



BOEM Bureau of Ocean Energy Management

Draft Guidance for Mitigating Impacts to Commercial and Recreational Fisheries from Offshore Wind Energy Development

August 2022

Why Have Fisheries Mitigation Guidance?

- BOEM considers the impacts to the commercial and recreational fishing industries resulting from the approval of Site Assessment Plans and Construction and Operations Plans (COPs).
- BOEM conducts National Environmental Policy Act (NEPA) reviews, which identify potential impacts that offshore renewable energy projects may have on the environment and ocean users, such as commercial and recreational fisheries.
- BOEM must consider these impacts per project and that analysis may support the need for mitigation measures.
- BOEM has not provided detailed guidance to the offshore wind industry regarding processes and methodologies for reducing impacts to fisheries. This has resulted in inconsistencies between projects in mitigating impacts.
- It is hoped that Federal guidance will provide greater consistency for equitable treatment of fishermen regardless of home or landing port.
- Nine eastern states identified to BOEM the need for and benefits of regional natural resource impact assessment and mitigation frameworks.



What Potential Impacts Has BOEM Identified?

Potential fishery impacts could include, but are not limited, to:

- Displacement from fishing grounds during offshore wind development activities or loss of fishing areas occupied by project components.
- Potential gear damage or loss from increased survey activity or new or additional underwater hazards.
- Necessary gear or fishing modifications for fishing near turbines.
- Increased transit times.
- Increased gear conflict or operational competition within and outside of wind project areas if fishing effort is shifted due to offshore wind energy projects.
- Secondary economic impacts for support businesses such as seafood dealers, vendors to the fishing industry (e.g., bait and tackle, gear supply), processors, and distributors.



What is Mitigation?

- BOEM considers “mitigation” to encompass the full suite of activities to avoid, minimize, and compensate for adverse impacts.
- BOEM is taking a national level approach to mitigation for its offshore renewable energy program.
- This concept is reflected in the Council of Environmental Quality’s definition of mitigation.



Guidance Overview



Timeline for Developing Guidance

- Fall/Winter 2021:
 - Identify ideas and considerations from the fishing community, offshore wind energy developers, and others to inform the draft guidance. **COMPLETE**
- Early Winter 2022:
 - Work in consultation with NOAA/NMFS, state fishery and coastal management agencies, and technical experts to develop the draft guidance. **COMPLETE**
 - Develop draft guidance considering comments received. **COMPLETE**
- Early Spring 2022:
 - BOEM internal review. **COMPLETE**
 - Collaboration with state and Federal partners. **ONGOING**
- Late Summer 2022:
 - Publish draft guidance and discuss with constituents. **NOW**
 - Issue final guidance. **UPCOMING**



What Can BOEM's Guidance Do?

- Recommend fisheries mitigation processes (including processes for filing claims, timing of initial proposals).
- Recommend methodology to determine the sufficiency of funds to compensate fishing communities for negative economic impacts arising from offshore wind energy development activities approved by BOEM.
- Propose measures that could result in fair, equitable, and predictable methodologies used by developers for mitigating impacts of offshore wind energy on all offshore renewable energy projects.
- Enforce, with the Bureau of Safety and Environmental Compliance (BSEE), compliance with contributions proposed by the lessee that were part of the approved Construction and Operations Plan (COP) or other appropriate plan approval, regardless of said contributions being required by a state or not.



What Can't BOEM's Guidance Do?

- **Create a central fund.** BOEM lacks legal authority to create or oversee a central funding mechanism for compensatory mitigation. BOEM also lacks authority to require contributions to a particular compensation fund, absent a previous commitment or obligation for the lessee to do so (e.g., commitment/obligation under state contracts or the proponent's own proposed COP).
- **Administer funds.** BOEM lacks the legal authority to hold funds received or assess industry fees for mitigation.
- **Require regional mitigation.** BOEM cannot require a lessee to mitigate regional impacts as part of a COP approval, unless BOEM's environmental impact analysis demonstrates the regional impacts of the specific project. This environmental impact analysis must be supported by the record and the effects analysis cannot be based on speculation.



Draft Guidance Addresses the Following Topics

- General approach
- Project siting, design, navigation, and access
- Safety measures
- Environmental monitoring plan
- Financial compensation



General Approach

- The lessee should engage with commercial and recreational fishing communities prior to engaging in any activity on the lease.
- This pre-activity engagement should be respectful of the views of the fishing communities consulted and result in a publicly available document describing the nature of the engagement and how the lessee has or has not adopted measures identified by the fishing communities to mitigate the impacts of the proposed activity.



Project Siting, Design, Navigation, and Access

Static cable design elements:

- All static cables should be buried to a minimum depth of 6 feet below the seabed
- Avoid installation techniques that raise the profile of the seabed
- Cable protection measures should reflect the pre-existing conditions at the site.



Project Siting, Design, Navigation, and Access (cont.)

Dynamic cable design elements

- Dynamic cables should be suspended at a depth that minimizes interactions with fishing operations.
- Where feasible, cables should share corridors and minimize the total cable footprint.



Project Siting, Design, Navigation, and Access (cont.)

Facility design elements

- The facility design should maximize access to fisheries, including by consideration of:
 - Transit and traditional fishing within the project area.
 - Consolidation of infrastructure, where practicable, to reduce space-use conflicts.
 - Consideration of larger turbine sizes to reduce total project footprint and meet energy production commitments.
 - Coordination of turbine and substation array layouts between and among neighboring lease areas
- Turbine locations should be sited to avoid known sensitive benthic features, such as natural and artificial reefs.
- Facility planning should use nature inclusive designs , where applicable, to maximize available habitat for fish.



Safety Measures

- Charting all facilities and obstructions resulting from construction and operations of an offshore wind energy facility and providing that information to NOAA, U.S. Coast Guard (USCG), and navigational software companies.
- Considering installation techniques and time windows that minimize disruption to fishing activities (e.g., simultaneous lay and burial, or conducting activity during the appropriate time of year).
- Employing liaisons from the commercial fishing industry to provide safety and communication services during construction.
- Monitoring cable burial in real-time and report all potential hazard events to the USCG as soon as possible.
- Using digital information technology platforms (e.g., smartphone applications) to bring together survey and construction schedules and locations in addition to standard local notices to mariners via the USCG.



Safety Measures (cont.)

- Marking facilities and appurtenances with permanent identification of the project and company.
- Providing training opportunities for the commercial fishing industry to simulate safe navigation through a wind facility in various weather conditions and at various speeds.
- Monitoring safety threats (e.g., radar disruption, ice shedding, vessel allisions and collisions, security threats, and impacts on search and rescue efforts) throughout the life of a project.
- Consulting with the fishing industry and the USCG to identify which structures would be most appropriate for Automatic Identification System (AIS) transponders consistent with BOEM's Lighting and Marking Guidelines .
- Considering lessee-funded radar system upgrades for commercial and for-hire recreational fishing vessels (e.g. solid state Doppler-based marine vessel radar systems).



Environmental Monitoring Plan

- BOEM recommends that lessees work with State and Federal fisheries management agencies to explore the need and methods to monitor changes in fishing activity as a result of proposed offshore wind energy development.
- BOEM provides recommendations for conducting and reporting the results of baseline collection studies in separate guidelines: <https://www.boem.gov/Survey-Guidelines/>.
- In 2021 the Responsible Offshore Science Alliance (rosascience.org) worked with State, Federal, and fisheries constituents to develop the Offshore Wind Monitoring Framework and Guidelines document (https://www.rosascience.org/_files/ugd/99421e_b8932042e6e140ee84c5f8531c2530ab.pdf).
- This document is an important resource in understanding necessary considerations in developing pre-construction, construction, and post-construction fisheries monitoring surveys.



Financial Compensation—Considerations

- Types of financial compensation
- Phases of the offshore wind process
- Eligibility for a claim
- Timing considerations for claims
- Options for managing funds



Types Financial Compensation – Gear Loss

- The lessee should reimburse for fisheries gear loss resulting from its own action that damages fishing gear.
- The lessee must honor the review of claims filed within 90 days after the date of first discovery of the incident.
- The lessee should fully compensate for the repair or replacement of the damaged gear and up to 50% of gross income loss during the period from the discovery of the lost or damaged gear to when the gear is repaired or replaced.
- The lessee should also compensate for reasonable fees paid to an attorney, CPA, or other consultant for the preparation of the claim.



Types of Financial Compensation – Lost Income

- The scope of impacts or losses that should be addressed by compensatory mitigation should be based on the impacts identified in the various environmental documents including the lessee's construction and operations plan and/or assessments prepared by BOEM analyzing the potential effects of the action proposed in the lessee's submitted plan. Minimum considerations include:
 - Construction:
 - Recommends 100% reimbursement during construction
 - Operations:
 - It should be assumed that there is an adjustment period for fisheries post construction. BOEM recommends that 100% of revenue exposure be available for claimants for the first year after construction, 80% of revenue exposure available for claimants 2 years after construction, 70% of revenue exposure available for claimants 3 years after construction, 60% after four years, and 50% available five years post construction.
 - Decommissioning:
 - Since only conceptual decommissioning is evaluated in the COP EIS BOEM recommends that the Decommissioning Application required under 30 CFR 585.906 contain the measures to mitigate impacts to commercial and recreational fishing in that application. In general, the same principles as described under construction (above) would apply.



Financial Compensation – Claims

- Management of Funds
 - BOEM recommends that funds be managed by a neutral 3rd party on behalf of the lessee. These funds may be established at the project level, company level (multiple project), or on a regional multi-lessee level. The 3rd party management is not limited to financial responsibilities but also includes processing of claims.
- Eligible Entities
 - Lessees should not limit claimants to vessel owners and operators. Negatively impacted businesses may include shoreside businesses such as seafood processors and bait dealers who can demonstrate in a claim that their business experienced a loss of income due to unrecovered economic activity resulting from displaced fisheries.
- Claims Process
 - While BOEM is supportive of claims processes that provide funds more directly to an impacted community for disbursement by community members, the model that ensures that funds are received by the impacted businesses is one that relies on individual claims. This ensures that claims are commensurate with the impacts of the claimant rather than pooled into a more general fund that may benefit the fishing industry more broadly, or a model that disburses funds equally amongst a fishing community for the period of impact. Claims should be honored for up to 2 years after the income loss was experienced.



Appendix A: Data and Methodology for Developing Revenue Exposure

- Applicable only to Northeast U.S. (GARFO Region)
- While the content is BOEM's the content is reflective of discussions in the data & methodology technical working group.
- Essentially recommends that the NMFS/GARFO Fishery Revenue Exposure Estimates (fishery footprint) be used at the starting point for developing adequate funds for fulfilling lost income claims.
- Provides caveats to different fisheries including data limited commercial fisheries and recreational fishing.



Submitting Written Public Comment



Questions for Public Comment

BOEM is seeking comments on all aspects of the draft guidance, and is particularly interested in feedback on the following:

1. Is more detail needed in one or more topic areas? If so, please indicate which area and what more detail is needed?
2. Are there other claims processes that would result in equitable treatment of claims and be less onerous? If so, please provide examples.
3. Should the guidance provide parameters or examples of documentation suitable for impact claims? If so, please provide examples of the documentation.
4. Should the guidance provide a list of potential 3rd party contractors for funds administration? If so, who should be on that list?
5. Is there additional detail that should be included in the Appendix A methodologies?
6. Are the assumptions accurate for determining adequacy of funds? If not, what assumptions should be incorporated?



Written Public Feedback

You may provide feedback by August 22, 2022 at:

<https://www.regulations.gov/docket/BOEM-2022-0033>

More information can be found at:

<https://www.boem.gov/renewable-energy/request-information-reducing-or-avoiding-impacts-offshore-wind-energy-fisheries>

Timeline, Next Steps, and Adjourn



Timeline for Developing Guidance

- Late Summer 2022:
 - Collect feedback on the draft guidance.
 - Revise draft guidance based on public comment.
 - Issue final guidance.





BOEM Bureau of Ocean Energy Management

Thank you!



New England
Fishery Management
Council



Joint MAFMC, NEFMC, SAFMC Comments on BOEM Draft Fisheries Mitigation Guidance

MAFMC Meeting

August 10, 2022

DRAFT Comments – Key Points

General Comments

- Councils strongly support development of this guidance.
 - Provides clarity on BOEM's recommendations.
 - A step towards greater consistency across projects.
- Many recommendations in the draft guidance align with Councils' wind energy policies and prior Council recommendations.

DRAFT Comments – Key Points

General Comments

- Final guidance should use stronger language.
 - E.g., “should” rather than “consider,” “make reasonable efforts.”
- Inability to address regional mitigation and cumulative impacts is a shortcoming.
- Would be helpful to provide information on how a project’s contribution to a regional effect will be assessed.
- Guidance should be updated periodically as our understanding of impacts evolves.

DRAFT Comments – Key Points

Project siting, design, navigation, and access

- Many recommendations in this section align with Council policies and previous Council comments.
 - E.g., shared cable corridors, using fewer turbines, cable protection measures should reflect pre-existing conditions, nature inclusive designs.
- Projects should be sited where fishery interactions are minimized.
- Draft guidance recommends minimum 6 ft cable burial depth.
 - Councils have not endorsed a specific cable burial depth.
 - If 6 ft is sufficient to reduce conflicts with fishing operations and surveys and to minimize impacts of EMF, then all COPs should be updated to reflect a min. burial depth of 6 ft.

DRAFT Comments – Key Points

Safety Measures

- Councils support measures in this section.

Environmental Monitoring

- MAFMC + NEFMC wind policy research and monitoring recommendations should be incorporated into the guidelines (e.g., monitoring should occur for the life of the project, coordination, data should be publicly available).
- Guidelines for monitoring socioeconomic impacts should be further developed.
- Final guidance should specify objectives and frequency of env. monitoring.

DRAFT Comments – Key Points

Financial Compensation

- Compensation fund and process should be established for all projects (not just “considered” if income losses are “likely.”)
- Draft guidance states the scope of impacts addressed by compensatory mitigation should be based on impacts identified in various environmental documents analyzing each project.
 - Which documents? What if two relevant documents show different information? How will new and/or more comprehensive information be considered?
- Final guidance should include considerations for unexpected impacts.

DRAFT Comments – Key Points

Financial Compensation, Cont.

- Suggested 5-year time frame for phasing-out compensation due to adaptation may not sufficiently address all impacts.
- Shoreside multipliers could benefit from further development.
 - Example 1-2% multiplier not well justified.
 - Appropriate multipliers will vary by fishery.
- Further development needed on process for evaluating and compensating impacts to data poor fisheries.

DRAFT Comments – Key Points

Financial Compensation, Cont.

- Fishermen should be allowed more than 2 years to submit claims given the need to submit final data, which can have lengthy QA/QC timelines, and especially during the early years of this new program.
- Guidance should outline steps that will be taken if guidelines not followed, sufficient funds not set aside, valid claims not honored, etc. (e.g., appeals process).

Surfside Foods Comments

- Concern that surf clam fishery will lose access, even with mitigation measures, resulting in major loss of income.
- Recommend “resource enhancement outside the lease area must be fully explored as a mitigation measure, before compensation.”
- Summary report on seeding surf clams from hatchery production.

Questions/Discussion
