

MARINE PLANNING COMMITTEE REPORT ON MARINE PLANNING ISSUES

The Pacific Fishery Management Council’s (Council) Marine Planning Committee (MPC) met online August 12, 2024, for updates and discussion on several topics to and prepare a report for Council consideration. The meeting agenda, materials, and recording can be found on the meeting [webpage](#). This report summarizes the presentations from that meeting and provides additional information on upcoming events and comment opportunities.

Pacific Northwest National Laboratory (PNNL)/Department of Energy (DOE) Presentation on Transmission Planning

The MPC received presentations from Travis Douville (PNNL), Katie Segal (DOE), and Marg Daly (PNNL) on two efforts underway: (1) Conducting an analytical campaign to develop a West Coast Offshore Wind Transmission Study (WOW-TS, or Transmission Study), and (2) a convening effort to engage with various stakeholders and tribal nations around all things offshore wind transmission across California, Oregon and Washington. The following is a very high-level overview of the information presented. The roughly one-hour discussion can be viewed on the [recording](#) of the August 12 MPC meeting beginning at about the eight minute mark.

The presentation opened with an overview of the energy transmission planning process, including necessary infrastructure on both the land and ocean side focusing on the bulk system network. As a reminder, the Federal Energy Regulatory Commission (FERC) regulates transmission planning. At a finer scale, the Bonneville Power Administration, PacifiCorp, and California Independent System Operator manage transmission needs to incorporate energy generated by offshore wind (OSW). Costs associated with this are directly allocated to the ratepayers. The Transmission Study will offer a detailed analysis of the impact of offshore wind on the Western Interconnection Grid, including how transmission of that energy will be managed.

Figure 1 depicts the components necessary for offshore wind transmission. While the figure includes an AC/DC offshore converter station, it is unlikely these types of converters will be utilized for the leases already in place. Transmitting direct current is more efficient over longer distances but the infrastructure necessary to do so is not yet technologically mature. Upon landing onshore, the power is converted back to alternating current to be pushed to the bulk electrical system. Because this is using the transmission in a different way than originally planned, there is no U.S.-

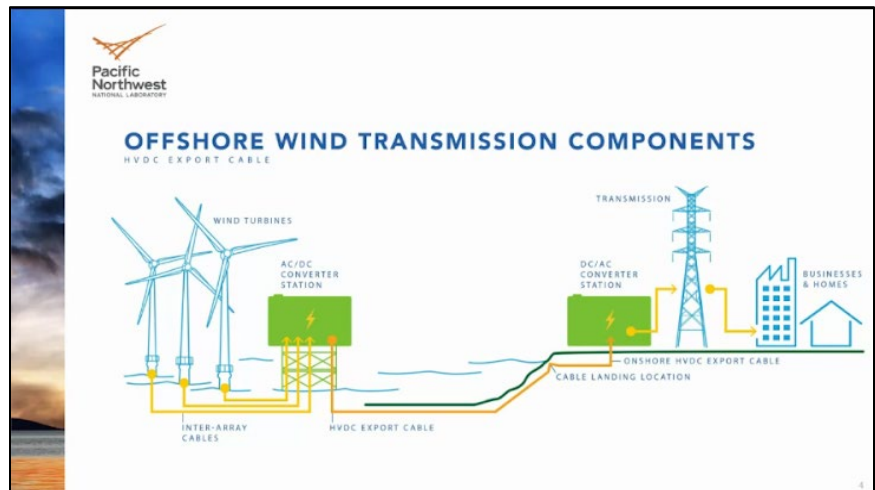


Figure 1: OSW energy transmission conceptual diagram

based example of incorporating bulk power production from offshore wind, but there is an intent to draw from lessons learned in Europe.

Katie Segal then provided an overview of DOE’s Grid Development Office’s (GDO) mission and role, and how West Coast fishing communities can provide feedback during their convening efforts. In short, GDO’s mission is to keep the power on and make sure the transmission system in the U.S. is built out responsibly and in a forward-looking way to ensure resilience. At this stage, GDO is thinking about how best to plan for offshore wind transmission. Therefore, DOE is engaging in a series of convening meetings through the end of this year focused on those who could be affected by or interact with offshore wind energy transmission. Figure 2 depicts this approach.

The end result of this will be the publication of an action plan for West Coast offshore wind transmission in early 2025.¹ DOE issued a [Request for Information](#) in the Federal Register on August 19, with responses due by October 3, 2024. The MPC proposes to coordinate with the Habitat Committee to develop a draft comment letter for Council consideration.

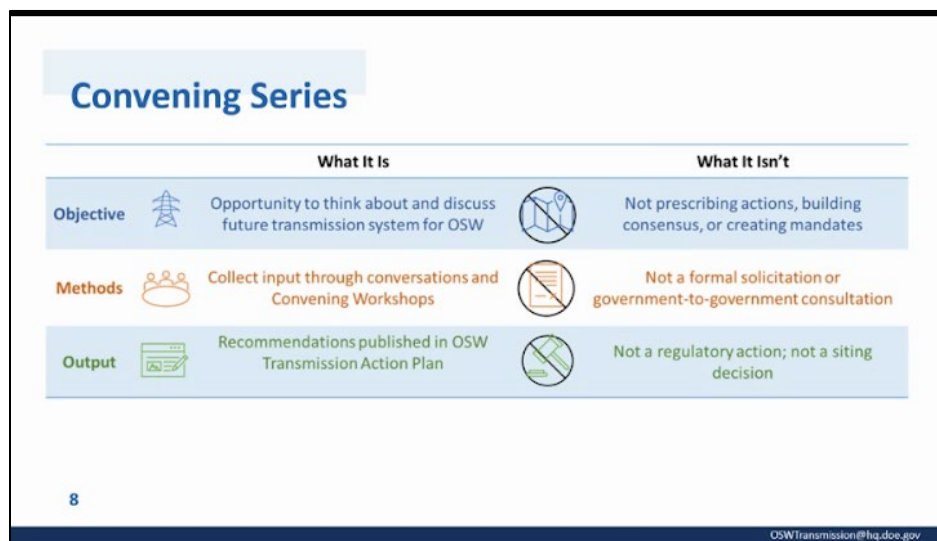


Figure 2: Scope of process

The WOW-TS will model power plants and transmission lines across the West, considering realistic scenarios for injecting 15 and 33 GW of offshore wind by 2035 and 2050 respectively. The intent of the study is to inform policymakers, planners, industry, and the public of the opportunities, challenges, and strategies to implement offshore wind transmission on the west coast. Figure 3 depicts four draft scenarios (or topologies), intended to provide a visual depiction of the offshore component.

PNNL is building socio-ecological modelling into the WOW-TS and will include consideration of community values. The authors will evaluate how the transmission options will impact fisheries and fishing communities, energy resilience, viewsheds and cultural landscapes, and coastal risk to people and energy infrastructure. As it pertains to fisheries, PNNL is collaborating with the Northwest Fisheries Science Center (NWFSC), and this work has been informed by a subgroup that includes representatives from Bureau of Ocean Energy Management (BOEM) and the Oregon

¹ Note – DOE recently published an action plan for East Coast offshore wind transmission. See [Atlantic Offshore Wind Transmission Action Plan | Department of Energy](#)

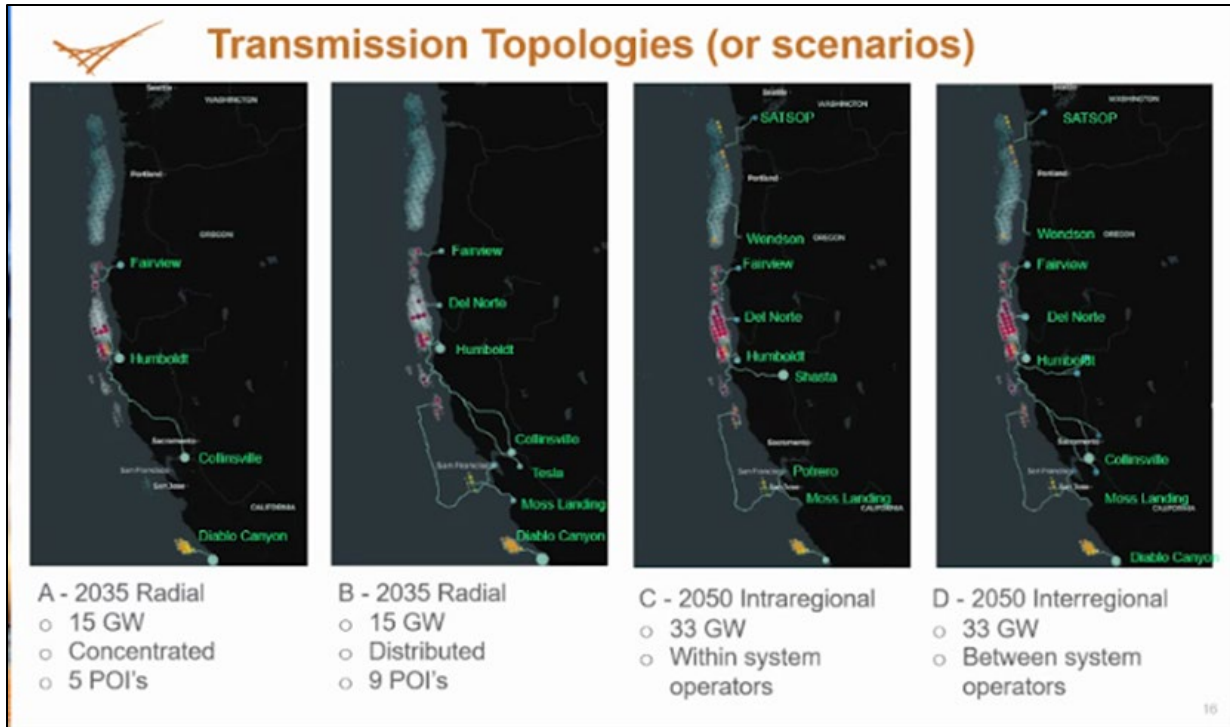


Figure 3: OSW energy transmission topologies

Department of Fish and Wildlife (ODFW) but does not include representatives from the seafood industry. Community values aren't typically considered in transmission planning and PNNL is treating this as an opportunity to elevate community values methods into strategic energy planning. The MPC appreciates PNNL taking the initiative to incorporate community values and sharing this important work with the MPC. The WOW-TS scenarios are not intended to be realistic and plausible and are not in any way determinative of future offshore wind siting by BOEM. However, given their realism, the MPC is interested in better understanding the modelling of fisheries impacts and whether the 15 GW and 33GW levels of development and socio-ecological modelling could improve understanding of cumulative impacts. The project will not consider oceanographic/hydrodynamic changes as part of the initial modelling but the presenters expressed their interest in doing so in the future.

The MPC recommends the Council:

- Continue to engage with DOE and PNNL during development of the WOW-TS;
- Support continued participation by NMFS in the fisheries subgroup; and
- Push for seafood industry participating in the fisheries subgroup.

Bureau of Ocean Energy Management Update

BOEM representatives Necy Sumait and Rick Yarde provided several updates and answered questions. BOEM said the Draft Programmatic Environmental Impact Statement (DPEIS) for the five California lease areas is progressing well, with a draft anticipated by late fall, ideally before the November Council meeting. BOEM also provided an update that current lessees in the region are actively making progress on site assessment and characterization surveys and directed those

interested to review progress reports and communication plans for updates on each lessee's current progress.

RWE's Progress Reports - [RWE Offshore Wind Holdings, LLC \(OCS-P 0561\) | Bureau of Ocean Energy Management \(boem.gov\)](#)

California North Floating LLC - [California North Floating LLC \(OCS-P 0562\) | Bureau of Ocean Energy Management \(boem.gov\)](#)

Atlas Offshore Wind LLC - [Atlas Offshore Wind LLC \(OCS-P 0563\) | Bureau of Ocean Energy Management \(boem.gov\)](#)

Golden State Wind LLC - [Golden State Wind LLC \(OCS-P 0564\) | Bureau of Ocean Energy Management \(boem.gov\)](#)

Invenergy California Offshore LLC - [Invenergy California Offshore LLC \(OCS-P 0565\) | Bureau of Ocean Energy Management \(boem.gov\)](#)

For Oregon, BOEM updated the MPC that the Final Sale Notice (FSN) is on schedule to be released in early September, with an auction set for mid-October. The review process for relevant documents is ongoing, but BOEM highlighted key updates to the FSN and lease instruments include the inclusion of "buyer beware" language regarding benthic habitats and coordination with the National Marine Fisheries Service (NMFS) regarding scientific survey work. For the FSN, these details are outlined in a specific section for better tracking. Following the MPC meeting, the [Final Environmental Assessment \(EA\) for Oregon](#) was published on August 13, 2024.

Additional updates from BOEM included sharing that they are still actively engaged in the California Coastal Commission's [California Offshore Wind and Fisheries Working Group](#) (commonly referred to as the "[California 7c Working Group](#)" developed as part of the state's consistency review) and are coordinating with the California Coastal Commission. Lastly, BOEM reminded the MPC that additional Pacific efforts are also under way for offshore wind siting in Hawaii and Guam. To that end, BOEM announced a [meeting of the BOEM-Hawaii Intergovernmental Task Force](#) will take place on August 22.

BOEM also communicated that they had no updates for and were not actively planning for offshore wind off Washington.

National Marine Fisheries Service Update

NMFS provided several updates. In July, NMFS sent its Endangered Species Act (ESA) Letter of Concurrence and EFH Conservation Recommendations to BOEM and the U.S. Army Corps of Engineers (USACE) for BOEM's proposed site assessment and characterization activities associated with leasing off Oregon.

Progress continues on Pacific Fisheries Effort Mapping Project (PacFEM) that NMFS is working on with the Pacific States Marine Fisheries Commission, Oregon, Washington, and California, despite some data challenges. The team is currently integrating many sources of data for fixed-gear groundfish fishing and then will turn to incorporating coastal pelagic species and swordfish fisheries. NMFS expects to release its West Coast OSW Strategic Science plan soon. Dr. George Watters and his team at the Southwest Fisheries Science Center are making progress on developing a new glider program for assessing the effects of OSW energy on the pelagic upwelling ecosystem. He will share the plan with the MPC and the Council's Ecosystem Workgroup for feedback

potentially late this year or early next as well as engage interested West Coast tribes to provide feedback and discuss potential research collaborations. Finally, the California Current Integrated Ecosystem Assessment Team is prioritizing OSW in its work on the Ecosystem Status Report, and the NWFSC is undertaking several new studies related to OSW and fisheries and climate change.

U.S. Fish and Wildlife Service Presentation on the Migratory Bird Treaty Act

At the Council’s request, the U.S. Fish and Wildlife Service (USFWS) was invited to present on the Migratory Bird Treaty Act (MBTA) provisions regarding take of migratory seabirds and offshore wind (OSW) energy development. Dr. Michael Green, Deputy Chief of the Pacific Region Migratory Birds and Habitat Program gave the presentation. He also provided information on their Endangered Species Act (ESA) activities and an overview of the knowns and unknowns of OSW-related seabird research. The MPC found the presentation very helpful and recommends viewing the recording to get fuller detail than provided here.

The [USFWS MBTA website](#) provides history and background on the law. It was enacted in 1918 and serves as an implementing statute for bilateral treaties (also called “conventions”) with Canada, Mexico, Japan, and Russia that set the conservation policies. The MBTA’s key function is to prohibit the take of migratory birds unless authorized by regulation. The regulations also include [a list of species protected](#), taken from the treaties, including many seabird species that may interact with OSW farms in the California Current ecosystem. In general, the regulations authorize take for activities that are “compatible with the terms” and “carry out the purposes” of the treaties. There is a distinction between direct (or intentional) take (e.g. hunting, scientific collection) and incidental (non-purposeful) take under the MBTA. This distinction is of interest because the regulations do not expressly authorize incidental take. USFWS has used Special Purpose permits for incidental take in limited cases. Dr. Green identified three such instances, including one for the Hawaii longline fishery (see [USFWS permit Q&As](#)). The agency has attempted to address incidental take via rulemaking, but there remains some uncertainty surrounding what activities would be considered incidental take, and the potential applicability of the MBTA to OSW development. A new proposed rule is expected in the future and may clarify the issue. However, in reviewing the website the MPC notes some uncertainty in the rulemaking history involving conflicting Solicitor opinions and court decisions in the recent past. More background is available on the [USFWS MBTA regulations website](#).

The agency’s primary strategy for addressing incidental take has generally been to provide technical assistance. A [presentation on a 2021 revocation and subsequent proposed rulemaking](#) for incidental take stated that the revocation of the prior rule “[r]eturns to long-standing MBTA implementation/enforcement approach of voluntary best practices to avoid or minimize incidental take and enforcement discretion.” Specific to OSW development, deterrence methods, monitoring to understand impacts, and compensation that would further seabird conservation are steps the agency could take to minimize impacts to seabirds.

Dr. Green also highlighted some differences between the MBTA and ESA:

- the purpose of the MBTA is to conserve species while the ESA’s purpose is to recover species.

- “Take” is defined slightly differently, although the differences did not seem highly relevant in the OSW context.
- The MBTA does not include habitat protections whereas the ESA does.

The MPC is interested in better understanding how the USFWS will conduct MBTA authorization and ESA consultation for OSW. While Dr. Green’s staff have been engaging with BOEM on the California and Oregon activities, it appears that detailed analysis will occur at the Construction and Operation Plan phase. The MPC notes that short-tailed albatross and the marbled murrelet are the two seabird species listed under the ESA in our ecosystem.

For overall conservation perspective, Dr. Green noted a study that concluded a 70% decline in seabird populations worldwide since the 1950s. The USFWS produces a [Birds of Conservation Concern report](#), last published in 2021, that identifies migratory and non-migratory bird species that are not ESA listed but represent the agency’s highest conservation priorities. The list includes species that occupy the California Current such as the Laysan albatross and the pink-footed shearwater.

In terms of OSW, collision, avoidance, and displacement are ways that seabirds could be affected by wind farms.² Collision with turbine blades can kill and injure birds, yet studies also show that some species will avoid OSW areas altogether thereby increasing energetic demands and causing loss of feeding and loafing habitat. Additionally, avoidance of OSW areas may pose increased energetic demands on transiting seabirds. The USFWS are also considering the transmission and related infrastructure as causing impacts to bird populations. Modelling and risk assessment efforts to consider seabirds’ vulnerability to OSW show a high degree of uncertainty in the science. Many studies have focused on the Atlantic and lack information on key species like albatross (which are not found in the Atlantic). Each species behaves differently and there are initiatives underway to evaluate not just overlap in sea surface area but also consider how much time birds occupy the turbine rotor zone or rotor swept zone (RSZ). Dr. Green noted that initial findings of [one study conducted off California](#) showed that birds spent the majority of the time below the RSZ and 21% of the time within, and that greater wind strength resulted in higher flight activity. He also noted that the technology to monitor seabird impacts is very nascent and that additional innovation, resources, and assistance from the OSW industry to improve monitoring and deterrence capabilities is needed.

California Update

The following items related to activities off California are solely informative in nature:

- The California Energy Commission (CEC) finalized the AB 525 Strategic Plan for Offshore Wind in Federal waters off California in July. All three volumes of the Final Plan can be found on the CEC’s [AB 525 Offshore Wind Strategic Plan webpage](#).
- The CEC held a workshop on August 8 in support of the publication of the CEC Draft Consultant Report Wave and Tidal Energy: Evaluation of Feasibility, Costs, and

² A [2018 study](#) lead by the U.S. Geologic Survey considered collision and displacement vulnerability to OSW. Highlighting the uncertainty, Dr. Green noted that a 2024 update changed expectations and found that phalaropes and tropicbirds are vulnerable to collision whereas pelicans and sea ducks are vulnerable to displacement.

Benefits. The presentation(s) and recording is available here - <https://www.energy.ca.gov/event/workshop/2024-08/iepr-commissioner-workshop-offshore-wave-and-tidal-energy>. This report is required by SB 605 and analyzes the feasibility of wave and tidal energy facilities in both state and federal waters off California. The Draft Consultant Report does not address SB 605's requirements to identify suitable sea space and identification of a robust monitoring strategy. These will be addressed in Phase 2. Sea Space identification will be informed by coordination and consultation with state and local agencies, California Native American Tribes, fishermen, the wave and tidal energy industry and stakeholders.

- Offshore wind companies RWE and Equinor have completed their initial survey work off Humboldt and Morro Bay, respectively.

Oregon Update

PacWave South Construction

The final phase of PacWave South's construction (i.e. cable installation) is under way with operations that were scheduled to begin on July 1, 2024, and conclude by October 15, 2024. More information is available at <https://pacwaveenergy.org/>. The PacWave facility is a grid-connected wave energy test facility developed in partnership with the U.S. DOE, the state of Oregon, Oregon State University and local stakeholders.

Federal Consistency Determination

The MPC received a review of the Department of Land Conservation and Development (DLCD) Oregon Coastal Management Program's (OCMP) Federal Consistency Determination [conditional concurrence letter](#) in response to BOEM's request to issue leases for purposes of offshore wind energy exploration on the Outer Continental Shelf off the coast of Oregon. The OCMP determined that the federal agency's proposed leasing activities are consistent with Oregon's [enforceable policies](#) if the conditions documented in the [decision letter](#) are met. OCMP staff, Jeff Burrigh and Andy Lanier, were present at the MPC meeting to describe the process for developing the conditions and describe what was included in each condition.

Washington Update

As expected, the Gridworks team finalized its recommendations for offshore wind planning and stakeholder engagement in the state and submitted [its report](#) to Gov. Jay Inslee on June 15. The substance of the recommendations was largely unchanged from those in [the draft report](#).

The Washington Coastal Marine Advisory Council (WCMAC) held a special meeting on July 10 to consider the Gridworks report. A [recording of the meeting](#) is available from TVW. The discussion resulted in a [letter sent to Governor Inslee on August 1](#), capturing areas of consensus and differences on each of the seven recommendations. The Governor's representative and state agency representatives on the WCMAC abstained from the discussion and letter so as to give stronger emphasis to the views of coastal stakeholder representatives. The agencies will be consulted by the Governor's policy staff during their evaluation of the Gridworks recommendations. The Governor's representative on the WCMAC also made clear that there is no definitive timeline for next steps on their response to the recommendations or unsolicited lease requests.

The WCMAC will next meet on September 11 per its regular schedule. No agenda for the meeting was available at the time of writing but the meeting information will be posted to The Washington Department of Ecology's [WCMAC website](#) at roughly two weeks before the September meeting.

Tribal update

NMFS visit to Neah Bay

On June 16, the Makah Tribe welcomed leadership and staff from the NMFS West Coast Region, Science Centers, and NMFS Headquarters to Neah Bay to discuss the Tribe's treaty rights and resources, including the potential impact of offshore wind energy. The meeting was an opportunity to strengthen existing professional relationships between NMFS and Makah and to begin planning cooperative efforts to address ecosystem and other impacts from offshore wind energy development. This meeting was a result of the Makah Tribe's October 2023 request to NOAA for technical assistance in supporting Makah treaty interest in the offshore wind energy process.

NWIFC letters to Gov. Inslee and BOEM

In June, the Northwest Indian Fisheries Commission (NWIFC), on behalf of its member tribes, sent a letter (C.1, Attachment 1) to Washington Governor Jay Inslee in response to the Gridworks report and advising the governor that, while they were appreciative of the work Gridworks has done, it did not go far enough to address tribal concerns nor was it appropriate for a consultant to carry out work that should be done by the treaty tribes and the state of Washington as co-managers.

The letter requested that the Governor's office work directly with the NWIFC and its member tribes to develop a process in addressing offshore wind energy that works for both the tribes and the state. Further, until such a process is in place and all the parties are in agreement to proceed, Washington does not initiate any offshore wind development activities.

In July, NWIFC sent a letter (C.1 Attachment 2) to BOEM stating that the 20 member tribes are opposed to further offshore wind development on the U.S. West Coast and that current activities be placed on hold until the tribes' concerns about the potential impact on the marine environment and tribal resources are addressed. The tribes believe that offshore wind development poses a significant threat to their treaty protected resources, even if lease areas are outside of tribal Usual and Accustomed fishing areas. Furthermore, BOEM, as a federal trustee, has a responsibility to ensure that these resources are protected for current and future generations. The letter also addressed tribal concerns related to a lack of meaningful consultation and tribal capacity to meaningfully engage on time-consuming offshore wind speculation.

Cumulative Impacts and Data Gaps

The MPC continues its work to develop a high-level framework document for identifying key issues and potential impacts of offshore wind, as noted in our March 2024 [Supplemental MPC Report 2](#) to the Council. This document would describe an approach to address information gaps needed to inform Council comments and recommendations around offshore wind siting and potential cumulative impacts to the resources and communities under the Council's purview.

To that end, Oregon Sea Grant Director Dr. Karina Nielsen presented a summary of OSW energy research activities in Oregon (available on the MPC [meeting webpage](#)). These were considered more Oregon-centric and not comprehensive, but also included relevant research that may not be

considered as directly offshore wind-related. The MPC agreed that even though the presentation was a cursory look at Oregon research, other states or regions may be considering similar or the same research or attempting to answer similar questions regarding offshore wind siting. For example, the Gridworks report for Washington also recommended a West Coast wide research consortium be formed and the West Coast Ocean Alliance has also been discussing similar ideas for coordinating research.

Several research projects are under way regarding social science/human dimensions, marine ecology, wildlife, fisheries, oceanography, engineering and OSW supply chain/manufacturing. Additionally, a mix of funding is available to see a number of these projects and studies proceed. The MPC struggled with how to assemble the known study results and information with the data gaps that other entities may be considering. A number of state, federal and private organizations and educational facilities are forming partnerships to consider science needs related to offshore wind. MPC members committed to continue to work on a living document that pulls this information together to better identify which entities may have ongoing studies or results that can inform Council decisions and comments regarding offshore wind and, potentially, wave energies. This information will also enable the MPC and Council to better identify data gaps and propose those to researchers for further study.

Upcoming events and comment opportunities

- October – December 2024:
 - Draft Programmatic Environmental Impact Statement for NOAA Aquaculture Opportunity Areas (September)
 - Draft Programmatic Environmental Impact Statement for 5 California OSW Leases
 - Oregon OSW lease auction (October)
 - CADEMO environmental review documents (December)

- January - December 2025:
 - Oregon OSW leaseholder Communication Plans
 - Environmental documents (EIS/EIR) for Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal Project and Port of Los Angeles/Long Beach Pier Wind Project

PFMC
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