

**BUREAU OF OCEAN ENERGY MANAGEMENT
FISHERIES MITIGATION GUIDANCE DEVELOPMENT
DEVELOPERS WORKSHOP
DECEMBER 14, 2021
10 A.M. – 12 P.M. ET
VIRTUAL MEETING**

TABLE OF CONTENTS

1. Meeting Overview
 - a. Process Background
 - b. Meeting Purpose
 - c. Meeting Agenda
 - d. Presenters
 - e. Facilitation Team
 - f. Participants
 2. Presentation Highlights
 - a. Welcome and Opening Remarks
 - b. Presentation
 3. Public Feedback Period
 - a. Fisheries Communication and Outreach
 - b. Project Siting, Design, Navigation, and Access
 - c. Safety
 - d. Environmental Monitoring
 - e. Financial Compensation
 4. Appendix A: Participant List
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MEETING OVERVIEW

Process Background

- The Bureau of Ocean Energy Management (BOEM), in consultation with the National Marine Fisheries Service (NMFS) and affected coastal states, is developing guidance for the mitigation of impacts from offshore wind energy projects on commercial and recreational fishing communities.
- To initiate the development of this guidance, BOEM issued a 45-day Request for Information (RFI) to obtain input from the public. The comments and information received will inform BOEM's development of draft guidance to mitigate certain impacts of offshore wind energy projects to commercial and recreational fisheries.
- Once complete, the draft guidance will be shared with the public for review and input for a 45-day comment period. Guidelines developed through this process may be updated periodically based upon public feedback and evaluation by BOEM staff.

Meeting Purpose

- Present the process for developing the draft Guidance for Mitigating Impacts to Commercial and Recreational Fisheries from Offshore Wind Energy Development to key stakeholders and answer questions.

- Provide information on how to submit comments during the public comment process.
- Receive comments on key issue areas.

Agenda

- Welcome and Opening Remarks
- Logistics and Agenda Review
- Overview of BOEM's Request for Information to Inform its Guidance Document to Mitigate Potential Impacts to Fisheries
- Public Comment Period
- How to Submit Written Public Comments
- Timeline, Next Steps and Adjourn

Presenters

James Bennett (opening remarks)	BOEM
Brian Hooker	BOEM

Agency Representatives

Brian Hooker	BOEM
Candace Nachman	NOAA

Facilitation Team

Julielyn Gibbons	Kearns & West
Adam Saslow	Kearns & West
Iqra Nasir	Kearns & West

Participants

One hundred fourteen (114) people registered for the meeting. A complete list of registrants is included as an appendix to this summary. The American Clean Power Association (ACP) organized to speak on all topic areas of interest to BOEM. Twelve (12) people provided public feedback.

PRESENTATION HIGHLIGHTS

Welcome and Opening Remarks

- Adam Saslow, facilitator, Kearns & West, welcomed attendees, and reviewed the meeting logistics and agenda. He emphasized that the meeting is intended as a conversation between BOEM and fishermen and asked other attendees to remain primarily in listen-only mode.
- James “Jim” Bennett, Program Manager for BOEM’s Renewable Energy Program, welcomed participants. Mr. Bennett emphasized the importance of BOEM’s work in fisheries mitigation as offshore wind projects develop. Mr. Bennett discussed the Biden-Harris Administration’s “30x30” goals, which aim to secure 30 gigawatts of offshore wind energy by 2030. Mr. Bennett mentioned that these goals will result in thousands of good-paying, union jobs. He added that:

- BOEM’s authority to mitigate impacts is afforded by the Outer Continental Shelf Lands Act (OCSLA), which seeks to minimize or avoid impacts. OCSLA allows BOEM to establish compensation if these impacts are unavoidable.
- The guidance will clarify what developers should consider before submitting their plans, and how developers can engage the commercial fishing industry.
- BOEM is not creating a general fund, as they are required to submit all funds to the U.S. Department of Treasury.
- The goal is to offer more transparency and establish a clear process around fisheries mitigation by summer 2022 to support BOEM’s environmental analysis for the construction and operations of several East Coast projects.
- BOEM will use information from this dialogue, and from discussions with federal, state, and Tribal partners to shape future mitigation discussions and develop a lasting engagement strategy that prioritizes science and meaningful collaboration.

Presentation

- Overview of BOEM’s Request for Information to Inform its Guidance for Mitigating Impacts to Commercial and Recreational Fisheries from Offshore Wind Energy Development (Brian Hooker, Lead Biologist, Office of Renewable Energy Programs, BOEM)
- Mr. Hooker’s presentation can be accessed at: <https://www.boem.gov/sites/default/files/documents/renewable-energy/BOEM-Fisheries-Guidance.pdf>.
- Mr. Hooker shared that:
 - BOEM is in the initial stage of the fisheries mitigation guidance development process and wants input from fishermen before drafting the guidance document.
 - BOEM can impose mitigation measures, but the guidance would not apply to impacts that are separate from a given project.
 - Financial compensation will likely be handled at a regional level. There are more data on the East Coast than other regions.
 - BOEM is not soliciting input on environmental monitoring of biological resources. BOEM does not want to repeat the efforts of those agencies.

PUBLIC FEEDBACK PERIOD

Public comments generally fell into one of the following topic areas highlighted in the RFI: fisheries communication and outreach; project siting, design, navigation, and access; safety; environmental monitoring; and financial compensation. Specific comments provided are described in greater detail below.

Fisheries Communication and Outreach

- There are best practices based on recent surveys on how to avoid gear conflict issues in both the lease area and the cable courtyard.
 - Vineyard Wind implemented three steps: (1) hired fishermen to work on the survey vessels and assist in communicating with other fishing vessels to monitor fixed gear during operation, (2) hired local fishing vessels to act as scout vessels to share information and increase awareness of where operations were occurring, and (3) ensured that the fisheries liaison regularly communicated with local fishermen on the survey vessel’s movement and progress.

- Vineyard Wind conducted a 6–8 week geophysical survey on the Nantucket Sound. The organization hired a local fisherman to serve as a scout vessel. Before the survey began, developers and the fisherman developed a communication network with local fishermen and provided each fisherman notice on the upcoming survey. During the survey, the fishermen onboard communicated as the vessel was moving and developers communicated information to surrounding fishermen on the current and future location of the vessel. The survey was a success, as there were no gear issues. This approach is being used in other survey areas.
- Communicating with local fishermen is important, as information from offshore wind development activity may be hard to track.
- Vineyard Wind is developing an app that can be downloaded to a smartphone or computer and will share real-time information on offshore survey activity. The app is currently being tested by fishermen.
- Another best practice is to collaborate with fishermen to develop and execute the pre- and post-construction monitoring plan. An example is Vineyard Wind’s work with the School for Marine Science and Technology (SMAST) in New Bedford, Mass. Vineyard Wind contracted SMAST to assist with the fisheries surveys by conducting workshops to gain input from fishermen on the information they were interested in and to provide pre- and post-construction updates. It was suggested to work with organizations that have a good relationship with the fishing industry (e.g. SMAST), maintaining ongoing communication with local fishermen on surveys and monitoring plans, and providing information on survey activity before its launch.

Project Siting, Design, Navigation, and Access

- It was suggested that BOEM develop specific mitigation guidance for all topic areas in the guidance.
 - BOEM should leverage existing best practices from projects currently under review to inform future projects and provide clarity for guidance on project siting, navigation, and safety measures.
 - BOEM should integrate fisheries monitoring best practices from recently established regional efforts, such as the Responsible Offshore Science Alliance (ROSA) and developers’ efforts to aid in revising the 2014 Fisheries Best Management Practices (BMPs).
 - Compensation should be provided during the construction and operations phase of the project.
 - The guidance should be flexible and adaptive in incorporating differences due to unique site-specific considerations. It should include evidence-based, best available, and peer-reviewed science on fisheries management and monitoring data.
 - BOEM should include regional entities in the development of the guidance.
 - Individual issues should be addressed from either a national or regional perspective rather than a standardized approach, depending on the issue.
- BOEM should incorporate ongoing efforts into the guidance development process, and develop evidence-based approaches to project siting and development.
 - BOEM should outline within the BMPs information that should be solicited by developers and how to integrate that information into the Construction and

- Operations Plan (COP) process, given that developers have varying project-specific approaches for soliciting feedback and incorporating input.
- BOEM should distinguish between macro-siting (where the lease is in planning and acquisition, as well as its location) and micro-siting (how the project is developed within an individual lease), given the uniqueness of each location and the inability to use a one-size-fits-all approach.
 - There is a desire for fact-based information gathered through site-specific studies, analyses, and data prior to the COP submission.
 - Best practices, case studies, and reports should be shared nationally and regionally.
 - BOEM's guidance should be flexible and adaptive to changes in fishing activity and how fishermen will choose to adapt to wind farms. Demonstrated impacts may be greater or lesser than what is predicted
 - Results from studies on fishing behaviors in and around the first round of projects should be incorporated.
- The offshore wind industry, the fishing industry, states, and the federal government will benefit from guidelines that are transparent, adaptive, and evidence-based. There is general alignment between developers and the fishing community on: (1) using federal funds from lease auctions for fisheries compensation and research, (2) creating a federal structure for compensatory mitigation, (3) developing structured regional science approaches to inform or augment federal surveys that assess stock status, (4) ensuring better communication of survey and offshore activity and activity offshore, and (5) increasing awareness and communication of how stakeholders can be involved during the development process of a project.
 - Processors are consolidated, and made major investments to process larger scale species. Fishing industry processors need to be acknowledged, given that their investments may be at risk. Fishermen could assist in the placement process and desire avoidance, not compensation. The guidance should acknowledge seasonal fish migration and shifting fishing patterns. Gear switching is not an easy process and would require additional permits from both fishermen and processors. It can take 5-10 years for these permits to be issued. Fishermen need to be involved early in the process rather than once siting is completed.
 - *Mr. Hooker shared that compensation is the last part of the hierarchy for mitigation and fishing interests. He expressed the challenge of determining costs and encouraged stakeholders to submit comments on who's eligible and how the compensation should be structured.*

Safety

- BOEM should differentiate navigation from project siting recommendations. BOEM should consider what information needs to be developed to inform each project phase, especially construction and decommissioning. BOEM's BMP revisions should acknowledge how information and standards developed to date, such as the New England Lighting and Marking Standards, can be incorporated. BOEM should not rely solely on agency expertise for safety measures but should collaborate with the U.S. Coast Guard.

- Orsted has taken measures on navigation safety. Orsted's six U.S. projects are designed in a uniform grid layout and have a minimum spacing of at least eight nautical miles. The design of the Orsted New Jersey project was revised and now includes feedback from the fishing community.
 - Orsted led an inter-developer and U.S. Coast Guard team for navigation lighting and signaling design, including the automatic identification system (AIS) on towers, a standard labeling protocol, and alphanumeric indicators that exceed international science standards. These measures were incorporated using stakeholder input to facilitate safe navigation. BOEM should establish a navigation safety fund to subsidize equipment upgrades and training.
 - Orsted's current efforts to recreate wind farms in marine simulation facilities in Rhode Island and Maryland will be replicated in New York. Many stakeholder groups participated in the simulations and found the experience rewarding.
 - There is a need for enhanced communication and 24/7 monitoring efforts to enhance safety.
 - *Mr. Hooker shared how difficult it is to capture the whole suite of activities carried out by a developer in a COP or during the environmental review. Often the measures focus on "bigger items" such as layout design and compensation.*

Environmental Monitoring

- BOEM should leverage and share best practices for monitoring approaches from current projects to help developers advance projects in new lease areas. The environmental monitoring plans should also consider site-specific fisheries, fishing activities, and the potential impacts from specific project designs on those site-specific resources and activities. The offshore wind industry supports structured regional approaches and collaboration to integrate data and information generated across the process. The industry supports regional approaches to inform or augment federal surveys, which assess the stock status and provide data to inform analyses on the potential effects of offshore wind on fisheries in the regions where development would occur.
 - Developers recognize and accept regional interaction of monitoring, data sharing, and standardization of monitoring methods.
 - BOEM should not make BMPs prescriptive but use BMPs to inform the creation and execution of developers' plans.
 - BOEM should consider opportunities where the guidance recommendations can create alignment and collaboration between developers and drive consistency across techniques and project-specific approaches.
 - BOEM should develop recommendations for monitoring based reasonable and existing information within a particular lease, not nationally or regionally. Level, duration, and types of monitoring should have separate considerations if an area is species-rich or species-limited or if the level of fishing activity is known or less known.
 - For areas with less data and information, BOEM BMPs should recommend guiding principles on how to collect information to develop site-specific monitoring plans versus prescribing a set standard method or duration.
 - BOEM should differentiate components of monitoring plans that are standard requirements of a COP and ongoing or completed efforts, such as the Responsible Offshore Science Alliance (ROSA) Monitoring Guidance, which may be referenced as a guide for developers as they advance monitoring efforts.

- BOEM cannot, per its RFI, require regional mitigations or monitoring, but should build collaborative processes between industries and third parties to share knowledge about project-specific monitoring and lessons learned.

Financial Compensation

- A legislative and regulatory solution can establish the appropriate mechanisms for a federal compensation program to address concerns from the offshore wind and fishing industries. The fund can facilitate continued fishing, enhance access to fisheries, and reduce operating costs for the fishing community in offshore wind lease areas. Any effort undertaken by BOEM in the RFI should not be retroactive or prescriptive. Compensation should provide options for developers and the fishing industry, be evidence-based, and be led by a collective federal government approach, specifically between BOEM and NMFS, that does not rely on multiple and independent states approaches. Compensation frameworks should be national.
- Federal guidance should be for federal waters.
 - The mitigation framework should be the last in the effort to avoid, minimize, and mitigate adverse impacts from offshore wind development.
 - A compensation valuation framework should be transparent and data-driven, and data currently being collected by NOAA from fishermen and reports should serve as a baseline. For example, reports for commercial fishing highlight annualized landings and revenue by species, gear type, and fishery management plan within each lease area, as well as vessel dependence upon operations in each lease area. The party and charter reports feature annualized catch by species and management category, annualized revenue, and vessel/angler dependence upon operations in each area.
 - Guidance should tailor recommended outcomes for different types of users, such as commercial fishermen and party/charter vessels. Compensatory mitigation recommendations could also take different forms (e.g. such as gear loss replacement, navigation safety and training funds, targeted compensation, and a coastal community fund) based on the potentially impacted parties.
 - Guidance must keep administration and verification simple. Commercial fishermen seeking compensatory mitigation must document loss based on continued fishing effort, but do not need to collect non-industry standard data that would not otherwise be measured.
 - The mitigation framework would be further strengthened and improved by legislation or regulation that direct or encourage portions of leasing or operational fees to go to regional mitigation funds administered by a third party. The federal government should explore these solutions in developing the guidance. A permanent stream of compensatory mitigation funding from existing leasing fees would provide greater clarity upfront for both fishermen and developers. A portion of BOEM's offshore wind revenue could be used to fund a mitigation framework. The sale of bidding credits or the proportional crediting fee rate reductions could be conditional upon an accredited amount to be deposited into a national or regional mitigation fund managed by a third party. BOEM would not create or manage such a fund.
- Existing guidance works well and is setting effective industry standards. EnBW North America continues to use BMPs to guide fisheries engagement, although the organization is currently not a leaseholder. A centrally managed fund would maximize

resources available to fishermen and alleviate the fishing community, developers, and the state from having to negotiate multiple compensatory mitigation agreements, thereby providing a clear, consistent, and reputable process.

- BOEM should develop a standardized, uniform, and equitable compensatory fisheries mitigation framework with the fishing community that all offshore wind developers adhere to.
 - Regarding the South Ford Wind EIS, all impact producing factors would result in an overall major adverse impact because commercial and recreational fishermen would experience substantial disruptions indefinitely, even if remedial action is taken. Any mitigation needs to be based on demonstrated impacts that cannot be avoided or minimized.
 - There is ambiguity with future impacts from offshore wind projects as they move into operation and decommissioning. BOEM should implement a performance or surety bond as a condition of COP approval for all offshore wind projects to account for unforeseen impacts.
 - The fishing community does not want to be compensated for impacts because of offshore wind development, but they want to continue to fish uninterrupted and unimpeded the way they have historically.
 - The fishing community will have to adapt to the changing conditions due to warming oceans. Offshore wind development could displace fishing efforts.
 - There is concern with exclusionary zones, given offshore wind structures, and a need for a uniform fisheries compensatory mitigation framework that can be applied to all developers and their projects.
 - The framework should be fair and equitable across all states.

- It's important to site to limit mitigation and include marine and alien species interactions during the monitoring of fishing activity. Stakeholders would like to know whether the expected energy generated from 30,000 MW of wind farms across the U.S. had been quantified.

The meeting adjourned at 11:46 a.m. ET.

APPENDIX A: PARTICIPANT LIST

1. Calvin Alexander
2. Lianne Allen- Jacobson
3. Katie Almeida
4. Cristiana Bank
5. Jerry Barnes
6. Sharon Benjamin
7. Steve Black
8. Bob Bochar
9. Idrissa Boube
10. James Boyd
11. Bonnie Brady
12. Jenny Briot
13. Morgan Brunbauer
14. Colleen Brust
15. Danny Bryant
16. Marina Chaji
17. Susan Chambers
18. Aideen Chapman
19. Douglas Christel
20. David Ciochetto
21. Ben Cooper
22. Christopher Cooper
23. Doug Copeland
24. Greg DeCelles
25. Michele Desautels
26. Brian Dresser
27. Stephen Drew
28. Russell Dunn
29. Laura Dwyer
30. Lorena Edenfield
31. Lisa Engler
32. Jennifer Flood
33. Gwen Gallagher
34. Nelson Garcez
35. Andrew Gould
36. T Haight
37. Anne Hawkins
38. Lyndie Hice-Dunton
39. Megan Higgins
40. Fiona Hogan
41. Caela Howard
42. Ursula Howson
43. Cheri Hunter
44. Jeff Jensen
45. Lane Johnston
46. Joshua Kaplowitz
47. Sara Krupa
48. Jim Lanard
49. Eva Land
50. Elizabeth Lange
51. Ron Larsen
52. Sean Lawler
53. Brian LeFebvre
54. Julia Lewis
55. Emily Lindow
56. Andrew Lipsky
57. Jennifer Lukens
58. Scott Lundin
59. Elizabeth Marchetti
60. Aoife Mc
61. Ashleigh MCCord
62. Tim McCune
63. Kim McLean
64. June Mire
65. Laura Morton
66. Sarah Murphy
67. Christine Myers
68. Candace Nachman
69. Casey Nolan
70. Kris Ohleth
71. Mike Okoniewski
72. Mike Olsen
73. Rachel Pachter
74. Molly Pacifico
75. Ross Pearsall
76. Doug Perkins
77. Ruth Perry
78. Lisa Pfeiffer
79. Mike Pol
80. Eric Poncelet
81. Jim Powers
82. Claire Richer
83. Emily Rochon
84. Samuel Rodriguez
85. John Romero
86. Prianka Sharma
87. Lauren Sidor
88. Angela Silva
89. Nancy Sopko
90. Joel Southall
91. Chris Sparkman
92. Mariana Steen
93. Bryan Stockton
94. Neczy Sumait
95. Steven Tadros
96. Larry Thevik

- 97. Eric Thunberg
- 98. Mary Tooley
- 99. Brick Wenzel
- 100. Katy White
- 101. Kate Will
- 102. 13399336492 Unknown Caller
- 103. 13606192019 Unknown Caller
- 104. 14018298286 Unknown Caller
- 105. 15085250421 Unknown Caller
- 106. 15089302633 Unknown Caller
- 107. 15129666177 Unknown Caller
- 108. 15183914565 Unknown Caller
- 109. 16173592576 Unknown Caller
- 110. 17322452751 Unknown Caller
- 111. 17572912245 Unknown Caller
- 112. 18048369576 Unknown Caller
- 113. 19175190579 Unknown Caller
- 114. 19784472737 Unknown Caller