

MARINE PLANNING COMMITTEE REPORT

Pacific Fishery Management Council
November 14, 2024



MPC Report 1

California

- Representative Project Design Envelope
- California OSW Energy Fisheries Working Group
- Met Buoy deployment off Morro Bay

Oregon

- Governor Kotek's September 27, 2024 letter to BOEM
- Oregon Offshore Wind Energy Roadmap

Washington

- Governor Inslee's September 18 letter to the WCMAC
- Next WCMAC meeting scheduled for December 3rd



NMFS West Coast OSW Energy Strategic Science Plan

Six Research Focus Areas:

- Habitat impacts
- Physiological and physical effects
- Species abundance and distribution
- Fisheries socioeconomic impacts
- Ecosystem and climate interactions
- Impacts to NMFS' scientific surveys



National Academy of Sciences study

NATIONAL
ACADEMIES

Sciences
Engineering
Medicine

Impacts on Shipping and Commercial, Tribal, and Recreational Fisheries from Development of Renewable Energy on the West Coast: Call for Experts

About the Activity & the Call for Experts

[Learn more about the activity here](#)

The National Academies of Sciences, Engineering, and Medicine is seeking suggestions for experts to participate in the new study to understand potential impacts of offshore renewable energy development on maritime traffic and fisheries (commercial, recreational, and Tribal) on the west coast in federal and state waters. This study will examine the current uses of areas considered for renewable energy development and analyze potential impacts. During this effort, the committee will analyze historic and current commercial, recreational, and Tribal fisheries and anticipated shifts in fish stocks; Tribal usual and accustomed fishing areas; U. S. Coast Guard operations related to commercial fishing activities including search and rescue, navigation, and safety around renewable energy sites; other maritime activities to include shipping; and mitigation methods to reduce adverse impacts. Using these suggestions, National Academies staff will be looking to build a committee of approximately **12-14** volunteer experts in addition to collecting information for potential speakers, participants, and peer reviewers for any publications resulting from the

Impacts on Shipping and Commercial, Tribal, and Recreational Fisheries from Development of Renewable Energy on the West Coast: Call for Experts



MARINE PLANNING COMMITTEE REPORT ON MARINE PLANNING ISSUES

Part of the Pacific Fishery Management Council's (Council, PFMC) Marine Planning Committee (MPC) October 9, 2024, meeting was dedicated to a discussion on further developing a high-level framework document for identifying key issues and potential long-term, coastwide impacts of offshore wind development on the U.S. West Coast. The main purpose of this report is to provide a status update on those discussions and to request further guidance from the Council on the draft content of the report and the next steps recommended by the MPC.

The report also provides an example of how we would organize content summarizing several key questions, data gaps, and research needs to be included in the framework document. In addition, Appendix 2 is a list of organizations that could contribute to or potentially conduct such an evaluation. The MPC requests guidance on the contents of the report, the example research and data needs table (Appendix 1) the list of organizations in Appendix 2, and next steps.

The main reason for presenting this as a status update, rather than a more thorough framework document paired with a request for more extensive comments, was the release of the National Marine Fisheries Service (NMFS) [West Coast Offshore Wind Energy Strategic Science Plan](#) (Science Plan) on October 17. The Council and MPC had received presentations on that plan but the MPC had not seen a draft of the written report. After seeing the full report, the MPC suggests that more time would better enable aligning this framework document with the NMFS Science Plan, and to consider how it could aid with creation and design of the Council's framework document. For instance, the plan outlines six priority areas for research that can be used to organize the key issues and data gaps identified in the Council's framework document, as described below.

The MPC discussed this concept and reported to the Council at the November 2023 and March 2024 meetings. At the November 2023 Council meeting the MPC proposed the development of a high-level, living, document for identifying and laying out means to address the information gaps needed to inform Council comments and recommendations around offshore wind (OSW) development scenarios and their associated cumulative impacts to the resources and communities that the Council manages. At the March 2024 meeting, the Council directed the MPC to continue developing the framework and to reach out to other entities that may also be considering something similar. Since then, the MPC has engaged with other organizations including the West Coast Ocean Alliance, NMFS, Department of Energy (DOE), National Renewable Energy Laboratory (NREL), and Oregon Sea Grant.

This report provides an update on the MPC's proposed:

- purpose and objectives,
- scope of potential development scenarios,
- method for cataloging research and data gaps,
- and preliminary list of entities engaged in research relevant to offshore wind development.

The MPC requests the Council's guidance on these sections and proposes to bring forward a completed PFMC OSW cumulative impacts framework for the March 2025 Council meeting. This

MPC Supplemental Report 2

MPC proposed the development, and the Council supported this effort.

Status Update and draft proposal given new resources and information.

Mar. 2024

Nov. 2023

Nov. 2024

Council directed the MPC to reach out to other entities. MPC engaged with WCOA, NMFS, DOE, NREL, Oregon Sea Grant

MPC Proposed Cumulative Impact Framework Proposed Outline

- Purpose and Objectives
- Scope of Potential Development Scenarios
- Method for Cataloging Research and Data Gaps
- Preliminary List of Entities Engaged in Research Relevant to Offshore Wind Development

Purpose and Objectives

The Council “*envisions a thriving and resilient CCE that continues to provide benefits to current and future generations and supports livelihoods, fishing opportunities, and cultural practices that contribute to the wellbeing of fishing communities in the nation*”.



February 20, 2024
 Chief, Environmental Assessment Section, Office of Environment
 Bureau of Ocean Energy Management
 760 Paseo Camarillo, Suite 102
 Camarillo, California 93010

Re: Notice of Intent To Prepare a Programmatic Environmental Impact Statement for Future Floating Wind Energy Development Related to 2023 Leased Areas Offshore California. Docket No. BOEM-2023-0061.

Submitted electronically via regulations.gov

To Whom It May Concern:

Please accept these comments from the Pacific Fishery Management Council (Council) regarding the Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) to analyze the potential impacts of floating offshore wind (FOSW) energy development on the five leased areas offshore Humboldt and Morro Bay, California.

The stated purpose of the Proposed Action is, in part, to identify, analyze, and adopt, as appropriate, potential mitigation measures to be applied to the five California leases issued in 2022 in the event a Construction and Operations Plan (COP) is approved and identify minor or negligible impacts so that site-specific reviews can focus on moderate or major impacts and analyze regional cumulative impacts. The Council supports a programmatic approach to identifying potential common impacts and mitigation measures. However, we are concerned that the stated focus on only minor or negligible impacts unnecessarily narrows the scope and the ability to adequately evaluate the range of impacts, including cumulative impacts. This letter expands on this point and includes recommended mitigation measures for inclusion in the analysis, as well as additional information for the Bureau of Ocean Energy Management's (BOEM) consideration.

Introduction/Background
 The Council has fisheries management jurisdiction in federal waters for marine and anadromous species off the U.S. West Coast and manages well over 100 species under its four fishery



July 1, 2024
 Mr. Doug Beem, Pacific Regional Director
 Bureau of Ocean Energy Management
 760 Paseo Camarillo, Suite 102
 Camarillo, CA 93010

Re: Bureau of Ocean Energy Management's Pacific Wind Lease Sale 2 (PACW-2) for Commercial Leasing for Wind Power on the Oregon Outer Continental Shelf – Proposed Solo Notice

Dear Mr. Beem:

The Pacific Fishery Management Council (Council) appreciates the opportunity to comment on the Bureau of Ocean Energy Management's (BOEM) Pacific Wind Lease Sale 2 (PACW-2) for Commercial Leasing for Wind Power on the Oregon Outer Continental Shelf – Proposed Solo Notice (PSN). The Council offers the following comments which address concerns surrounding impacts to commercial and recreational fishing activities, fishing-dependent communities, and vital marine habitats and species of the California Current Ecosystem (CCE). We provide some general comments followed by responses to each but not all of the specific questions posed in the PSN.

First, however, we wish to make clear that serious concerns about the process remain. One concern is that the process continues to move too quickly. It has required the information needed for responsible decision-making, leaving the decision-making process so far under-informed at best. The customary benefit agreement (CBA) concept included in the PSN provides one example. They may hold promise. At the same time, they are something the Council will take considerable time to develop, with at least a three-month process for considering alternatives, analysis, and public input. More fundamentally, there is concern that the focus on CRAs signals a shift in emphasis to compensating for fisheries losses instead of where it properly belongs – in avoiding and minimizing them. The right to fishing, and interpreting BOEM's mandates as so not to affect it, is enshrined in the Outer Continental Shelf Lands Act's Congressional declaration of policy (43 U.S.C. § 1332(d)).

In addition, the sequence of decision-making and environmental impact analysis under BOEM's

Scope of Potential Development Scenarios



Representative Project Design Envelope for Floating Offshore Wind Energy: A Focus on the California 2023 Federal Leases

Aubryn Cooperman, Michael Biglu, Matt Hall, Daniel Mulas Hernando, and Stein Housner

National Renewable Energy Laboratory

NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy
Operated by the Alliance for Sustainable Energy, LLC

Technical Report
NREL/TP-5000-89988
BOEM 2024-048
August 2024

Contract No. DE-AC36-08GO28308

Scope of Potential Development Scenarios

Geographic Scope

- Current State Energy Goals
- Future Energy Goals



Figure 1. From south to north, shown in yellow, [Morro Bay](#) and [Humboldt](#) WEAs, and [Brookings and Coos Bay](#) Call Areas. [Onshore transmission line](#) voltage increasing from green to red.

Scope of Potential Development Scenarios

Development Scope

- Infrastructure needed

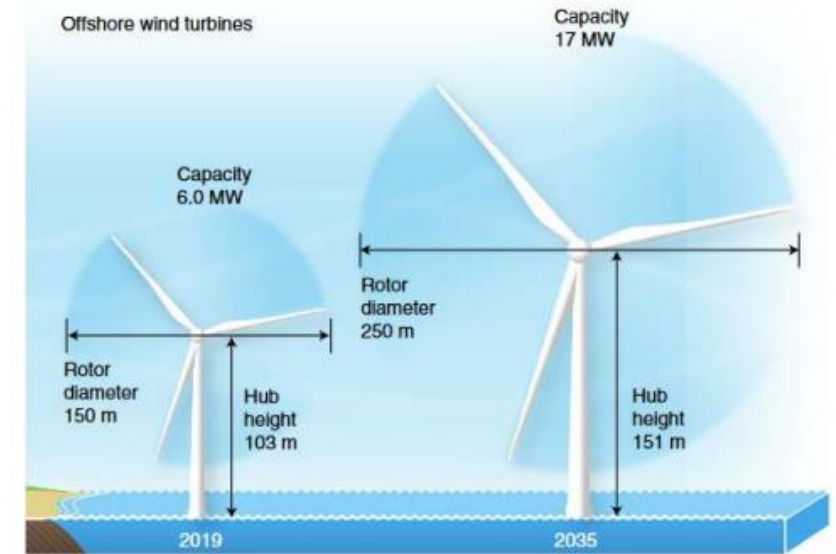


Figure 3. Evolution of wind turbine rating and size over time.

Source: Wiser et al. (2021)

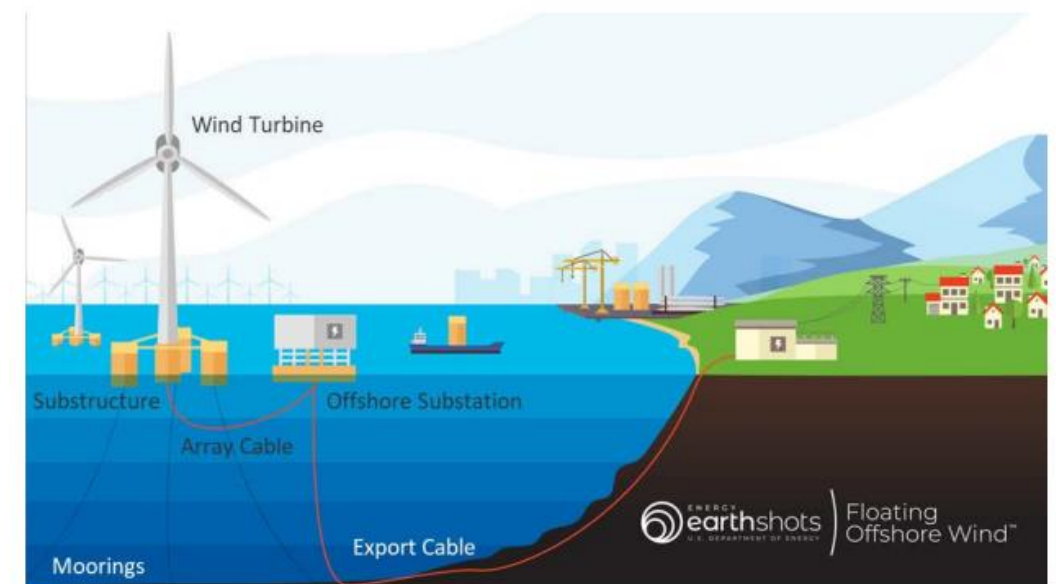
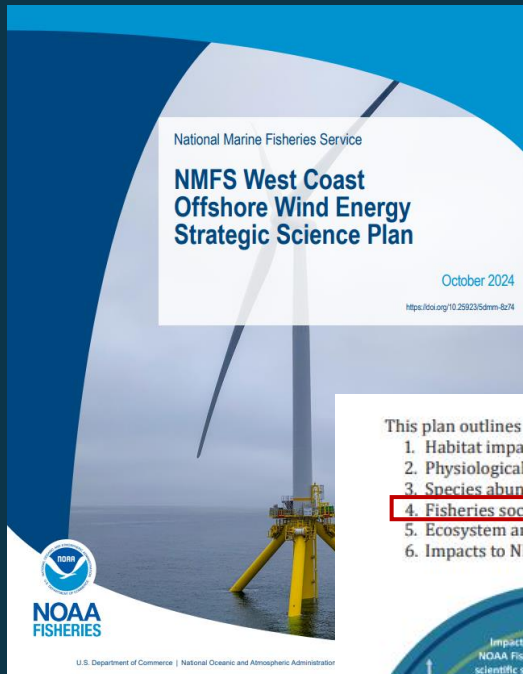


Figure 1. Floating offshore wind plant

Image from U.S. Department of Energy, with labels added by authors

Information Needs and Data Gaps



This plan outlines six priority areas for research:

1. Habitat impacts
2. Physiological and physical effects
3. Species abundance and distribution
4. Fisheries socioeconomic impacts
5. Ecosystem and climate interactions
6. Impacts to NMFS' scientific surveys

Figure 1. Interdependencies of the research foci of the NMFS West Coast Offshore Wind Energy Strategic Science Plan. Graphic by Su Kim, NMFS/NWFSC.

Appendix 1: Example format of Information Needs and Data Gaps

Information Gap	Impact Category	Data Needs	Source	Documentation that may Inform
Science Plan Research Focus 4: Socioeconomic Impacts to Fisheries & Fishing Communities	Fisheries and Fishing Communities	Develop web portals for spatial revenue and fishing effort and landings data for commercial and recreational fishing.	Science Plan	PacFEM, PacFIN, NMFS, States
	Fisheries and Fishing Communities	Assess the distribution of different types of fishing effort, the potential redistribution of different types of fishing effort or changes to transit due to closed/inaccessible areas, and changes in fishing effort distribution and/or catch composition due to species distribution shifts.	Science Plan	NMFS Surveys, PacFIN, States
	Fishing Communities	Improve and customize economic impact modeling tools to be useful for analysis of the impacts of offshore wind energy on the seafood industry, tourism, local labor, and regional welfare.	Science Plan	PacFEM, IOPAC, Census
	Fishing Communities	Understand how port infrastructure development will affect different types of fishing activities.	Science Plan	Ports
	Fisheries and Fishing Communities	Evaluate strategies that avoid or minimize impacts on fisheries-related operations and assess the effectiveness of proposed mitigation efforts.	Science Plan	
	Fishing Communities	Integrate NMFS' community vulnerability indices for the U.S. West Coast with the national NMFS Social Indicators for Coastal Communities and	Science Plan	IEA State of the CA Current Status Report

Appendix 2: List of Offshore Wind (OSW) Development research Entities and Organizations Involved in OSW Research and Planning

Appendix 2: Offshore Wind Science/Research and Other Organizations Involved in OSW Research and Planning

Pacific Offshore Wind Consortium (POWC)

<https://powc.us/>

POWC Advisory Committee: <https://powc.us/advisory/>

The Pacific Offshore Wind Consortium (POWC) is a joint effort between three research centers: the [Schatz Energy Research Center](#) at Cal Poly Humboldt, the [Pacific Marine Energy Center](#) at Oregon State University, and the [Center for Coastal Marine Sciences](#) at Cal Poly San Luis Obispo. Together, these universities are housed in and support the coastal communities in California and Oregon that are anticipated to host floating offshore wind development. The POWC will enable universities, host communities, and Tribal nations to share resources, co-develop best practices, and design comprehensive research programs that reflect the dynamic nature of the ocean environment and the diversity of community perspectives.

The consortium will advance three pillars: (i) research and innovation, (ii) university-level workforce education and professional development, and (iii) community and Tribal engagement and knowledge exchange.

- Since 2018, the **Schatz Energy Research Center** has published over 30 reports on topics ranging from transmission expansion to seabird vulnerability, in an effort to understand the feasibility of offshore wind, and to identify critical environmental and community needs that would be associated with its development. The Schatz Center works in close partnership with Tribal Nations, county services, and state government to design innovative solutions for clean power generation and energy resilience.
- Cal Poly San Luis Obispo is home to the **Center for Coastal Marine Sciences**, which has a history of interdisciplinary, applied research to address a range of management issues for the Central California Coast. Cal Poly San Luis Obispo works collaboratively with a variety of interest groups in the Morro Bay Area to promote and design effective environmental monitoring for offshore wind. The Morro Bay Wind Energy Area covers 376 square miles across three wind lease areas.
- The **Pacific Marine Energy Center (PMEC)** at Oregon State University brings more than 15 years of experience investigating the technical, environmental, and social dimensions of offshore energy, and expanding scientific understanding, engaging stakeholders, and educating students. The Hatfield Marine Science Center at OSU serves as a hub for research on potential ecological effects of offshore renewable energy, while the PacWave test site demonstrates in-water activities and potential issues associated with offshore energy projects, such as seabed surveys, cable laying, construction and operational noise, and electromagnetic fields (EMF). PMEC also conducts significant hydrodynamic and aerodynamic studies of offshore wind platforms at the Hinsdale Wave Research Laboratory.

National Offshore Wind Research Consortium

MPC Year at a Glance

* At best a guess and subject to change – last updated 11/5/24

Q2 2024	Q3 2024	Q4 2024	Q1 2025
Oregon Draft EA & PSN (April)	Oregon Final EA & FSN (Aug/Sept)	Oregon Auction (Oct)	Potential California Call Areas
Oregon Consistency Review (May/June)	Draft PEIS Ca Leases (Late fall)	CADEMO NOP/NOI EIR/EIS (Dec)	Oregon – FCPs/AGPs/NATCPs
Washington – engagement strategy (May/June)	Feasibility Study – SB 605 (Ca) – July/September	NREL/PNNL/DOE Transmission Planning	Draft EIR - Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal Project
		MPC Roadmap/Vision Quest	Pier Wind Draft EIR/EIS (LA/LB) – Spring 2025
		Draft PEIS for AOAs	

MPC Requests guidance on

- Further Guidance on Proposed Cumulative Impact Framework
- Potential Quick Response Letters on the two DPEIS
- Additional items that may arise during Council discussion



THANK YOU

