

Cook Inlet Planning Area
Proposed 2021 Oil and Gas Lease Sale 258

Final Scoping Report

November 11, 2020

Prepared by
ICF

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1.0 INTRODUCTION

Under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations, scoping is a process for determining the scope of issues to be addressed in an Environmental Impact Statement (EIS) and for identifying the significant issues related to a proposed action (40 CFR 1501.7). Scoping begins with a Notice of Intent (NOI) to prepare an EIS, which is published in the Federal Register. The NOI for the proposed 2021 Cook Inlet lease sale EIS was issued on September 10, 2020.

The NOI describes the proposed action and gives instructions for participating in the scoping process. Scoping is ongoing and concurrent with development of the EIS. Throughout the scoping process, Federal, State, Tribal, and local governments and the general public have the opportunity to provide input to the Bureau of Ocean Energy Management (BOEM) in determining significant resources, issues, impacting factors, reasonable alternatives, and potential mitigation measures to be analyzed in the EIS, and to provide additional information.

Background

Section 18 of the Outer Continental Shelf Lands Act (OCSLA) (43 USC 1331-1356) directs the Secretary of the Interior to prepare, periodically revise, and maintain an oil and gas leasing program. To comply with the OCSLA, BOEM prepares a National Outer Continental Shelf (OCS) Oil and Gas Leasing Program. On November 28, 2016, the Secretary of the Interior (Secretary) released the 2017–2022 National OCS Oil and Gas Leasing Proposed Final Program (Proposed Final Program).

On January 17, 2017, the Secretary issued a memorandum with a decision to proceed with the OCS leasing program as described in the Proposed Final Program. The Proposed Final Program includes the proposed 2021 Cook Inlet Lease Sale 258, which consists of 224 lease blocks and covers approximately 442,875 hectares (or 1.09 million acres) located offshore of the State of Alaska in Federal waters in the northern portion of Cook Inlet

The sections that follow include:

- Section 2 – a description of the details of the scoping process to date;
- Section 3 – a summary of the scoping comments received;
- Section 4 – a brief discussion of how these comments will be used to inform the EIS, further opportunities to inform the decision on the 2021 Cook Inlet Lease Sale 258, and information about potential cooperating agencies.

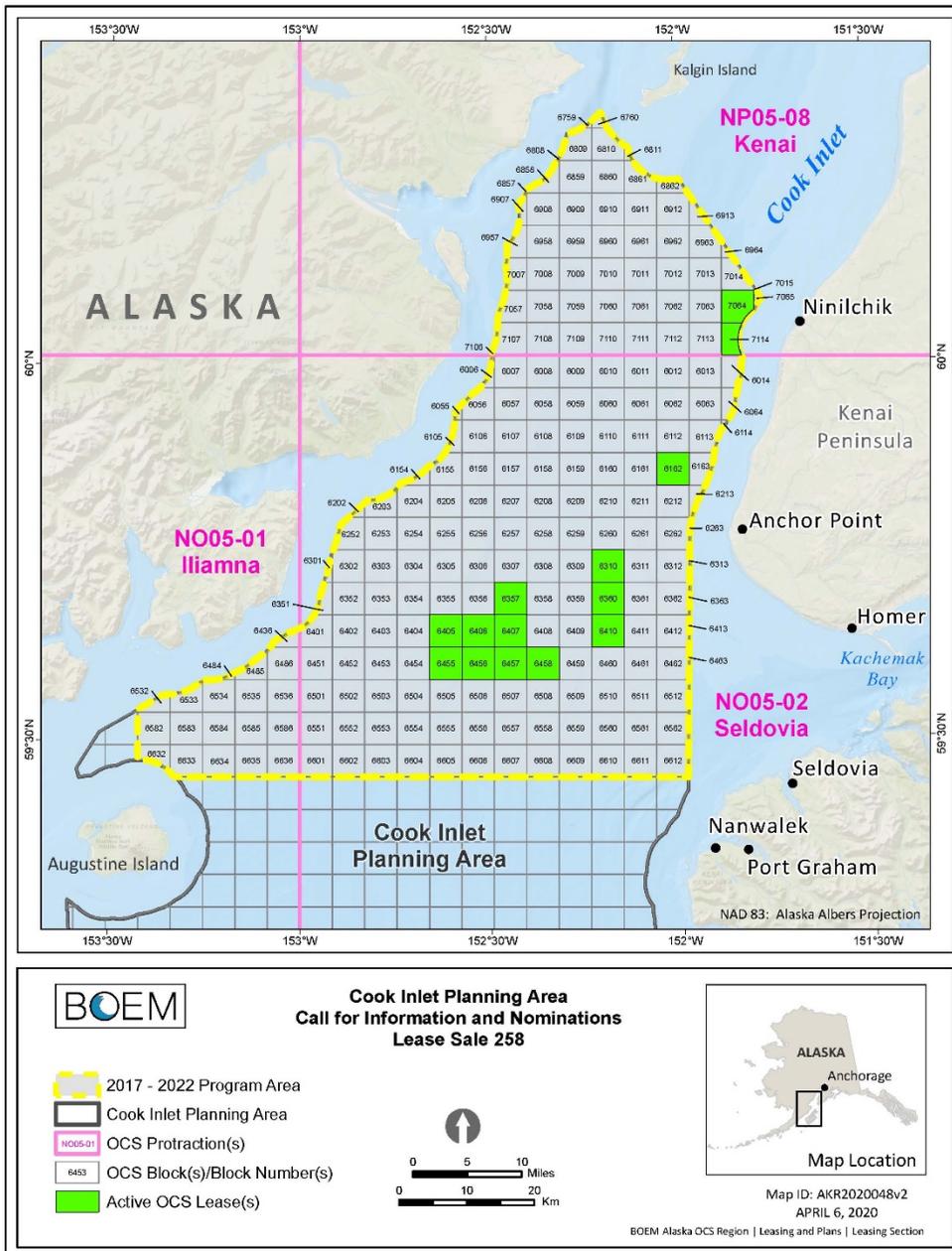


Figure 1. Cook Inlet Lease Sale Area. This is the area that is proposed for leasing and will be analyzed in the EIS.

2.0 SCOPING PROCESS

This section provides a description of the details of the scoping process to date.

2.1. Approach

On September 10, 2020, BOEM published in the Federal Register (FR) an NOI to prepare an EIS for the proposed 2021 Lease Sale 258 in the Cook Inlet Planning Area (85 FR 55861). The NOI also served to announce the beginning of the scoping process designed to identify issues and concerns related to the potential lease sale. Scoping comments were received through October 13, 2020. To protect the health of local communities and minimize in-person contact during the Covid-19 pandemic, the public's participation in the scoping process was virtual. The NOI identified three methods by which the public could provide scoping comments or suggestions regarding the 2021 Cook Inlet Lease Sale EIS:

- via a virtual “meeting room” at <https://www.boem.gov/ak258-scoping>.
- by electronic written comment via <https://www.regulations.gov>
- by submitting comments during live virtual meetings

2.2. Public Scoping Meetings

To protect the health of local communities and minimize in-person contact during the Covid-19 pandemic, public scoping was conducted online. To participate in the scoping process, interested parties were asked to visit BOEM's virtual “meeting room” (at <https://www.boem.gov/ak258-scoping>) through the end of the comment period on October 13, 2020. This “meeting room” page included an overview of the lease sale, links to pages with more information on the NEPA process, the BOEM National Program, and the natural and human environment in Cook Inlet. A field for readers to submit questions to BOEM electronically was also available.

In addition, BOEM held four live virtual meetings during the 30-day scoping period. These sessions were held at 6:30 p.m. Alaska Time on Tuesday, Sept. 29, 6:30 p.m. Alaska Time on Thursday, Oct. 1, and 3:30 and 6:30 p.m. on Thursday, Oct. 8.

3.0 SUMMARY OF SCOPING COMMENTS

This section presents a summary of the comments that were received to date for consideration in preparing the Draft EIS. It is not intended to be an exhaustive list of all the comments received and does not respond to comments or provide conclusions or decisions related to the content of the comments.

The majority of comments received during the scoping period were in opposition to oil and gas development on the OCS in the Cook Inlet Planning Area. Many of these commenters expressed concern for the potential impacts on climate change, the environment, and socio-cultural factors. One commenter provided a list of scientific references in support of these concerns for BOEM's consideration. Commenters stated that producing more oil and gas will result in more water and air pollution, and could exacerbate climate change which will put communities and wildlife at risk. Other commenters suggested that the construction and operation of oil rigs would not only be visually unappealing, but endanger wildlife in the oceans. A commenter said that oil rigs can also cause earthquakes.

A few commenters urged BOEM to cancel the proposed lease sale out of concern for the environment, wildlife, and communities of Alaska. One commenter requested BOEM issue a permanent moratorium on oil and gas exploration and development in Lower Cook Inlet. One commenter suggested cancelling all lease sales and returning the money back to the oil and gas companies, while another urged BOEM to, “...defer leasing additional areas in Cook Inlet to the oil industry.”

Several commenters said that the lease sale will undermine Alaskans' way of life and will industrialize Cook Inlet. Some commenters went on to say that Alaska is pristine, unpolluted, and the community relies on these aspects for fishing and tourism.

Other commenters suggested the focus should shift to developing renewable energy sources, and diversifying the economy. One commenter stated that any benefits from the return on investment do not compensate for the environmental and aesthetic impacts on Cook Inlet.

One commenter expressed general support for the proposed lease sale. The commenter stated that it supports responsible leasing and resource development and would like BOEM to complete lease sales in Cook Inlet, as well as the Chukchi and Beaufort Seas. The commenter went on to state that there is sufficient information available to proceed with the lease sales and comply with mitigation and environmental requirements.

3.1. Proposed Lease Sale

Purpose and need for the lease sale

A commenter objected to the assumption that offshore oil and gas development will enhance U.S. energy security, arguing that this is not true when impacts to essential habitats and the climate are considered. The commenter said the region does not need more oil and gas development, rather the region would benefit from a diversified grid.

Other comments on the proposed lease sale

A commenter expressed concerns that the Cook Inlet area is in close proximity to a Clean Air Act designated Class I area, the Tuxedni National Wildlife Refuge. The commenter also expressed concern that emissions in the Cook Inlet area have the potential to also impact visibility in Denali National Park and Preserve, another Class I area. The commenter stated that Federal agencies are required to enforce ambient air quality standards that exist in the corresponding onshore area. The commenter said that Class I areas require additional analysis for impacts to Air Quality Related Values and the EIS should include a summary of this. Commenters asked if the proposed lease sale areas would exclude a corridor for a possible pipeline across the inlet for the Pebble project and if they would exclude drilling rigs in vessel navigation channels.

A commenter requested that three areas receive special concern and analysis, including:

- “Compass Rose,” the area which is covered by a compass rose on NOAA printed charted and is important for commercial fisherman and charter operators;
- “The riffles,” which the commenter describes as an area coming down below anchor point that includes both halibut and salmon fisheries and is important for commercial and charter fishing; and
- Kamishak Bay, which contains herring spawning grounds that are an important resource for the community and the herring population.

3.2. Alternatives

Beluga Whale Mitigation Alternative

A commenter expressed opposition to the consideration that any EIS alternative would exclude Cook Inlet beluga whale critical habitat from leasing, prohibit seismic surveys or exploratory drilling from all lease blocks between November 1 and April 1, and prohibit seismic surveys or exploration between July 1 and September 30 within 10 miles of anadromous streams. The commenter stated that there does not appear to be regular use of the critical habitat in this area by beluga whales, instead that the majority of Cook Inlet beluga whale activity has historically occurred north of the proposed lease area. The commenter suggested that excluding this critical habitat or adding blanket stipulations may constrain oil and gas activities without providing any conservation benefit to beluga whales.

Another commenter stated that they were unable to locate a map and description of the Beluga Whale Mitigation Alternative referenced on www.regulations.gov, and thus they were unable to provide specific comments on the alternative.

A commenter asserted that BOEM's beluga whale mitigation alternative fails to consider that breeding and calving times for Cook Inlet beluga whales take place in April and May and, therefore, the alternative should exclude the Cook Inlet beluga whale critical habitat from the lease sale blocks from November 1 through the end of May. The commenter also expressed concern that the prohibition on seismic survey and exploratory drilling from July 1 to September 30 for areas within 10 miles of major anadromous streams included in the beluga whale mitigation alternative is inadequate to minimize adverse effects because beluga whales do not migrate out of Cook Inlet and may be adversely affected by anthropogenic noise and other industry activities year-round.

Northern Sea Otter Mitigation Alternative

A commenter expressed opposition to the consideration of a northern sea otter mitigation alternative on the grounds that excluding the area from the lease sale or adding stipulations is unlikely to provide conservation benefit, as oil and gas development is unlikely to adversely affect the population of the Alaska Distinct Population Segment of the northern sea otter. The commenter wrote that the sea otter critical habitat within the proposed leasing area is a small portion of the sea otter's critical habitat within the Cook Inlet and within the entire habitat of the sea otter. The commenter said that there is no indication that habitat is the limiting factor to the recovery of the sea otter population.

Gillnet Fishery Mitigation Alternative

A commenter expressed support for stipulations prohibiting seismic surveys during drift gillnet fishery season in the EIS, writing that this would be effective in mitigating the impact of on the Upper Cook Inlet drift gillnet fishery and on the migrating adult salmon returning to their natural streams.

No-Action Alternative

A couple of commenters supported the no-action alternative, writing that there is no need for the lease sale and that oil and gas development does more harm than good for the environment and the United States as a whole.

Another commenter stated that BOEM's No-Action Alternative evaluated in the EIS should not assume that the oil which would be extracted under the lease sale would be substituted by fossil fuels extracted elsewhere or that the lease sale would still occur in the future. The commenter said that by assuming that the lease sale would still occur, BOEM is "neglecting to consider what would be a true 'no action' alternative."

One commenter recommended BOEM rigorously consider the no-action alternative. Citing NEPA, the commenter stated that agencies must present relevant information about potentially significant adverse impacts to allow policymakers and the public to make fair comparisons of the alternatives. Additionally, the commenter stated that a no-action alternative should consider the United States' commitments to reduce greenhouse gas emissions under the Paris Agreement. The commenter wrote that the United States is committed to holding long-term global temperatures below 2°C above pre-industrial levels. The commenter said that these commitments to reducing greenhouse gasses are incompatible with expanding oil and gas extraction in the Cook Inlet. Additionally, the commenter suggested that, due to the current and predicted state of the oil market, the lease sale is not necessary and may even cause inflation. The commenter wrote about the effect of the COVID-19 pandemic and the anticipated long-term outlook of the global oil market to point out that the lease sale is counter-productive. Finally, the commenter identified significant environmental impacts that could be avoided by cancelling the lease sale and maintaining the status quo, including:

- “Reduction in large volumes of direct and reasonably foreseeable conventional air pollution, greenhouse gas emissions, and water pollution from the production, transport, refining, and consumption of the oil;
- Reduction in damage to sensitive ecosystems and protected areas, and wildlife that would have been impacted by the production, transport, refining, and consumption of the oil;
- Reduction in the risk of spills, explosions, accidents and consequent threats to human welfare and the environment; and
- Reduction in the risk of harm to important commercial and subsistence resources like fisheries and hunting areas, as well as industries dependent on tourism and outdoor recreation.”

Other Alternatives

One commenter expressed concern that BOEM did not make information on the alternatives for the beluga whale, northern sea otter, or drift gillnet fisheries available on the BOEM website, which the commenter said suggests that BOEM did not take a hard look at other alternatives to mitigate potential harm to the environment. Another commenter suggested that BOEM consider an alternative to end all new offshore oil and gas leasing or consider an alternative where the area is instead leased for renewable energy, due to plans to limit warming to 1.5°C or 2°C.

A commenter suggested that there should be an analysis of leasing the area to wind versus oil and gas, which must include an assessment of the impact of greenhouse gas emissions, from oil and gas exploration to consumer use; an analysis of the current economies which rely on the resources of the Lower Cook Inlet; and an assessment of regional job creation under each scenario over a 40 to 70 year period.

A commenter suggested that including some leasing stipulations in various EIS alternatives would provide an opportunity to determine if those stipulations are beneficial for the recovery of the listed species and encouraged BOEM to evaluate alternatives with such stipulations.

Another commenter recommended that alternatives included in the EIS should also include impacts on vulnerable species surrounding the action area. The commenter suggested that oil spills can spread long distances and impact species outside the action area. The commenter recommended that the EIS include an alternative that would prohibit any exploration or drilling activities from June to September when the waters outside Cook Inlet in the Gulf of Alaska are designated as biologically important areas for North Pacific right whales.

One commenter asked if the oil and gas resources in the Cook Inlet could be extracted using shoreside drilling as an alternative to marine drilling rigs. Another commenter expressed concern that, by presenting three separate alternatives that each focus protection on a different special-status species (i.e., Beluga Whale Mitigation Alternative, Northern Sea Otter Mitigation Alternative, and Gillnet Fishery Mitigation Alternative), BOEM would only afford protection to one of the species groups. The commenter asked whether a single alternative would be created to provide protection to all species separately considered in the three mitigation alternatives.

3.3. Exclusion Areas

One commenter discussed exclusion areas. The commenter suggested BOEM exclude from Lease Sale 258 the parcels overlapping the areas designated as critical habitat for the Cook Inlet beluga whale and the northern sea otter. The commenter stated that the population of the beluga whale has declined 80 percent since the 1970s, due to pollution, habitat degradation, oil and gas exploration, and other human disturbances. Likewise, according to the commenter, the population of the northern sea otters has declined by 55-65 percent since the 1980s, despite being listed as threatened on the endangered species list.

3.4. Physical Environment

Water Quality

Several commenters expressed concern over Lease Sale 258's potential effects on water quality. A few commenters discussed fracking and how potential resulting earthquakes, oil and other spills can impact water quality. One commenter expressed concern regarding off-shore fracking and acidizing and the potential water contamination due to chemicals used during these processes. Further, the commenter expressed concern for how the chemicals used, including nonylphenol and phenol formaldehyde resins, could affect the health of marine and human life if exposed. One commenter expressed concern regarding wastewater injection and the potential effects of contamination due to loss of well casing integrity. A commenter discussed the specific impacts of ocean acidification in the Alaska region due to continued carbon emissions from fracking operations and stated that because CO₂ contribution to chemistry changes can be calculated, BOEM must quantify the lease sale's contribution to ocean acidification.

Other concerns expressed related to water quality include concerns regarding water contamination and its effects on cold water species in the area, specifically the possible negative impacts on food sources and reproduction. One commenter expressed concern that local fishing and tourism could be negatively impacted due to potential water contamination from lease sale operations. Another commenter noted that the Clean Water Act must be considered. One commenter expressed concern that Lease Sale 258 may be in violation of National Pollutant Discharge Elimination System (NPDES) discharge elimination requirements due to wastewater discharge in areas of aquatic species habitat.

Air Quality

Several commenters expressed concern over Lease Sale 258's potential effect on air quality. One commenter expressed concern over well stimulation techniques, such as acidizing, and requested that analysis be done to find the potential impacts on air pollution. Specifically, the commenter expressed concern over volatile organic compounds (VOCs) and crystalline silica dust emitted during the fracking process, and the potential impacts to human health. One commenter asked if the EIS considers science regarding atmospheric carbon and impacts on seawater and biological environments.

Noise

Several commenters expressed concern regarding Lease Sale 258's potential contribution to noise pollution. One commenter expressed concern that ocean acidification could increase ocean noise pollution, which could disrupt the ability of marine life to communicate through low frequency sounds. A commenter discussed harmful and long-term effects high-intensity anthropogenic noise can have on marine mammals. Some commenters expressed concern regarding the noise and seismic impacts of well blasting and other manmade noise pollution and its effects on marine life, such as beluga whales. Commenters requested that acoustic monitoring be done as part of the lease sale. Referencing a report on acoustic monitoring conducted, "in conjunction with Hilcorp's seismic blasting work in Lower Cook Inlet in Fall 2019," a commenter stated BOEM has not considered or addressed the acoustic footprint from oil and gas exploration in this region, including failure to compile baseline conditions for impacts on marine life potentially impacted by high intensity seismic air gun deployment. Similarly, a commenter pointed out that abandonment of the seismic testing region in Lower Cook Inlet by humpback whales and harbor porpoise is an indication of the initial effects of oil development.

A commenter stated the EIS should include a complete analysis of the effects of active sound sources on acoustic environment and marine mammals. The commenter recommended the EIS assess and analyze the aggregate effects of marine seismic surveys, geohazard surveys, acoustical positioning and related activities associated with leasing instead of isolating each activity. Further, the commenter provided additional recommendations of impact modeling that should be included in the EIS and added concluded that an EIS must sufficiently analyze the cumulative effects of sound from all sources in Cook Inlet on marine mammals.

Climate Change

Many commenters discussed how quickly the impacts of climate change are developing in the Arctic region and expressed concern that the impacts will be compounded by the consequences of oil and gas drilling. Commenters expressed concern about the impacts the "climate crisis" is already having on Alaska, including coastal erosion, increased storm effects, sea-ice retreat, permafrost melt, and relocation of villages. Commenters suggested that instead of opening Cook Inlet to more drilling, BOEM should protect Alaska from further climate catastrophe. Commenters also stated that oil and gas development will exacerbate climate change, mentioning that rising temperatures impact salmon streams and dry out local lakes.

A commenter suggested that BOEM must properly consider the climate crisis by properly quantifying and analyzing all the greenhouse gas emissions from Lease Sale 258, including those generated by drilling, transporting, refining, and consuming the extracted oil, and the emissions saved by cancelling the Lease Sale. The commenter went on to explain that climate change impacts are already affecting Alaska in significant ways including eroded shorelines, sea-ice loss, increased sea surface temperatures, increased terrestrial permafrost degradation, rising sea levels, and increased storm power. The commenter also mentioned the potential impacts on the already collapsing fish populations. The commenter suggested that BOEM use tools such as the Greenhouse Gas Protocol and the National Energy Modeling System to identify and quantify greenhouse gas submissions and estimate the impacts of fossil fuel extraction. The commenter stated that ending new fossil fuel projects like offshore leases is necessary to avoid the "lock-in" of decades of fossil fuel production.

A commenter stated BOEM must quantify the lease sale's contribution to ocean acidification. The commenter discussed in detail the potential impacts greenhouse gas pollution from the lease sale would have on ocean acidification in the Arctic and affects ocean acidification has on marine animals. The

commenter concluded that the effects of increased GHG pollution/ocean acidification would impact the stability and operations of oil and gas drilling in Alaska and increase the risks of accidents and oil spills.

Additionally, a commenter stated that BOEM must complete an impact analysis for the potential industrialization of Homer, Seldovia, Port Graham, Anchor Point, and the west side of the Inlet, that includes cumulative impacts to water resources, essential fish habitat, harm to tourism and fishing industries, population impacts. The commenter stated that the analysis must include climate change and population pressure.

A commenter pointed out that instead of conducting basic research on oil and gas impacts and pursuing cleaner forms of energy, especially in a region where climate change is developing quickly, BOEM has pushed ahead “under a statutory construct that is inherently immoral and which hastens the demise of the very systems that support life on earth.” Similarly, a commenter explained that the lease sale would contribute to increased greenhouse gas emissions which are incompatible with the commitments taken on by the United States so as not to raise global temperatures by 2°C. The commenter said that NEPA requires BOEM to calculate direct, indirect, and cumulative effects of the proposed sale, including greenhouse gas emissions that may result from the consumption of oil from the sale. According to the commenter, BOEM cannot rely on the 2017-2022 program analysis of greenhouse gas emissions because it did not include the world market for oil. The analysis for this proposed sale must consider the impact on both the domestic and international oil supply and carbon emissions, as well as the social cost of carbon emissions from the lease sale, and the effects on climate change on the environment, community, and ecosystems.

Other comments on physical environment

A commenter stated that any plan for oil and gas development in the Lower Inlet must include comprehensive monitoring to safeguard the ecosystems of Cook Inlet. The commenter also listed additional information gaps that must be addressed in the EIS such as wave height and the role of ice in either accelerating or restricting the dispersion of possible oil spills or other pollutants in Cook Inlet. Another commenter also listed key topics that must be included in the EIS such as:

- The impacts of lease sales and associated activities on the biogeochemical cycle;
- Ice scouring;
- Faults;
- Mid-regional low tidal energy;
- Unpredictable earthquakes and tsunamis;
- Oily wastewater injection adding to earthquakes;
- Live active volcanos;
- Large tides earth causing tide dominated circulation with turbulence considerable in lower cook inlet;
- Extreme winter storms;
- Differential between upper cook inlet and lower cook inlet;
- Suspended sediments exceeding 1500 mg/l dominates the surface waters; and
- The average nitrate concentration in the upper 25 m in mid channel is generally high, between 5 and 18 mg-at n/m³ (equivalent to 125-450 mg-at n/m²), because of high vertical turbulence in lower cook inlet.

A commenter explained that Lower Cook Inlet is dangerous due to extreme tides, severe weather, winter ice, and sediment loads and urged BOEM to proceed with caution to avoid damages that would be irreversible.

3.5. Biological Environment

Lower tropic level organisms

A commenter claimed that “seismic air gun blasting” has negative impacts on zooplankton, which, according to the commenter, has adverse effects elsewhere on the food chain and could harm other fish species. In addition, the commenter said that ocean acidification has the potential to affect the growth and toxicity of phytoplankton associated with harmful algae blooms (HAB). The commenter said that exposure to HABs can contaminate food sources and cause mortality in marine mammals.

A commenter claimed that phytoplankton is double the productivity in the Lower Cook Inlet than in the Upper Cook Inlet. The commenter said that spring phytoplankton blooms in Kachemak Bay, Kamishak Bay, and the central part of Cook Inlet are all different and it is critical that these areas remain uncontaminated during the larval stage of zooplankton species.

Fish and Shellfish

A commenter stated that noise pollution can be especially harmful for some species of fish and stated that intense acoustic activities, such as those in air gun surveys, have led to declining populations of haddock and cod in the area.

Another commenter argued that crude oil harms fish by causing, for example, increased mortality, reduced growth, morphological abnormalities, and immunotoxicology. The commenter argued that threespine stickleback (*Gasterosteus aculeatus*) have severe negative effects of crude oil exposure and are especially vulnerable in the instance of an oil spill. The commenter said that this would have significant impacts on the rest of the food chain. One commenter said that the Kamishak area could yield 4 million pounds of Tanner crab and Dungeness crab if the area is kept clean.

Marine and Coastal Birds

A commenter suggested that BOEM should consider the impacts of the lease sale on Steller’s eiders and other seabirds, who are vulnerable to disorientation from oil and gas operations. The commenter said that some birds, especially nocturnal species, can get caught in a phenomenon called light entrapment, in which seabirds continually circle lights on vessels and energy platforms instead of foraging or visiting their nests. Seabirds also frequently collide with industry structures, causing injury or mortality. Another commenter agreed that the EIS should consider the impacts to Steller’s eiders, writing that a significant portion of the global population of Steller’s eiders winter in nearshore waters from the Aleutian Islands to the Cook Inlet, where they may be exposed to petroleum and other pollution. One commenter asked how endangered Steller’s Eiders that winter in the proposed lease area would be considered in the analysis. Similarly, a commenter said that the Lower Cook Inlet is the farthest north wintering habitat used by twelve species of seabirds.

Marine Mammals

Cook Inlet Beluga Whales

Several commenters said that the Cook Inlet beluga whale population is declining to an estimated 279 individuals. The commenters suggested cancelling Lease Sale 258 entirely due to the potential consequences for the Cook Inlet beluga whale population. Similarly, a commenter suggested that BOEM exclude areas of Lease Sale 258 that overlap with Cook Inlet beluga whale critical habitat.

A few other commenters expressed similar concerns about the population decline, claiming the population is declining at 2.3% per year. One commenter stated that beluga whales are threatened by noise pollution, oil spills, and ship strikes. The commenter said that water pollution, such as pollution caused by dredging, can harm beluga whales and multiple other species of fish. Additionally, the commenter said that beluga whales are vulnerable to biomagnification through the consumption of prey exposed to harmful chemicals.

A few other commenters agreed that beluga whales are vulnerable to oil spills. One commenter said that some oil spills go undetected for months, such as the Hilcorp Alaska natural gas pipeline spill in 2016-2017, during which time there was an unusually high rate of beluga whale mortality. Another commenter added that the potential for oil spills in the Cook Inlet and the permitted discharge of waste from oil and gas development could lead to the extinction of the Cook Inlet beluga whale. The commenter said that due to the seriousness of the threats, the EIS should include an analysis of the potential consequences of an oil spill on marine mammals, including beluga whales.

One commenter stated that beluga whales are sensitive to noise pollution, as they depend on sound for life functions, such as navigation, finding food, and finding a mate. The commenter said that increased oil and gas development in the Cook Inlet will increase artificial noise and negatively affect the beluga whales' health. The commenter compared beluga whales to the North Atlantic right whale, for which chronic stress from artificial noise has shown to reduce reproduction, impair health, and increase mortality. The commenter argued that the EIS should include an analysis of the effects of noise pollution on marine mammals, such as the beluga whale. Finally, the commenter emphasized the importance of considering the aggregate effects of all acoustic changes to the beluga whale's environment, rather than individual activities, arguing that the cumulative effects are predicted to be Level B noise harassment that disrupts animal behavior.

A commenter outlined the conservation challenges of maintaining the Cook Inlet beluga whale population. The commenter argued that although individual activities may be considered inconsequential, cumulatively those activities can have substantial adverse effects. Another commenter agreed, referencing the National Marine Fisheries Service Recovery Plan for Cook Inlet beluga whales which, according to the commenter, identified ten threats to beluga whales. The commenter argued that Lease Sale 258 would exacerbate six out of the ten threats to beluga whales. As such, the commenter recommended that BOEM consider in the EIS:

- “The effects of noise from oil and gas activities on beluga whales;
- How the lease sale will impair beluga whales' critical habitat and/or hinder recovery;
- The effects of oil spills on beluga whales; and
- Cumulative and synergistic effects on beluga whales.”

A couple of commenters said that the beluga whale is culturally significant. A commenter requested that indirect and cumulative impacts be included in the impact analysis of the lease sale.

One commenter asked how the proposed lease sale would affect beluga whale winter feeding habitat and beluga whale travel through the lease area.

Sea Otters

A few commenters said that sea otters are threatened by oil and gas development in the Cook Inlet. The commenters said that sea otters in the eastern area of southwest Alaska are surviving better than sea otters in the western area, reasoning that preserving any sea otter habitat is important. Another commenter agreed and stated that the sea otter population on the Alaska Peninsula has declined by 65-72 percent since the mid-1980s. The commenter said that sea otters are vulnerable to oil spills because sea otters' fur mats when it is exposed to oil, preventing the fur from insulating the sea otters and can cause sea otters to die of hypothermia. The commenter provided examples of the negative health effects of the Exxon Valdez oil spill on sea otters, which ultimately may have reduced productivity and survival of young sea otters. The commenter referenced the National Marine Fisheries Service, saying that climate change may disrupt sea otters' critical habitat, such as through redistribution of kelp forests and ocean acidification. As such, the commenter reasoned, BOEM should assess the cumulative impacts of climate change with the changes from industry activities on sea otter critical habitat.

One commenter recommended that BOEM exclude the areas in Lease Sale 258 that overlap with sea otter critical habitat. On the contrary, another commenter suggested that the stipulations in the Lease Sale 244 would not provide any benefit in conserving the populations of Cook Inlet beluga whales or sea otters. The commenter argued that unnecessarily restricting oil and gas activities undermines other conservation efforts by raising doubts that the stipulations are necessary. The commenter said that the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) provide adequate protection for beluga whales and sea otters.

A commenter suggested that Northern Sea otters have expanded their range in the proposed lease area and asked whether BOEM was aware of this expansion.

North Pacific Right Whale

A commenter said that the lease sale would have negative consequences for the North Pacific right whale, which is critically endangered, with threats of mortality from ship strikes and noise pollution. The commenter said that an oil spill could potentially drive the species to extinction and BOEM must consider impacts the Lease Sale, such as an oil spill, could have on North Pacific right whales.

Vegetation and wetlands

For BOEM's consideration, one commenter provided comments and information on several different types of algae, including:

- At least two dozen algae contribute to the primary production in the Lower Cook Inlet nursery and rearing habitats, but algal production declines in the Upper Cook Inlet;
- Intertidal algae, offshore kelp beds, and floating clumps of algal debris provide food for herbivorous macroinvertebrates;
- Kelp provides protection for fish from predators and year-round oxygen; and
- Crude oil washed ashore enters the food chain and causes adverse effects to the food chain.

Other comments on biological environment

A commenter stated BOEM consider the direct, indirect, and cumulative impacts of the program, including increased ship traffic, noise, and oil spills, on species already effected by climate change and ongoing oil and gas activities.

A commenter said that BOEM should provide baselines for petroleum containment in Cook Inlet. The commenter also suggested benthic habitat mapping is required to understand the impacts on marine habitats of the region. In addition, the commenter requested that BOEM consider the following questions for exploration, development, production and abandonment, including:

- “How will halibut, cod, crab, salmon, scallops and clams be impacted by the lease sale?”
- How will zooplankton and primary productivity be impacted?
- What will be the impacts to benthic invertebrates?
- How will the commercial, subsistence, and recreational fisheries in the Lease Sale 258 area be changed, altered or impacted?
- How will these changes impact the economic, cultural, recreational or subsistence uses by commercial, sport and subsistence users and their families?
- How will marine mammals, their habitats and food sources be impacted?
- What will be the impacts to the commercial fishing areas?
- What will be the impacts to the sport fishing areas?
- What compensation methods will be in place to make whole an injured party? What bonds will be required to hold responsible parties accountable?”

According to the commenter, the issues above were explored in the 1977 Environmental Assessment of the Alaskan Continental Shelf by National Oceanic and Atmospheric Administration, and recommend they be updated so the EIS can be complete.

Another commenter requested BOEM consider the following questions:

- “What are the chemical reactions when contaminants combine with higher water temperatures?”
- “What are the lethal threshold levels of these chemical reactions to high latitude cold water larval, juvenile and adult species that take years not months to develop into adults?”
- “Will this EIS differentiate the longer length of development to reproductive age of high latitude cold water species measured in years as compared with lower latitude warm water species development measured in months?”
- “Are interactions between habitat / food web of functioning plant, animal, protista, bacteria, and fungal species considered when potentially interrupted and impacted by lease sale activities or the resultant fossil fuels combustion?”

3.6. Sociocultural Systems

Economy

A commenter stated that the economic premise used to justify the lease sale must be carefully reviewed, as BOEM’s assumption that offshore oil and gas development in the Lower Cook Inlet is the best way to enhance energy security in the United States may not be true. The commenter suggested that a cost-benefit comparison of oil and gas versus wind resource development would be helpful to assure that BOEM is fulfilling its mission.

A commenter said that risking the health of the Cook Inlet watersheds could be catastrophic for Alaska’s economy, therefore the lease sale should not go forward. On the other hand, a commenter said that all phases of oil and gas development that have occurred in Cook Inlet contributed to the growth in the State’s economy, and coexisted with other industries. The commenter said that additional drilling in Cook Inlet would bring critical revenue and jobs to the State.

One commenter asked how much money the leases would add to the State of Alaska general fund and what percentage of each barrel of oil extracted would go to the general fund.

Commercial Fishing

A commenter described how offshore drilling and associated activities such as seismic air gun use, “produced water” from drilling, and oil spills can have serious and long-lasting impacts on commercial fish communities. The commenter said that oil spills are difficult to clean and can impair the reproductive success for generations.

Another commenter described the specific commercial fisheries and fish populations that are present in Cook Inlet, such as the Drift Gillnet Fishery, which is the most likely to be directly impacted by oil and gas development, forage fish, groundfish, and shellfish, such as Tanner crab and red king crab.

Two commenters asked how the proposed lease sale would affect commercial fisheries for salmon, cod, and halibut including a halibut nursery off Point Pogibshi.

Some commenters stated that the Lower Cook Inlet and Kachemak Bay environments are recognized as some of the most nutrient rich and biologically productive in the world and oil and gas drilling poses serious risks to regional commercial and recreational fisheries and will disrupt the regional economy. A commenter stated that commercial fishing is the “cornerstone of coastal Alaska’s economy,” and the only source of employment and economic income.

A commenter requested that BOEM consider the added time and concentration of commercial marine transport which will “alter productivity by introducing pollutants (oil spills), drilling muds and wastewater discharge and noxious exotic and invasive species as competitors and predators.”

A commenter described their experience as a member of a commercial salmon and halibut fishing family that depends on a clean and functioning Cook Inlet marine ecosystem for food, health, and well-being.

Subsistence Activities and Harvest Patterns

A commenter said that the scoping process must include and analyze the effects of the proposed lease sale on subsistence users and develop alternatives that might avoid or reduce impacts on communities. The commenter went on to say that offshore drilling in Alaska disproportionately impacts Alaskan Native communities who rely on wildlife for subsistence hunting and fishing that are threatened by the impacts of oil and gas activities. The commenter said that these activities could impact beluga whales, harbor seals, stellar sea lions, and sea otters. Another commenter said that Cook Inlet’s ecosystem has provided subsistence resources to Native Alaskans for thousands of years and continues to sustain the region.

A commenter said that harvest activities could be impacted by oil and gas development if access to resources is limited, if fish and wildlife are displaced, or if resources are contaminated by an oil spill. The commenter provided several resources related to harvest activities and recommended that an assessment of current subsistence use in Cook Inlet be performed.

Environmental Justice

Two commenters explained that Executive Order 12898 makes it the responsibility of each Federal agency to make achieving environmental justice part of its mission. The commenters went on to say that early and “meaningful” public participation is a paramount goal of NEPA. One commenter said that so far, BOEM has shown no signs of conducting effective outreach, and must actively seek out information to determine whether any potential environmental justice communities may be disproportionately

impacted. Toxic pollution from refineries and offshore oil and gas drilling disproportionately impacts Alaska Native communities and low-income neighborhoods. The commenters concluded that BOEM's proposed lease sale will exacerbate these impacts, therefore, BOEM must take a "comprehensive look" at the environmental justice impacts of the lease sale.

Other socioeconomic impacts

A commenter requested that BOEM consider the following for "all phases of exploration, development, production, and abandonment:

- How will the commercial, subsistence, and recreational fisheries in the Lease Sale 258 area be changed, altered or impacted?
- How will these changes impact the economic, cultural, recreational or subsistence uses by commercial, sport and subsistence users and their families?"
- What will be the impacts to the commercial fishing areas and sport fishing areas?
- "What compensation methods will be in place to make whole an injured party? What bonds will be required to hold responsible parties accountable?"

Another commenter requested that the EIS consider the risks to United States food security as the proposed lease sale is in a rich habitat that produces food.

Another commenter explained that the economic viability of the Gulf of Alaska communities is based on the biological productivity that support commercial fisheries, which then contribute to all sectors of the communities such as hospitals, restaurants, and other local businesses.

A commenter requested that BOEM take every precaution to prevent disasters that would leave residents without the ability to make a living from certain resources.

One commenter asked if BOEM would use a Cook Inlet vessel traffic study prepared by the Cook Inlet Regional Citizen Advisory Council in their analysis.

Lastly, a commenter explained that ADF&G and the Alaska Department of Natural Resources co-manage state special areas that were designated to protect high value fish and wildlife habitat and recreational activities. These areas include six refuges, six critical habitat areas, and one sanctuary along Cook Inlet.

3.7. Environmental Impacts

Impact Producing Factors

One commenter expressed concern over potential impact producing factors as a result of the Lease Sale and requested that the EIS carefully examine the impacts of the loss of well casing integrity; offshore fracking and acidizing, including impacts on water contamination on human and marine life; air pollution; increased risk of earthquakes and seismic events; and increased risk of catastrophic oil spills.

Analyzing Impacts and Lease Sale

Two commenters requested that a cost benefit analysis of fossil fuels compared to alternative energy be conducted. One requested that the analysis of cumulative impacts on impacted communities include water resources, essential habitat for fishes, and harm to the existing tourism and fishing industries, net population impacts, as well as impacts to subsistence practices of residents, especially Alaska Native Tribal Members. Multiple commenters requested that an analysis of the potential industrialization of

Homer, Seldovia, Port Graham, Anchor Point, and the west side of the inlet be included in the analyses of the Lease Sale.

One commenter asked if new data would be collected on contaminants and the cumulative effects of existing oil and gas activities.

Very Large Oil Spills

Several commenters expressed concern regarding very large oil spills. One commenter urged that the EIS take a hard look at the risks and impacts of oil spills during drilling operations and transportation of extracted crude. The commenter identified several human and natural resource areas that should be considered in an analysis of oil spill impacts and requested that oil spill modeling include all weather conditions. The commenter also recommended that the EIS evaluate how conditions in the Cook Inlet such as wind, temperate, and ice affect spill response effectiveness and consider the ability of potential bidders to prevent and clean up a spill, should one occur. One commenter discussed the potential impacts of a large oil spill and noted that measures should be implemented to reduce risk. One commenter recommended that the EIS use peer-reviewed research to analyze the risks from oil spills that cannot be contained or cleaned. One commenter expressed concern regarding the timeliness of oil spill detection and responses, along with their impact on marine life. One commenter expressed concern regarding the overall footprint of a large oil spill in the Alaskan gulf. Another commenter noted that oil spill models have been inaccurate in the past and requested more in depth modeling. A commenter noted that prevention is the only way to mitigate oil spills. One commenter asked what preventative measures would be set in place prior to drilling to prevent spills and if there would be a contractual agreement that would hold the lessee liable for any damages caused by spills. At the same virtual scoping meeting, a commenter asked if the risk of earthquakes would be considered in the evaluation of spill risk and asked what would be in place to clean up possible spills.

Several commenters expressed concerns regarding general environmental impacts of the lease sale. A commenter expressed concern that increased air and vessel traffic in the area during operation could have negative impacts on local environmental and wildlife. One commenter expressed concern regarding the cumulative impacts of adding additional oil well operations to the area. One commenter expressed concern over the presence of oil operations in known food production area .

3.8. Mitigation

Several commenters requested the inclusion of mitigation measures to the lease sale. One commenter requested the use of an ocean observing system, no seismic work during salmon run, no seismic work without surveys for beluga whales, study of oil in tidal convergence zone, effect of seismic surveys on zooplankton, and the use of a regional ocean modeling system. One commenter requested that monitoring of biota be included in the lease sale. A commenter suggested seismic surveys in the Lease Sale 258 blocks to occur outside salmon migration times.

One commenter requested that the lease sale include financial assurances to mitigate potential accidents. The commenter also suggested the EIS consider mitigation measures restricting lease activities during important periods, including migratory, breeding, and birthing and also suggested BOEM include possible spatial alternatives that would lower the likelihood of catastrophic effects of oil spills on wildlife.

A commenter said that sea otter population is largely limited by the animals' ability to dive to the ocean floor to eat invertebrates and fish. The commenter argued that mitigation measures should consider seasonal mitigation measures and seismic activity that could affect the availability of sea otters' prey.

One commenter stated the waiver program established for stipulations in Cook Inlet Lease Sale 244 creates unnecessary hurdles and restricts activities for lessees, especially when permits have already been granted.

3.9. Consultation and Coordination

Tribal Consultation

One commenter asked how BOEM planned to engage with tribal communities in Government-to-Government consultation and how widely BOEM would consult.

ESA Section 7

A commenter explained that, because the lease sale will affect threatened and endangered species and their critical habitats, BOEM must conduct comprehensive Section 7 consultation that analyzes all activities, including the effects of greenhouse gas emissions, to ensure that any action is not likely to jeopardize endangered species.

3.10. Other Comments

Lease Sale Process

A commenter requested that BOEM hold more frequent lease sales in Cook Inlet in order to find more offshore oil and gas resources. The commenter recommended an area-wide approach, similar to BOEM's approach in the Gulf of Mexico, would allow all non-withdrawn tracts to be offered simultaneously.

Environmental Review and Statutory Compliance

One commenter asked if BOEM has developed new NEPA guidance in accordance with the CEQ's *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*.

Comments on outreach/public scoping meetings/public involvement

A commenter said that they previously asked BOEM to conduct research on toxic industry dumping, pipeline spills, endangered animals, and seismic blasting impacts, and even requested tracts be deleted due to sensitive habitats, and BOEM has not responded. The commenter said that BOEM has failed to conduct any comprehensive reviews in Cook Inlet since the 1980's. The commenter also stated that BOEM only gave Homer residents a three-hour notice for a public hearing, directed the public to a broken internet link for commenting, and refused to extend the public comment period. Another commenter stated that local fisherman's 2019 expressed objection, concerns and questions about the impacts of seismic exploration and oil and gas development in Lower Cook Inlet were dismissed by Hilcorp.

A commenter said that their comment would have been longer, but the comment period was too short, and should be extended.

One commenter asked if participants would be provided with a copy of the BOEM virtual scoping meeting presentation and another expressed concern that very few people were aware of the virtual meeting, the comment period, and lease sale.

Other comments on the NOI

Several commenters submitted other comments on the NOI. One commenter requested that BOEM work with other agencies to complete the analysis. One commenter requested that the analysis differentiate between upper and lower Cook Inlet. Another commenter requested that the analysis include cost benefit analysis between oil and wind, an ocean observing system, an analysis of similar areas, and requested no seismic activities conducted during the entire period of the salmon run.

4.0 OPPORTUNITIES FOR FURTHER PUBLIC INVOLVEMENT

Under the NEPA process, publication of the NOI and public scoping is the first phase of public involvement. There will be additional opportunities for involvement as the issues, potential alternatives, and mitigation measures are considered and an EIS is prepared. The information gathered during scoping will be used to inform decisions regarding potential alternatives and potential mitigation measures. A range of reasonable alternatives will be fully developed and analyzed in the EIS and considered in the decision process for the Sale.

BOEM appreciates the comments received and welcomes continued involvement from the public, Tribes, Federal agencies, and State and local governments as it conducts the analysis informing the Secretary's decision regarding the proposed 2021 Cook Inlet Lease Sale.