

**BUREAU OF OCEAN ENERGY MANAGEMENT  
FISHERIES MITIGATION GUIDANCE DEVELOPMENT  
WEST COAST WORKSHOP  
DECEMBER 13, 2021  
10 A.M. – 12 P.M. PT  
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. Environmental Monitoring
    - d. Financial Compensation
  4. Appendix A: Participant List
- 

**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 The comments and information received will inform BOEM's development of draft guidance to mitigate certain impacts of offshore wind energy projects to commercial and recreational fisheries.
- Once complete, the draft guidance will be shared with the public for review and input for a 45-day comment period.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- Present the process for developing the draft Guidance for Mitigating Impacts to Commercial and Recreational Fisheries from Offshore Wind Energy Development to key stakeholders and answer questions.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

|                              |      |
|------------------------------|------|
| Doug Boren (opening remarks) | BOEM |
| Brian Hooker                 | BOEM |

## Agency Representatives

|                 |      |
|-----------------|------|
| Doug Christel   | NMFS |
| Donna Schroeder | BOEM |
| Necy Sumait     | BOEM |

## Facilitation Team

|                   |               |
|-------------------|---------------|
| Julielyn Gibbons  | Kearns & West |
| Adam Saslow       | Kearns & West |
| Hannah Silverfine | Kearns & West |

## Participants

One hundred ninety five (195) people registered for the meeting. A complete list of registrants is included as an appendix to this summary. Seventeen (17) 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.
- Doug Boren, Regional Director of the Pacific Office at BOEM, welcomed participants. He emphasized the importance of BOEM's work in fisheries mitigation as offshore wind projects develop. Mr. Boren discussed the Biden-Harris Administration's "30x30" goals, which aim to secure 30 gigawatts of offshore wind energy by 2030. Mr. Boren 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; environmental monitoring; and financial compensation. Specific comments provided are described in greater detail below.

#### Fisheries Communication and Outreach

- How can fisheries prevent local entities from engaging directly with developers in industry-to-industry meetings and how BOEM would approach ongoing efforts on the West coast regarding compensation for impacts?
  - *Brian Hooker responded that BOEM would still encourage industry-to-industry conversations. BOEM was not directly involved in mitigation negotiations on the East Coast. This guidance development process has been initiated, in part, because discussions on the East Coast did not lead to equitable application across states. Guidance development does not preempt or preclude any industry-to-industry meetings on the West Coast.*

- Santa Barbara fishermen benefit from cable committees that grant funds to associations and fisheries that may be impacted by their operations. There's a hope to create a network of organizations that can negotiate directly with energy companies to create compensation mechanisms. There is a need for an equivalent to the JFLO (Joint Oil-Fisheries Liaison Office) model set up with oil industry impacts. State and federal agencies should create a unified position and endorse fishermen's efforts to negotiate. There is a need to clarify state agencies' roles.
  - *Brian Hooker replied that BOEM's approach is to engage in a meaningful process with federal and state partners.*
  - *Doug Boren responded that the State of California and BOEM are partners and BOEM wants to reach a process that works not just for the West Coast. This is the beginning of a plan and there will hopefully be benefits for offshore wind and fishing communities.*
- As salmon population goals change, so does mitigation. Will BOEM guidance change over the course of a lease to follow the trends of fisheries and species impacts, prioritizing ecological systems over engineering?
  - *Brian Hooker replied that the guidance is meant for the lessee. A fisheries communication plan is included in a lease, and the plan must be completed prior to lease. Guidance is non-binding and under temporal constraints.*
- Mitigation is needed for both fishermen and processors. Processors are an essential part of the supply chain to get fish to market and would be impacted by offshore wind development. Mitigation should apply to the private infrastructure put into place by processors in support of fishermen and fishing businesses. Processors have already consolidated over the past 20 years and losing fish has economic repercussions. Not enough sectors have been spoken to about this. Communication could be improved with fishing groups to assess if certain areas are less impactful to fishermen. There will be impacts from the transmission of power to shore.
  - *Brian Hooker responded that BOEM is looking for downstream effects and how to quantify the impact with the data necessary to support analysis.*
- The State of California is engaged with a variety of stakeholders on ways to support mitigation. Fishermen have taken great initiative to engage in industry-to-industry conversations, and BOEM should remain flexible with mitigation guidelines and continue to engage with commercial fishermen.
- The process should slow down. Mitigation can be avoided with a more thorough review of siting impacts before leasing. A catalogue of negative impacts would provide a process to deny a lease if there are unmitigable impacts. There is a need for data-led decisions, regional and state assessments, and compensation for cumulative impacts. Each fishery is unique in its environmental circumstances and migratory patterns. Each additional stressor causes financial hardship.
- Is BOEM considering a no action alternative under NEPA, and will BOEM consider avoidance or mitigation for impacts to wetlands and wildlife in the NEPA analysis?

- *Donna Schroeder replied there will be a no-action alternative. NEPA is not prescriptive but informs decision-makers of the environmental consequences of each alternative considered in the NEPA document. For potential impacts there is a mitigation hierarchy in how they are addressed and are tailored to each project. Mitigation measures may be a part of project's conditions of approval. It's a life cycle approach with site characterization first and the Construction and Operations Plan (COP) second.*
- *Necy Sumait responded that on the East Coast, there are COPs. BOEM is still gathering data and doing environmental assessments for lease issuance on the West Coast.*
- The timeline is rushed, and one meeting is not enough to garner meaningful fishing engagement. The industry is not homogenous and would like more discussion with BOEM. The NEPA process is complex and difficult to navigate, and BOEM guidance doesn't sufficiently protect the fishing industry from other industries.

#### Project Siting, Design, Navigation, and Access

- Every port will be affected differently by wind energy development. For example, Morro Bay development will affect fishermen on the ocean and the beach. Will contracts like the one signed between the Morro Bay Commercial Fishermen's Organization and the Port San Luis Commercial Fishermen's Organization and Castle Wind be used as models in the guidance?
  - *Brian Hooker replied that he hasn't seen the contract, but elements of the contract that BOEM could include in national guidance should be submitted as public comment.*
  - *Donna Schroeder noted that BOEM develops strategies and approaches for mitigation that include avoidance, minimizing impact, and financial compensation. Plans are tailored to the expected impact to fisheries, fishing organizations, and other stakeholders.*
- There needs to be direct mitigation for losses to fishermen. How does BOEM determine direct mitigation, the indirect infrastructure mitigation, and the potential upwelling effects that impact the productivity of fisheries? Does BOEM have a framework to determine the effects on fishermen?
  - *Donna Schroeder replied that analyses consider what potential factors affect which groups. The process considers local and regional effects on fishing, and the socioeconomic impacts on fisheries. BOEM is studying specific impacts on fisheries and needs input from the fishing community.*
- BOEM doesn't seem to have a maximum threshold on cumulative impacts to fisheries. How will BOEM address thresholds? Some maps leave out significant fishing grounds. How will BOEM keep fishing viable in ports due to direct impacts? Tribal special management areas are losing more area and time and BOEM needs to save fisheries for future generations.

- *Donna Schroeder replied that an ongoing study is mapping all fishery closures along the West Coast to understand cumulative impacts. BOEM is working with NOAA, state agencies, and Tribal partners to consider the full extent of impacts of offshore wind farms. Cumulative impact questions will be further addressed when a COP is submitted to BOEM for review.*
- Multi-day drifting for groundfish in wind areas will become a safety hazard. A North-South corridor with a limit of one-mile spacing and a lane to ensure that boats can get to the ports if the weather is bad was proposed. Automatic Identification System (AIS) monitoring for service traffic can assess whether vessels stay within traffic lanes. If BOEM required the offshore wind industry to reach an MOU with fishermen, they could move forward with leasing. Other onshore impacts need to be treated secondarily to impacts to fishermen. If they can negotiate with wind companies, then a certain percentage of funding could be dispersed to fishermen and processors across the state. Environmental control sites both inside and outside of wind areas need to be monitored throughout the process.
- The issue of fisheries impacts is not new. Fisheries went through this 22 years ago with the cable industry. BOEM should use the Central Coast Liaison as an example of a successful blueprint of corporate and community organizations working together.
- The mitigation impacts of Morro Bay are completely different from Northern to Southern Oregon. Siting offshore wind projects in 1,300 meters could reduce impacts to trawl, fixed gear, and crabs. To get transmission cables to shore, deep barriers and burials could reduce effects on bottom fish and species migrating.
- Would BOEM reconsider creating national guidelines? West Coast conditions are different than East Coast conditions. The West Coast has floating turbines (vs. fixed turbines), the projects will need to be further offshore with longer transmission lines, and manufacturers are creating larger turbines and larger blades. National guidelines should include regional sections with guidelines for the East Coast, West Coast, and the Gulf of Mexico to account for differences, similarly to how BOEM is regionally structured.

#### Environmental Monitoring

- It's difficult to comment on guidance when data around impacts on fish, birds, and marine life are insufficient. Stocks are based on long-running transects. There are different impacts to different fisheries, and a one size fits all approach will not work. Electromagnetic fields will impact migratory species like tuna and swordfish. BOEM should consider equity and cultural impacts. Best practices should consider evolving technologies and changing ocean conditions. The fishing community should be involved in the conversation early and often. National guidelines are preferred, but regional guidelines could be used where measures don't work (e.g., for fixed infrastructure on the East Coast and floating infrastructure on the West Coast). Project siting should build from existing models and anecdotal knowledge from fishermen and partners, such as the differences between Vessel Monitoring System (VMS) and AIS. Guidelines should include search and rescue for the U.S. Coast Guard. Financial compensation should be a last resort and include all potential users, such as bait shops, processors, and restaurants. Permit values should reflect the lack of opportunity and productivity.

- The Guides and Anglers Association supports clean energy in the Pacific Northwest. Sources of energy like hydropower have dramatic impacts on the health of salmon. Guidance should be designed based on offshore wind's potential to mitigate damages and reduce reliance on hydropower.
- There will always be unintended consequences and financial impacts to ancillary businesses and recreational fishing. BOEM should consider impacts from wind and swells due to platforms on the water. BOEM should consider how projects interact with the Chumash Heritage National Marine Sanctuary. AIS and radar should be placed on all platforms. BOEM should consider the impact of electrical wires on halibut (a species that is known to avoid currents), and how platforms might attract fish. Wind turbines could impact Dungeness crab and vertical lines for both recreational and commercial fisheries. There's concern about the lack of central funding from BOEM. Will there be a fund to pay for decommissioning, how does maintenance work, and how is traffic handled?
  - *Brian Hooker replied that BOEM cannot answer these questions until a COP is submitted. A decommissioning application is required two years prior to the actual decommission.*
  - *Donna Schroeder indicated that BOEM considers what kind of potential impact marine traffic may have on fishing communities and considers actions to mitigate potential impacts, for example, requiring vessel traffic corridors.*
- BOEM should consider adaptive mitigation because fisheries change season by season, with some dependent on groundfish surveys and specific transects. Development needs to avoid areas that are popular with trawlers. If certain species are under pressure, they go inshore. New traffic/channels from offshore wind will disperse traffic into other areas and impact existing fishing areas. Safety corridors in the call areas could protect people from disabled vessels. Electric currents can negatively impact halibut and whales. California has a prolific whale migration area, and interrupting their normal patterns is detrimental. BOEM should adopt a holistic approach to mitigate effects on the fishing community. For example, lobstermen rely on other fishermen for bait, even if they aren't physically near the wind energy area.

#### Financial Compensation

- BOEM should consider the loss of space for fishing from transit, cumulative impacts, and increased cost to get around the sites. Dungeness crab, the biggest fishery in Oregon by volume, may leave and migrate to another location. There are impacts at both the old and new locations. There needs to be a local lost gear fund. The federal process through lost gear fund by NOAA isn't effective. The decommissioning schedule doesn't go far enough. There needs to be bonding and money for breakaway, sinking, walkaway, and technology failure. Resilience should be regional, not just port-based. Permitting and permitting structures often prevent resilience. BOEM could use a third party to assess resilience for fishermen and the financial ecosystems they support.

The meeting adjourned at 12:25 p.m. PT

## APPENDIX A: PARTICIPANT LIST

1. Lianne Allen-Jacobson
2. Alan Alward
3. Leif Anderson
4. Dan Ayres
5. Margaret Barber
6. Celia Barroso
7. Dale Beasley
8. James Bennett
9. Steve Black
10. Brian Blake
11. Bob Bochar
12. Lindsay Bonito
13. Doug Boren
14. Caren Braby
15. Miranda Brumbaugh
16. Morgan Brunbauer
17. Danny Bryant
18. Nicholas Buch
19. John Burns
20. Gregory Busch
21. Marina Chaji
22. Susan Chambers
23. Allen Chen
24. Elizabeth Clarke
25. Leanne Cohn
26. Tyrone Conner
27. Mike Conroy
28. Flaxen Conway
29. Mark Cooper
30. Michael Cornman
31. Sarah Courbis
32. Amanda Cousart
33. Ariella Dahlin
34. Michele Daigle
35. Mark Danielson
36. Taylor Debevec
37. David Demer
38. Casey Dennehy
39. Yvonne deReynier
40. Michele Desautels
41. Jaime Diamond
42. Vince Doyle
43. Brian Dresser
44. Russell Dunn
45. Michael Dunning
46. Lorena Edenfield
47. Nick Edwards
48. James Falino
49. Whitney Fiore
50. Sarah Fiskien
51. Peter Flournoy
52. Jen Ford
53. Zach Forster
54. David Fox
55. Nelson Garcez
56. William George
57. Chris German
58. Julielyn Gibbons
59. Ted Gibson
60. Kerensa Gimre
61. Jonathan Gonzalez
62. Andrew Gould
63. Mike Graybill
64. Kerry Griffin
65. Amy Grondin
66. Sara Gultinan
67. Owen Hackleman
68. Tom Hafer
69. Heather Hall
70. Abigail Harley
71. James Haussener
72. Anne Hawkins
73. Liz Hellmers
74. Roger Hewitt
75. Brian Hooker
76. Kate Huckelbridge
77. J. L. Ise
78. Kaety Jacobson
79. William Jasper
80. Steve Joner
81. Jennifer Jones
82. Joel Kawahara
83. Robert Kehoe
84. Delia Kelly
85. Haley Kennard
86. Justine Kimball
87. Kristen Koch
88. Wayne Kotow
89. Sara Krupa
90. Paul Kujala
91. Dave Lacey
92. Jeff Lackey
93. Jim Lanard
94. Elizabeth Lange
95. Andy Lanier
96. Brian LeFebvre

|      |                     |      |                      |
|------|---------------------|------|----------------------|
| 97.  | Andrew Lipsky       | 147. | Doug Robison         |
| 98.  | Natalie Lowell      | 148. | John Romero          |
| 99.  | Alden Lundy         | 149. | Emma Ross            |
| 100. | Sean Macduff        | 150. | Scott Rumsey         |
| 101. | Jonathan Mackay     | 151. | Tim Sartwell         |
| 102. | Linette Makua       | 152. | Adam Saslow          |
| 103. | Kim Marshall McLean | 153. | Steve Scheiblaue     |
| 104. | Katie Matha         | 154. | Donna Schroeder      |
| 105. | Lynn Mattes         | 155. | Ava Schulenberg      |
| 106. | Jennifer Mattox     | 156. | Chugey Sepulveda     |
| 107. | Ty Mautner          | 157. | Mark Severy          |
| 108. | Tamara Mautner      | 158. | Prianka Sharma       |
| 109. | Tim McCune          | 159. | Angela Silva         |
| 110. | Aoife McGovern      | 160. | Hannah Silverfine    |
| 111. | Margarita McInnis   | 161. | Tim Sippel           |
| 112. | Scott McMullen      | 162. | Ann Skelton          |
| 113. | Parker McWilliams   | 163. | Mark Smith           |
| 114. | Elizabeth Methratta | 164. | Dale Squires         |
| 115. | Rennie Meyers       | 165. | Lori Steele          |
| 116. | Melissa Monk        | 166. | Mariana Steen        |
| 117. | Wayne Moody         | 167. | Gregory Stelmach     |
| 118. | Chiharu Mori        | 168. | Adam Stern           |
| 119. | Tracey Moriarty     | 169. | Daniel Studt         |
| 120. | Kaitlin Morton      | 170. | Necy Sumait          |
| 121. | Nicole Murphy       | 171. | Andrea Sumerau       |
| 122. | Candace Nachman     | 172. | Roberta Swift        |
| 123. | Michael Nelson      | 173. | Ray Teran            |
| 124. | Conrad Newell       | 174. | Larry Thevik         |
| 125. | Corey Niles         | 175. | Eric Thunberg        |
| 126. | Tim Novotny         | 176. | Jean Thurston-Keller |
| 127. | Yelena Nowak        | 177. | Kyle Van de Graaf    |
| 128. | Jeremiah OBrien     | 178. | Dan Waldeck          |
| 129. | Shauna Oh           | 179. | Jessica Watson       |
| 130. | Kris Ohleth         | 180. | Alla Weinstein       |
| 131. | Mike Okoniewski     | 181. | Brick Wenzel         |
| 132. | Becky Ota           | 182. | Katy White           |
| 133. | Brian Owens         | 183. | Rick Yarde           |
| 134. | Darus Peake         | 184. | Mike Zickel          |
| 135. | Ross Pearsall       | 185. | Unknown Caller       |
| 136. | Frank Pendleton     | 186. | Unknown Caller       |
| 137. | Daniel Perrone      | 187. | Unknown Caller       |
| 138. | Lisa Pfeiffer       | 188. | Unknown Caller       |
| 139. | Larry Phillips      | 189. | Unknown Caller       |
| 140. | Katie Pierson       | 190. | Unknown Caller       |
| 141. | Mike Pol            | 191. | Unknown Caller       |
| 142. | Carrie Pomeroy      | 192. | Unknown Caller       |
| 143. | John Primo          | 193. | Unknown Caller       |
| 144. | Ranelle Reber       | 194. | Unknown Caller       |
| 145. | Bob Rees            | 195. | Unknown Caller       |
| 146. | Derrick Robinson    |      |                      |