation. Even when impacts are identified as significant there is no little quantification of the risk. "A large oil spill or chronic small-volume oil spills impacting intertidal or estuarine habitats used by early life-history stages of Pacific salmon would be likely to result in significant adverse effects on local populations. These would require three or more generations to recover to their former status." How many more generations for full recovery, one or two or more or several more generations? Impacts lasting multiple generations can increase exponentially with each generation lost to the point populations may never be able to recover. Temporary and nonlethal effects to ESA listed marine mammals should be explained better. Will these temporary and nonlethal effects interfere with foraging, breeding, or other activities that could have long-term population level impacts? What is the difference between substantial impacts and significant impacts? These are just a few examples of the insufficient information, the pattern continues throughout the document.

The sociocultural discussion on pg. 23 is an example of an appropriate analysis summary; impacts are defined, quantified, duration identified, and adequately explained. All resources should be discussed to a similar level of detail in order to make an informed decision.

The supplemental EIS fails to adequately analyze effects to ESA listed species instead relying on the following statement (pg. 20): "additional Section 7, ESA consultation would be required before BOEM approves any Development and Production Plan that could follow from a lease sale." A similar tactic is taken with non-listed marine and coastal birds on page 21: "A marine and coastal bird use presence is quite variable by season and location, an accurate assessment of impacts at this early stage is difficult. Additional NPEA and other environmental review processes occurring at later stages of the OCS Lands Act program (i.e. exploration, development and production) will have site-specific plans to focus on analysis. Significant adverse impacts to marine and coastal birds will be identified through consultation and mitigation measures implemented during those later review processes."

As identified earlier, once leases are issued it is too late. Environmental effects of exploration, development, and production must be considered prior to leasing to make an informed decision. Leases are a binding contract which come with a right to develop, once a lease is issued, the time to appropriate environmental mitigation may not be possible. It's not realistic to preserve that development of additional, site-specific mitigation measures during later environmental review processes would produce only minor impacts to Threatened and Endangered species. Mitigation measures must be defined and analyzed prior to leasing in order to make an informed decision. Leasing and development are connected actions, development impacts must be considered prior to leasing.
Differences between the alternatives should also be quantified, not merely generalized in terms of “greater or lesser”, in order to make an informed decision. How much greater or lesser?

The Affected Environment section does a decent job of discussing recent and projected climate and meteorological changes (p. 32). Similar level of detail should be included in other sections of the Affected Environment sub-chapter as shown in Table 3-2 where increased shore erosion should be discussed as it would likely affect shoreline properties, constructed islands, and other features of the oil and gas development.

I do not know much about ice gouging, but from the affected environment discussion (pg. 35) it sounds like it is an important issue. If increasing ice is a problem, then what is the total number of lease parcels and therefore what is the total number of platforms, wells, and pipeline length anticipated?

The development scenario (pg. 61) anticipates oil development to begin in 2020. 10 years from today. This is too long, too speculative, and therefore too risky. The natural gas discussion identifies the need for a transportation mechanism, without a defined transportation mechanism, the project is incomplete and should not be considered. Gas development and transportation to market are connected activities and must be considered together. BOEMRE must cancel the lease sale at least until a transportation pipeline proposal has been received so that the cumulative impacts of leasing, development, production, and transportation can be analyzed together.

The development scenario description is not clear. Will drilling and production be accomplished from a single platform (pg. 62) within each lease? That is what the description seems to indicate, but how large are the lease parcels? What is the total number of lease parcels and therefore what is the total number of platforms, wells, and pipeline length anticipated?

The Chapter 4 environmental analysis section provides no more detail than the summaries provided in Chapter 2. Most of the discussion is very generic with little detail mostly in subjective terms which are not defined. This EIS lacks sufficient information to make a reasoned informed decision.

In summary, please accept alternative 2 and cancel lease sale 193. The Arctic climate is too harsh and the ecosystem too fragile to risk another environmental catastrophe. It is too bad that the federal legislators and executive agencies do not have the political will power to adapt from preventable disasters such as the Exxon V Alyeska and the Deepwater Horizon. Ten years for production is too long, too speculative. America must move away from its dependence on carbon-based energy, not prolonging it. We have the capacity to embrace cleaner, renewable energy sources in the next decade. Ten years for production is too long and too speculative and is not worth the environmental risk.

The impacts to the local human environment (socio-cultural systems, subsistence economy, and commercial fisheries), physical environment (air quality, water quality, and acoustic environment), and biological environment (essential fish habitat, marine mammals, marine and coastal birds, and ESA listed species) that are disclosed are too great and not worth the limited economic benefit from the proposed lease sale.

An EIS is required to provide sufficient information to make a reasoned, well informed decision; this EIS does not. Many of the impact analyses are considered too speculative and postponed until time of development, including ESA consultation. Waiting until development is too late, the impacts must be assessed and disclosed prior to lease sale. Leases are contracts, once issued access must be granted, and development will occur. A complete environmental impact analysis must be conducted prior to leasing.
From: Claude Bondy [akclaud2009@yahoo.com]
Sent: Tuesday, November 09, 2010 3:54 AM
To: BOEMRE AK Public Comments
Subject: OCS Lease Sale 193

Please consider this when making a decision:

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation’s long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deeperwater exploration and development in the Gulf of Mexico. The pressure encountered in deeperwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contracts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- According to a 2010 study by the University of Alaska, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than $72 billion over the next 50 years.

November 24, 2010

Mr. John Go3
Alaska Regional Director
Bureau of Energy, Regulation and Enforcement
3803 Centerpoint Dr. Suite 520
Anchorage, Alaska 99503

Dr. Mr. Gull:

Please, no drilling in the Chukchi Sea at all. No more oil spills. Save this area for the animals, the environment and the Alaskan natives.

Thank you for your consideration.

Sincerely,

Mary Brown
268 Bigelow Street
Clayton, CA 94517
Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic Ocean are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities. The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur. There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As the tragedy in the Gulf of Mexico taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences.

Please commit to making management decisions based on adequate science, not politics or profits. We must learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America’s Arctic Ocean.

The Administration should continue to fund the collection of baseline scientific information on the Arctic Ocean ecosystem so that they will be able to make informed decisions about the development of the Arctic Ocean.

The oil spill in Valdez, the oil gusher in the Gulf of Mexico teach that oil cannot be cleaned up once it hits the ocean. Aproximately 3% of the Gulf oil has been recovered according to news releases. This is totally unacceptable in oceans prone to seas of ice. There are no Coast Guard bases within an hour or two reach of the proposed Chukchi and Beaufort sea extraction activity. Kodiak Coast Guard base is a couple days by ship to reach the North Seas, weather permitting. I'm not aware of anyone willing to go rescue anyone from a burning platform when there is a snow storm, ice storm, wind storm in the North seas. That would be called a suicide mission in my book. I'm not aware of anyone willing to go rescue communities from the cold water and frigid winds when the winds are blowing offshore. There are children that are not able to return to their Villages on the North Slope as the air is toxic to their lungs. The flaring that is allowed to continue day and night has had devasting consequences on the lungs of elders, parents, youth and babies. No one is immune to the toxins being burned into the air. The toxins are affecting the air that we breathe. The toxins are accumulating in the marine life in the areas of the North Seas.

The oil is going to the bottom, it would travel in layers of currents, and where it would show up could have devastating effects on marine life in many areas of the North Seas.

There are children that are not able to return to their Villages on the North Slope as the air is toxic to their lungs. The flaring that is allowed to continue day and night has had devasting consequences on the lungs of elders, parents, youth and babies. No one is immune to the toxins being burned into the air. The toxins are affecting the air that we breathe. The toxins are accumulating in the marine life in the areas of the North Seas.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than $72 billion over the next 50 years. I support OCS drilling and production in Alaska.

Fred Caples Jr.

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Nov 21, 2010

Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

RE: Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193

Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic Ocean are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities.

The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur. There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As the tragedy in the Gulf of Mexico taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences.

Please commit to making management decisions based on adequate science, not politics or profits. We must learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America’s Arctic Ocean.

J. Capuzzo, Jr.
315 West 8th Street
New York, NY 10024
November 10, 2010
Alaska Bureau of Ocean Energy, Management, Regulation, and Enforcement
2011 Centerpoint Drive
Suite 308
Anchorage, AK 99503

RE: Chukchi Sea Draft SEIS

I am writing because the recent draft supplemental environmental impact statement for the Chukchi Sea Lease Sale 193 is an unnecessarily hurried attempt to paper over, rather than obtain, essential missing information about the Chukchi Sea. The Bureau理由 admits that without missing information the basis of the area, it is in many cases not possible to judge the impacts of oil and gas activities resulting from the lease sale.

Nevertheless, the Bureau has determined its draft supplement that it will obtain more of the missing information before making its leasing decision. This decision is irresponsible and irresponsible.

The draft supplement fails to assess the total impacts of oil and gas drilling and other lease activities in this high-risk region. Simply stating that the agency does not lease the impact is not acceptable. For example, a catastrophic spill in the bath, remote waters of the Arctic Ocean will devastate that region. Twenty-foot ocean swells, freezing waves, subzero temperatures and a lack of infrastructure will make oil spill nearly impossible to clean up.

The Bureau also must more meaningful assess the potential impacts of natural gas development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development is not adequate.

The Bureau’s actions here represent a business-as-usual approach to push through Arctic offshore oil leasing even in light of the major failures of the agency recently brought to light by the Gulf spill. There should not be a rush to lease the Chukchi Sea and open it to oil and gas drilling. As the Gulf spill has taught us, killing oil and gas development in the offiers before fully analyzing and preparing for its potential impacts has been tragic and irreversible consequences.

Just five months ago, an oil spill occurred in the Gulf of Mexico, dumping millions of gallons of oil into ocean waters. Government officials are still picking the pieces together to determine the systemic failures that led to the spill and to ensure a spill like the Deepwater Horizon never happens again. But even then those states have not been completed; the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), is moving toward oil and gas drilling in the Arctic Ocean as if the spill never occurred.

This summer, a Federal court directed BOEMRE to redo its analysis of the environmental impacts of a massive Hudson oil and gas lease sale in the Chukchi Sea off the northwest coast of Alaska. But just two months later, BOEMRE has now issued a draft document that leaves unanswered hundreds of questions about the impacts of drilling in the Arctic Ocean and the potential threat of a spill in those waters.

I urge you to more that decisions about Chukchi Sea Lease Sale 193 are made with adequate scientific information and analysis. President Obama has made a commitment to policy decisions that reflect science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic Ocean drilling before you proceed with Lease Sale 193.

Please rely on sound science and learn from mistakes made in the Gulf before you allow oil and gas drilling in the fragile waters of America’s Arctic Ocean. Thank you for your help.

Yours truly,
Jefferson Childs
Oceanauts

Jefferson Childs
Marine Wildlife Ecologist
Anchorage, Alaska
Oceanauts@gci.net

From: jeffersonchilds@oceanauts.gci.net
Sent: Monday, November 29, 2010 8:10 PM
To: BOEMRE AK Public Comments
Cc: ‘Jeff Ruch’
Subject: Attn: Chukchi Sea Draft SEIS
Attachments: Chukchi Sea Draft SEIS Comments_JChilds.pdf

I’ve quickly reviewed BOEMRE’s Chukchi Sea Draft SEIS. Please find attached are my comments (in pdf) for BOEMRE’s consideration for improving the SEIS. Because of past problems with MMS, please note I am ccing PEER with these comments. Should BOEMRE have questions regarding my SEIS comments, BOEMRE may contact me via my email below.

Cheers,
Jeff Childs
Marine Wildlife Ecologist
Anchorage, Alaska
Oceanauts@gci.net

Jeff Childs – LS 193 Draft SEIS Comments

After quickly reviewing BOEMRE’s Chukchi Sea Draft SEIS and parts of the Lease Sale 193 ES from which it is tiered, I note the following deficiencies, analytical flaws, and noncompliance with federal regulations:

1. Incomplete Analysis of Gas Development Activities
   a. Section IV.B.5. discusses the potential for an (accidental) natural gas release, citing loss of well control or ruptured pipeline as potential sources in offshore waters. BOEMRE, in describing the scenario of potential natural gas release from a ruptured pipeline, states “Offshore, from a subsea pipeline release, the gas would bubble to the surface and continue into the atmosphere, where it would dissipate.” The scenario and subsequent analyses do not consider what would happen if natural gas was released during colder months when the sea surface is covered with ice! Natural gas released during colder months when ice covers the Chukchi Sea would not necessarily “bubble to the surface and continue into the atmosphere.” (DSEIS IV.B.5.; p. 67). It is more likely to become trapped beneath the sea surface-ice interface, where juvenile arctic cod, ice seals, beluga whales, and bowhead whales may breathe in pockets of trapped natural gas. BOEMRE describes the fate of a gas release thusly (p. 68):
   “The primary component of natural gas is methane, a colorless, odorless, and tasteless gas. It is not toxic in the atmosphere, but is classified as a simple asphyxiate, possessing an inhalation hazard. As with all gases, if inhaled in high enough concentrations, oxygen deficiency could occur and result in suffocation. The specific gravity of methane is 0.58. Being lighter than air it has the tendency to rise and dissipate into the atmosphere.”

   The impact analysis is incomplete until BOEMRE analyzes the impacts of natural gas trapped beneath sea ice on pinnipeds such as the bearded whale, beluga whale, ice seals, and arctic cock. Please note that contaminated breathing gases can be serious (human) divers breathing contaminated breathing gases have passed out and/or died. We might anticipate similar lethal or sublethal impacts to pinnipeds breathing natural gas trapped beneath the sea ice. Further expanded analysis would also consider possible escapement of trapped natural gas at breathing holes used by ice seals or visited by hunting polar bears.

   b. There are a number of rare fish species documented occurring in the Chukchi Sea Planning Area; some species are known only based on one or several specimens collected in the Planning Area. Data available in Mecklenburg et al. (2002) indicates such species are demersal in nature. BOEMRE has not conducted an analysis investigating adverse impacts associated with leasing blocks where rare fish species occur (i.e., have been collected). Without doing the analysis for BOEMRE, consider the impacts associated with leasing a block where an endemic demersal fish was collected in the Chukchi Sea Planning Area; the only known site in all of Alaska’s waters. What is the population size and distribution of the
A Sample List of Newly Published Information BOEMRE Should Consider in the DSEIS.

2. Incomplete Analysis of Oil & Gas Leasing Activities (LS 193 EIS & DSEIS)
   a. The MMS noted the following in its LS 193 EIS: “While we expect no regionally losses to fish resources at the population level…” However, MMS did not perform a thorough analysis since there exists potentially significant impacts to rare fish species in the Chukchi Sea Lease Sale 193 area. As noted above in I.b., BOEMRE need analysis leasing blocks inhabited by rare fish species, where impacts of placing exploratory drilling operations, production platforms, seawall structures, and pipelines may result in the only known regional population occurs. For example, construction activities on the seawall in areas where a rare marine fish species inhabits may adversely threaten their population or habitat leading to their extinction from the Planning Area. MMS-Alaska Region (now BOEMRE-Alaska Region) has previously been tasked to analyze offshore oil & gas industry activity impacts on rare marine fish species in the Beaufort and Chukchi seas, though the agency managers chose to disregard such concerns expressed by their agency subject matter expert (me, at the time)! The former MMS-Alaska Region notes the potential for significant adverse impacts to some local fish populations, but assumes impacted local fish populations would recover due to recruitment from adjacent fish populations. In the scientific arena, this is metapopulation ecology, and BOEMRE need more information to accurately assume/asses such recruitment recovery. In instances that BOEMRE finds significant adverse impacts to local populations, it is then necessary for them to conduct a metapopulation analysis that examines "source/link" population relationships, pathways of recruitment (as well as barriers), availability of habitats, and importantly, abundances of adjacent populations! Without considering such parameters and conducting a detailed metapopulation analysis, they are left with flawed assumptions of recovery.

3. Incomplete and Inconsistent Use of New Information in the SEIS
   a. There are many newly published scientific reports and peer-reviewed scientific papers available with new information relevant to lease sale activities in the Chukchi Sea Planning Area and the environmental analyses of the Lease Sale 193 EIS and this DSEIS. Much of this newly published information (since 2007) comes from NOAA, USGS, faculty of the University of Alaska-Fairbanks, and even BOEMRE! Additionally, the Oil & Gas Industry (e.g., SEPCO, Conoco-Phillips) have published recent reports of offshore surveys or monitoring efforts in the Chukchi Sea area and the Beaufort Sea. The DSEIS does not cite or consider such newly published information, including some studies funded or published by BOEMRE! Moreover, the BOEMRE-Alaska Region has a number of ongoing studies that it receives progress reports on; these ongoing studies and progress reports are not considered in the DSEIS environmental analyses. It’s striking and embarrassing that BOEMRE would prepare an SEIS that does not make better use of newly available scientific information (e.g., published since 2007), in light of recent transgressions at the MMS. At the end of my comments, I’ve provided a partial list of newly published studies that BOEMRE should examine and incorporate in their environmental analyses for the SEIS and future lease sale analyses!

4. Underestimating the Importance of Incomplete or Missing Information
   a. BOEMRE underestimates the importance of incomplete or missing information in the Lease Sale 193 EIS and DSEIS (see pp 8-15 of 14); Appendix A of DSEIS). BOEMRE (in the DSEIS) often uses “canned” statements dismissing why incomplete or missing information is not essential to making a reasoned choice regarding the Alternatives considered in the EIS. However, there are many gaps in knowledge regarding the distribution, abundance, ecology and behavior of many fish resources, particularly so for some rare demersal fish species! occurring in the Chukchi Sea Planning Area, that with more thorough analysis (not done in the LS 193 EIS) suggest significant adverse impacts may occur if certain lease blocks are made available to or modified by offshore oil and gas activities. As noted earlier, some rare fish species are known occurring in the Lease Sale area from one to several locations, and only by one to several specimens! One rare species is endemic to the eastern Chukchi Sea! As such, the best available information suggests these animals are concentrated where collected and may represent one or several populations in the region (at least without further information). Should BOEMRE lease a block for offshore oil & gas exploration and development where the only known population of a rare fish species occurs in the region (or say one of two locations), industry activities pose a substantial threat to that population or its habitat and may inadvertently extirpate the population via normal or accidental activities (e.g., exploratory drilling, installation of production platform or trenching of a pipeline). BOEMRE has not done the requisite hard look at how leasing such blocks to industry may adversely impact such rare fish species. Such lease sale blocks should not be leaseable or cancellations at risk just because they lack scientific qualifications (e.g., via pipeline right-of-way) unless more information is gathered indicating the species (2) has more populations in the Chukchi Sea Planning Area, (2) is more abundant than previous data indicate, (3) a broader distribution than several joint sampling sites, and (4) known habitat requirements are not unique to that block. Indeed, the BOEMRE’s need much more information than it currently has to confidently determine that its leasing activities will NOT cause a significant adverse impact to a rare fish species/population, such as extirpating it from the planning area.

5. Noncompliant Listing of Preparers
   a. Chapter VI.D. Authors, Reviewers, and Supporting Staff (p.122) does not comply with and fulfill CEQ Regulations (Section Sec. 1502.17) (list of preparers). These regulations specify:

Jefferson Childs Comment

species? What are the habitat parameters? What impacts might occur should BOEMRE allow exploratory drilling, installation of a production platform, or trenching of a pipeline through the only known area where the species was collected in the Chukchi Sea? What impacts might there be if there are two separate sites where a rare demersal species are known to occur in the leasing area? Consideration of such rare animals, their distributions, abundance, and habitat requirements are necessary to avoid extirpating them from the region. BOEMRE should conduct an analysis, block by block, in the Chukchi Sea Planning Area, for rare fish occurrences, and consider potential impacts to these fish species. In fact, consider removing lease blocks where rare fish are documented occurring from past surveys, from the lease sale (of course, this may involve generating a new Alternative in the SEIS).

Jefferson Childs Comment

the Chukchi Sea Planning Area. The DSEIS does not cite or consider such newly published information, including some studies funded or published by BOEMRE! Moreover, the BOEMRE-Alaska Region has a number of ongoing studies that it receives progress reports on; these ongoing studies and progress reports are not considered in the DSEIS environmental analyses. It’s striking and embarrassing that BOEMRE would prepare an SEIS that does not make better use of newly available scientific information (e.g., published since 2007), in light of recent transgressions at the MMS. At the end of my comments, I’ve provided a partial list of newly published studies that BOEMRE should examine and incorporate in their environmental analyses for the SEIS and future lease sale analyses!

Jefferson Childs Comment

http://www.springerlink.com/content/d454720773312h86/fulltext.pdf


See also the various ongoing studies BOEMRE is funding at:


**Additional Literature Cited**


Comments Prepared and Submitted by: Jeff Childs, Marine Wildlife Ecologist, P.O.B. 111406, Anchorage, AK 99511, Oceanaute@qsi.net

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From: g45@g45.com
Sent: Tuesday, November 09, 2010 5:19 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

John Goll
OCS Director, BOEMRE Alaska

November 9, 2010

Dear John Goll:

I urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife. The current draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193 dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife.

On October 12, the Alaska region BOEMRE released the draft SEIS in response to a June ruling by the Alaska District Court that their environmental analysis was inadequate. In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process. In response to the court mandate, the Alaska regional office’s draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

BOEMRE’s decision to release the draft SEIS goes against the Obama administration’s commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed. Furthermore, it seems to directly disregard Secretary Salazar’s September statement that “we must be thoughtful and responsible in developing... [Alaska’s]... resources so that we protect Alaska’s fisheries, wildlife, and remarkable beauty for generations to come... In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward.”

In determining that we should accept any cost for drilling, the draft SEIS undercuts sound environmental stewardship and decision making for our oceans.

Instead of proceeding with the current draft SEIS, your agency should first put a priority on collecting essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE’s first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

Thank you for considering my comments.
Sincerely,

Regis DiGiacomo
2333 N. 113th St.
Wauwatosa, WI  53226
November 23, 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment – Support Access to Alaska’s OCS Oil and Gas Resources

Dear Mr. Goll,

I’m writing to express my full support of oil and gas development of Lease Sale 193 in Alaska’s Chukchi Sea.

Many barrels of oil and gas has been successfully and safely harvested from the North Atlantic providing jobs for locals and funds for the Government with little or any disruption to the local environment. Developing the Chukchi Sea oil and gas reserves will provide the next generation necessary resources to meet the challenges they will inevitably face without taking unnecessary environmental risks. Boosting oil and gas development in Alaska is a way to improve economic conditions all over our country during a time when our country is struggling to keep everyday Americans’ heads above water financially. Local oil and gas development reduces trade deficits, creates jobs in America and puts money into local, state and federal treasuries.

There is no better time to start fixing America’s financial troubles by putting ourselves to work. I believe that the federal government should move forward with the process of developing Lease Sale 193.

Sincerely,

Bradley J. Fliesch, CFA
5730 North Douglas Hwy, Ste. B
Juneau, AK 99801
(907) 523-1029
bfj@gei.net
From: Defenders of Wildlife [defenders@mail.defenders.org] on behalf of Heidi Grassberger
hgras99@yahoo.com
Sent: Monday, November 22, 2010 2:42 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

Nov 22, 2010
Regional Director Alaska OCS Region Bureau of Ocean Energy Management, Regulation and Enforcement
Dear Regional Director Bureau of Ocean Energy Management, Regulation and Enforcement,
As someone who cares about wildlife, I am deeply concerned about the Draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193.
Drilling in the Chukchi could be disastrous for the wildlife that depends on the Chukchi to survive.
There is still no effective, proven technology to clean up oil spills in broken sea ice conditions in Arctic waters such as those found in the Chukchi Sea.
Oil can coat polar bear fur, causing even these Arctic sea-ice dwellers to freeze to death. And increased drilling activities can disrupt the feeding habits of walruses, seals and other animals that depend on the sea ice of the Chukchi to hunt and survive.
Because the risks to wildlife are so great, I urge your agency to await the results of the President’s Spill Commission, due out in January, and a U.S. Geological Survey analysis of the Arctic, due out in April.
Once that critical information is in hand, then the agency should put out a new Draft Environmental Impact Statement for public comment. We simply should not move forward with drilling in this fragile environment until we have collected and fully analyzed all relevant information.
Thank you for considering my comments.
Sincerely
Ms. Heidi Grassberger
1565 N 117th St
Wauwatosa, WI 53226-3207

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From: World Wildlife Fund [ecomments@wwfus.org] on behalf of Heidi Grassberger [hgras99@yahoo.com]
Sent: Sunday, November 21, 2010 8:11 AM
To: BOEMRE AK Public Comments
Subject: Urgent Action Needed: Protect the Arctic's Chukchi Sea for People and Wildlife

Nov 21, 2010
Regional Director, Alaska OCS Region, BOEMRE John Goll
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503
Dear Regional Director, Alaska OCS Region, BOEMRE Goll,
The draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Lease Sale 193 represents a rushed decision by the Alaska Region of BOEMRE to ignore, rather than obtain, essential missing information about the Chukchi Sea.
The draft SEIS acknowledges that, without the missing information about the basic ecology of the area, it may not be possible to judge the impacts of oil and gas activities resulting from the lease sale. Yet BOEMRE has determined that it will obtain none of the missing information before allowing activity on the leases, including drilling, to go forward.
The decision undercuts sound environmental stewardship and decision making for our oceans. It goes against the administration’s commitment to science-based decision making, especially in light of the systemic failures made evident by the Gulf of Mexico accident.
BOEMRE should prioritize the collection of essential missing information. This information should be based, in part, on the data generated by the U.S. Geological Survey analysis of the Arctic due out in the spring of 2011. BOEMRE should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.
BOEMRE’s first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science -- and lessons learned from the Gulf of Mexico spill -- are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.
Sincerely,
Ms. Heidi Grassberger
1545 W 117th St
Wauwatosa, WI 53226-3207

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Attn: Chukchi Sea Draft SEIS

Subject: I am an Alaskan by birth and have lived in Barrow, Alaska for 51 years, my wife and I have
allow oil drilling in the Chukchi Sea.

I am also a Petroleum geologist. An explorer. I’m one of the folks who use the seismic data to find new oil and gas fields. I have worked for several multinational oil companies and I have worked throughout the region - in the North-western Basin, Cook Inlet, ANWR, the Nenana Basin, the North Slope, the Canadian Beaufort, the Chukchi Sea, the Beaufort Sea – and I have a reasonably sound understanding of Alaska’s hydrocarbon potential. It’s my personal opinion that the Alaska’s OCS, especially in the north, has the best potential for large, economically viable reserves in the state and very likely, in the nation. But I don’t know that because the wells have not been tried to prove.

Back to my demographic: I acknowledge global climate change and the role of humans in it. The infamous hockey-stick Carbon curve and its correlation to industrial activity is, in my opinion, incontrovertible. I believe that we need to wean ourselves from our over-consumption of fossil fuels. But we must do this in the context of the severe realizations that our vast natural resource endowments are largely from an unstable supply of foreign oil. An economically weakened nation will not tread lightly on the environment. Thus, I believe that the potential for domestic oil is not a result of the assumption that oil is safe, and the sources are of finite size (especially for transportation energies) and that in the meantime, we need to keep domestic supply viable, first by knowing what we have through exploration. I believe it is a capital blunder to not even seek to know what our resource base is and that continued dismantling of Alaska’s oil industry will surely decimate Alaska’s economy.

The companies have not degraded Alaska’s environment (which, again, I personally value very highly) beyond what I believe is acceptable to deliver the vital energy we enjoy here. A smaller operation, including in the Chukchi and Beaufort, are proven to be clean and safe - the environmental record of

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John Homza
OCS Director, BOEMRE Alaska

Dear BOEMRE,

Sincerely thanks for taking local opinions concerning OCS development. This is a difficult and important issue. Let me give you my demographic. My name is Tom Homza, an Alaskan democrat who proudly supported President Obama’s candidacy and I believe his programs are generally prudent and wise. I was the first kid on the block to drive a hybrid out of principle. I came to Alaska 21 years ago primarily to practice geology and to experience the wilderness. My wife and I are raising an Alaskan family with what we believe are strong environmental principles.

I urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife. The current draft supplemental environmental impact statement (SEIS) for Chukchi Sea Lease Sale 193 dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife.

On October 12, the Alaska region BOEMRE released the draft SEIS in response to a June ruling by the Alaska District Court that their environmental analysis was inadequate. In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process. In response to the court mandate, the Alaska region office’s draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

Alaska’s BOEMRE’s decision to release the draft SEIS goes against the Obama administration’s commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed. Furthermore, it seems to directly disregard Secretary Salazar’s September statement that “we must be thoughtful and responsible in developing...[Alaska’s] resources so that we protect Alaska’s fisheries, wildlife, and remarkable beauty for generations to come...In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward.”

In determining that we should accept any cost for drilling, the draft SEIS omits critical environmental stewardship and decision making for our oceans.

Instead of proceeding with the current draft SEIS, your agency should first put a priority on collecting all essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE’s first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and reasons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

I am an Alaskan by birth and have lived in Barrow, Alaska for 51 years, my wife and I have four children, 14 grandchildren and 4 great-grandchildren, most of whom were born in Barrow...
Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species. I support OCS production in Alaska.

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.

I support OCS production in Alaska.

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Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
("Attn: Chukchi Sea Draft SEIS")

14 November 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503–5820

Dear Sir,

The Bureau of Ocean Energy Management, Regulations and Enforcement has determined that despite huge gaps in information about bowhead whales, polar bears, walrus and pretty much all living things in the Arctic, it was not a mistake to sell the Chukchi Sea off to the highest bidders in 2008.

This conclusion is simply wrong. Drilling in the Arctic is too risky. The Arctic is already weakened and fragile because of the warming climate. What’s more, there is simply no technology to clean up oil in broken ice conditions. There is no way to mobilize even a fraction of the response required for the Gulf disaster in the remote Arctic. And a large oil spill could mean the difference between survival and extinction for struggling Arctic species.

Unfortunately, your draft supplemental EIS does not come anywhere near addressing these problems of critical importance. Your draft supplemental EIS does not satisfy your obligation to protect America's Arctic, and it does not comply with the law. In order to comply with the law, you must analyze the substantial gaps in scientific information in the current EIS and make a good-faith effort at obtaining information that is realistically attainable. And most importantly, you must not allow drilling to go forward unless you have the scientific knowledge to say that drilling in the Arctic is safe.

Respectfully,

Michael & Kathy Kevany

[Signature]
Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities. The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur. There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As a tragic example, the Administration should learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America’s Arctic Ocean.

Denise Meyer
Wauwatosa, WI
approximately 10 years after an exploration well discovers oil and appraisal drilling determines sufficient volumes are in place to warrant development. There will be significant improvements in oil spill prevention, detection and response by the time development operations create even a remote risk of an oil spill in the Alaska OCS. The many years between now and first oil production provides ample time to fill any remaining data gaps.

2. Many of the statements related to lack of information in the Sale 193 EIS revolve around understanding bowhead whale and other marine mammals. It should be made clear that there has never been a documented case of a release death from OCS oil and gas operations in the U.S. and possibly in the world. Furthermore, in the Chukchi and Beaufort Seas of the U.S. and Canada, there has been an estimated 300,000 oil production wells of atomic acquired and 134 wells drilled since the 1970s (all within or in close proximity to primary bowhead whale migration and feeding habitats) and the bowhead whale population has grown from approximately 3,500 in the 1970s to approximately 19,000 today. If there were any population level cumulative impacts from these operations over the past 35 years, they would surely have manifested themselves by now. Additionally, nearly one billion barrels of oil has been produced from five man-made gravel islands in the Beaufort Sea state waters without any discernable impacts to any fauna or flora. While there is much that is not known about all aspects of each species living in the Chukchi Sea, it is clear that decades of exploration and development have not had a material impact on any species, nor on the ability of local residents to hunt these species for subsistence.

3. 1-1  Many of the bird species discussed as having data gaps are described as "coastal" birds. It should be noted that a 25 mile coastal leasing deferral was implemented for Sale 193 and no leases were purchased within 50 miles of the coastline. In the very unlikely event of an oil spill in a development scenario, the prevailing currents in the Chukchi sea move westward, further diminishing the potential impact to coastal bird species.

4. 1-1 2-3, 3-3, 5, 4-5, 2-8, 3-2, 4-3, 4-4 V. 3-4-4 V. 3-4-4 V. 4-2-4 V. 4-2-4 V. 4-2-4 While there may be aspects of the Chukchi Sea fish populations which are not known today, it should be noted that other areas where oil and gas operations occur near fisheries, negative impacts to fisheries have not been experienced. These areas include the Cobs Island, Nova Scotia, Newfoundland and the Gulf of Mexico. Since the Sale 193 action has nothing to do with commercial fishing, this missing information is irrelevant; however, much information about fish stocks in the Chukchi Sea will be obtained if leasing and exploration is allowed to move forward. The area has been closed to commercial fishing by the North Pacific Fisheries Management Council. Finally, coastal fish species are unlikely to be impacted by any scenarios due to the 25 mile coastal leasing deferral. The fact that no leases were purchased within 50 miles of the coastline, and the prevailing westerly currents in the Chukchi Sea.

5. 1-1 While there may be uncertainty about the exact bowhead population (and there always will be), the bowhead whale has been intensively studied and the migration pathways and key feeding areas are well understood. No key feeding areas have been documented in the Sale 193 area.

6. III-45. The work of Professor John Blichman has documented that the BCB stock of bowhead whales are a single genetic stock.

7. III-45. The recent BOEMRE 2009-033 study of Satellite Tracking of Western Arctic Bowhead Whales should be referenced which has confirmed what has been observed for many years. Bowhead whales use the eastern Chukchi Sea in the Sale 193 area as a migration pathway and there is very little ingesting or feeding. Key feeding areas for bowhead whales are in the Amundsen Gulf of Canada, east of Barrow, on the Russian side of the Bering Strait and in the Russia Sea.

8. III-48. Refer to Professor Blichman's work as noted in #6 above.


11. III-56. According to HNMS, the fin whale range is south of the Bering Straits; therefore, this statement is not pertinent to the proposed action.

12. III-57. Same comment as #11 above.

13. III-58. According to HNMS, the humpback whale range is south of the Bering Straits; therefore, this statement is not pertinent to the proposed action.

14. III-62. See comment #3 above.

15. IV-89. The statement, "Lastly, and importantly, data are not available sufficient to characterize the current seasonal or temporal use of the Chukchi Sea and the Belukha Seas to bowhead whales", is not accurate. See comment #7 above.

16. IV-99. The concern stated about increasing levels of noise in the oceans and the cumulative impacts on whales should acknowledge that the oceans were much noisier prior to commercial whaling when whale populations were much greater. Whale vocalizations create significant noise. While anthropogenic sounds will increase with oil and gas development, there is nothing to suggest this will be at a level which will have a negative population level impact on whales. Perhaps the greatest impact on noise in the Arctic Oceans will be from the increasing size and numbers of the commercial harvesting population and the related noise vocalizations.

17. IV-120. Long-term impacts of seismic survey sound on whale hearing is unknown, it is well known that intense activity has occurred in this region since the 1970s and the bowhead whale population is robust and growing, in spite of a significant subsistence harvest.

18. IV-121. Oil spill in the polynya zone described in this statement could only occur from a pipeline which could only occur during development which is not part of the proposed action and which could not occur for at least 10 years after successful exploration and appraisal.

19. IV-123. Please include support for the statement "Those are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area." The results of BOEMRE 2010-033 would not support this statement.

20. IV-140. See comment #3 above.

21. IV-145. Please provide support for the statement "However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals then their preferred habitats, increased mortality, and..."
Dear BOEMRE,

Your recent draft supplemental environmental impact statement for the Chukchi Sea Lease Sale 193 is an unnecessarily hurried attempt to paper over, rather than detail, essential missing information about the Chukchi Sea. The Bureau readily admits that without missing information about the basic ecology of the area, it is in many cases not possible to judge the impacts of oil and gas activities resulting from the lease sale. Nevertheless, the Bureau has determined in its draft supplemental that it will obtain none of the missing information before making its leasing decision. This decision is unsupportable.

The draft supplemental utterly fails to assess the true impacts of oil and gas drilling and other lease activities in this fragile region. Simply stating that the agency does not know the impacts is not acceptable. For example, a catastrophic oil spill in the harsh, remote waters of the Arctic Ocean will devastate that region. Twenty-foot ocean swells, frozen seas, subzero temperatures and a lack of infrastructure will make an oil spill nearly impossible to clean up.

The Bureau also must more meaningfully assess the potential impacts of natural gas development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development alone is not enough.

The Bureau’s actions here represent a business-as-usual approach to rush through Arctic offshore oil leasing even in light of the major failures at the agency recently brought to light by the Gulf spill. There should not be a rush to lease the Chukchi Sea and open it to oil and gas drilling. As the Gulf spill has taught us, allowing oil and gas development in the offshore before fully analyzing and preparing for its potential impacts can have tragic and irreversible consequences.

I urge you to ensure that decisions about Chukchi Sea Lease Sale 193 are made with adequate scientific information and analysis. President Obama has made a commitment to policy decision-making that relies on science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic policy decision-making that relies on science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development alone is not enough.

Sincerely,

Ms. Colleen O’Donnell
754 N 119th St.
Wauwatosa, WI 53226-3625

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From: Colleen O’Donnell [cmodon71@aol.com]
Sent: Tuesday, November 30, 2010 6:59 AM
To: BOEMRE AK Public Comments
Subject: BOEMRE AK Public Comments

Attn: Chukchi Sea Draft SEIS

Dear BOEMRE,

I urge the BOEM to allow the development of Alaska OCS to continue. Of the 30 wells that have been drilled in the Chukchi and Beaufort seas, there has never been a blow out that has resulted in an oil spill. Many of these wells were drilled in the 1980’s with technology that is significantly less stringent than the technology that exists today. Given the distinct differences in deepwater drilling in the Gulf of Mexico, and relatively shallow depth of drilling in Alaska; I believe the FEIS and SEIS will safely and adequately address any safety and environmental concerns.

I write in support of oil and gas development enabled by Lease 193 in the Chukchi Sea.

Regards,

Kevin Pomeroy
970 Goldmine Trail
Fairbanks, Alaska
99712

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Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
("Attn: Chukchi Sea Draft SEIS")

I urge the BOEM to allow the development of Alaska OCS to continue. Of the 30 wells that have been drilled in the Chukchi and Beaufort seas, there has never been a blow out that has resulted in an oil spill. Many of these wells were drilled in the 1980’s with technology that is significantly less stringent than the technology that exists today. Given the distinct differences in deepwater drilling in the Gulf of Mexico, and relatively shallow depth of drilling in Alaska; I believe the FEIS and SEIS will safely and adequately address any safety and environmental concerns.

I write in support of oil and gas development enabled by Lease 193 in the Chukchi Sea.

Regards,

Kevin Pomeroy
970 Goldmine Trail
Fairbanks, Alaska
99712

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
("Attn: Chukchi Sea Draft SEIS")

The long-term outlook for oil production on the North Slope is one of gradual decline supplemented with smaller field-size oil development with gas field development in or near existing infrastructure. The state expects average daily production in fiscal year 2010 to drop to 650,000 barrels per day 619,000 barrels per day in fiscal year 2011.

I support development of OCS production in Alaska.
From: Destin.Singleton@shell.com
Sent: Tuesday, November 16, 2010 6:42 AM
To: BOEMRE AK Public Comments
Subject: I support responsible access to Alaska's Resources: Chukchi Sea Draft SEIS

Dear Mr. Goll:

I strongly support oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

Following a recent decision by the federal courts, the Department of Interior has issued a draft supplemental Environmental Impact Statement (SEIS). Following conclusion of this regulatory process, it is my hope that the federal government will move quickly and finally approve the responsible development of the Chukchi's abundant oil and natural gas resources.

With Alaska and national unemployment at record levels, it is important that we develop Alaska's vast oil and natural gas reserves. In fact, a 2009 study by the University of Alaska found that new offshore energy in Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of $72 billion (2007) over the 50-year period.

Further, because energy is such a vital part of our domestic economy, new offshore development in Alaska's Chukchi Sea will help stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states.

Now is the time to move forward in support of thoughtful, safe and efficient energy production.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

Destin Singleton
1605 Columbia
Houston, TX 77008-4307
Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore. I support the development of OCS production in Alaska.

Dear Sirs,

2850 Runaway Dr
Fairbanks, AK 99709

Gary R. Wilken
Alaska State Senator (retired)
2850 Riverside Drive
Fairbanks, Alaska 99709

garywilken@me.com

November 23, 2010

Mr. John Boll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment - Support Access to Alaska’s OCS Oil and Gas Resources

Dear Mr. Boll,

I respectfully write in strong support of development under Lease Sale 193.

Alaskans are in a dangerous place. America faces a financial recession that has cut off many at the knees — home foreclosures, job layoffs, and the mental stress that comes with financial troubles are taking their toll on the country. It won't be long before the full force reaches Alaska.

In order to survive, Alaska needs a real self-sustaining economy to not only support itself and its residents, but to also support our nation. As you well know, Alaska occupies a key strategic location, not only for Arctic trade routes, but also as the primary home for America's missile defense sites protecting our country and our valued allies. In order to support the infrastructure that makes carrying out these important tasks possible, a grounded population base rooted with good-paying jobs and a stable economy is absolutely necessary.

Please support development of Lease Sale 193 in the Chukchi Sea. Both America and Alaska will benefit by a positive, and responsible decision.

Sincerely,

Gary R. Wilken
Fairbanks, Alaska

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
(“Attn: Chukchi Sea Draft SEIS”)

There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi — all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. I support OCS production in Alaska.

My Name is

James A. Land

Address is

4112 Hanies Ave

Fairbanks, Alaska

I have been in Aki 32 years.

We need this soon.

Cindy Wilson

3210 Park Hwy #8

Fairbanks, AK 99709

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
(“Attn: Chukchi Sea Draft SEIS”)

Shell returned to Alaska in 2005 to participate in Beaufort Lease Sale 202, signaling the first major offshore activity in Alaska in decades and a new era of exploration in the Arctic. As a result of that sale and subsequent partnerships, Shell now owns outright or holds an equity position in 137 leases in the Beaufort Sea - stretching east from Harrison Bay to an area north of ANWR. The leases Shell picked up in 2005 included Unocal's Hammerhead discovery and Arco’s Kuvlum discovery. I support development of OCS production in Alaska.
Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future. I support OCS drilling in Alaska.

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503–5820
("Attn: Chukchi Sea Draft SEIS")

As throughput in the Trans-Alaska Pipeline continues to decline, many look to the Alaska OCS as a critical new source of oil. A recent economic study completed by Northern Economics and the Institute of Social and Economic Research estimates the oil and gas reserves in the Alaska offshore could exceed those of Prudhoe Bay. I support development of OCS production in Alaska.

Zebulon Woodman
1809 Roberts Rd
Fairbanks, AK 99709
(907) 322-5605
As the Nation’s principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.