



Outreach Summary Report

Addendum

California Offshore Wind Energy Planning

Updated November 2023



Prepared by BOEM, through the Department of the Interior's Collaborative Action and Dispute Resolution office. BOEM contracted with Kearns & West to develop this report.

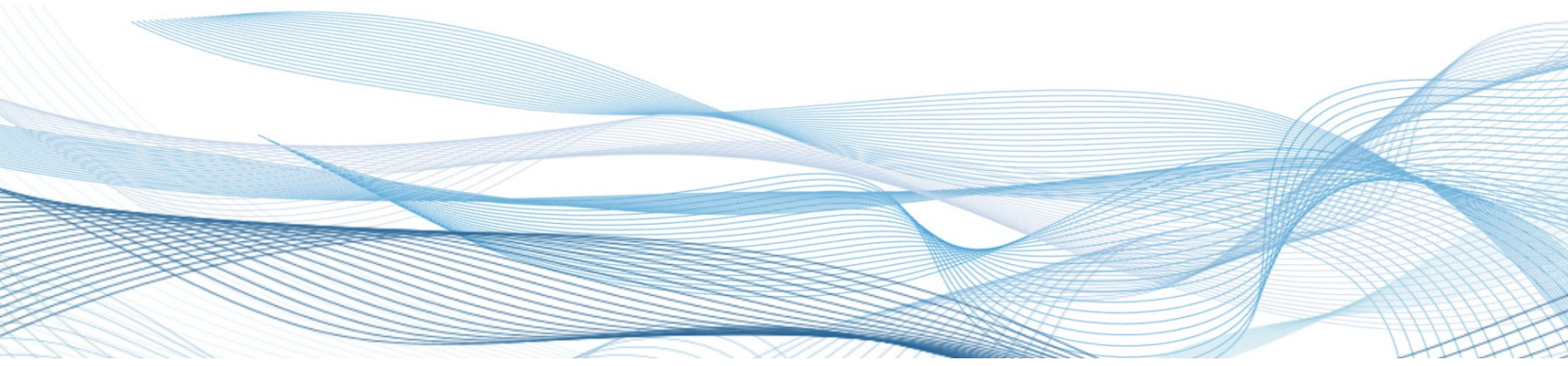


Table of Contents

1. Introduction	2
1.1 Background	2
1.2 Wind Energy Areas	6
2. Overview of Outreach Conducted from January 2021-December 2022	8
2.1 Outreach Activities	8
3. Outreach & Engagement Results	10
3.1 Tribal/Section 106	10
3.2 NEPA Meetings	14
3.2.1 North Coast	15
3.2.2 Central Coast	16
3.2.3 California Proposed Sale Notice Auction Seminar	16
3.3 Intergovernmental Renewable Energy Task Force	17
3.4 Fishing Community	19
3.4.1 North Coast	19
3.4.2 Central Coast	22
3.4.3 West Coast Fisheries Mitigation Meetings	25
3.4.4 Pacific Fisheries Management Council (PFMC)	26
3.4.5 Recreational	28
3.5 State Agency Meetings	29
3.5.1 California Energy Commission (CEC)	29
3.5.2 California Coastal Commission (CCC)	30
3.6 Coastal Communities	32
3.7 Industry	33
3.7.1 Maritime Community	33
Appendix	35
Appendix 1. Summary of All Outreach and Engagement Meetings	35
Appendix 2. Summary of Outreach and Engagement Meetings (Attendance and Assessment)	44
Appendix 3. List of Tribes Engaged and Contacted	47

1. Introduction

The Bureau of Ocean Energy Management (BOEM), in coordination with the State of California (State) have continued to build on Tribal government and stakeholder outreach¹ and engagement since the September 2021 update of the Outreach Summary Report for California Offshore Wind (OSW) Energy Planning. This Addendum contains a summary of the Tribal government and stakeholder engagement conducted between January 2021 and December 2022.

1.1 Background

From January 2021 to December 2022, BOEM and the State of California conducted extensive outreach to identify and collect relevant data, information, and input on the California Offshore Wind Energy Planning process. On July 29, 2021, BOEM published the Morro Bay East and West Extensions – Call for Information and Nominations in the Federal Register, which initiated a 45-day public comment period where industry nominations and public comments were accepted until September 13, 2021. Throughout the public comment period, BOEM and the State conducted outreach to engage with and receive input from Tribal governments, local, state, and federal agencies, stakeholders, and the public. During the timeframe of January 2021 to December 2022, BOEM conducted focused outreach and engagement on the National Environmental Policy Act (NEPA) Environmental Assessment and the subsequent California Coastal Commission’s (CCC) Federal Consistency process.

Table 1 below includes a list of the category and number of outreach meetings held between January 2021 and December 2022.

¹ Outreach is defined broadly here as comprising both one-way and two-way engagement between BOEM and stakeholders or Tribal governments. It includes: informing stakeholders and Tribes about the goals and activities of BOEM Pacific’s California Offshore Wind Planning Process; involving stakeholders and Tribes in data gathering to inform offshore wind energy decisions; and soliciting stakeholder input and input from Tribes on key elements of the planning process, including siting, potential impacts, and user conflict.

Table 1: List of Outreach Meetings by Category and Number of Meetings

Meeting Category	No. of Meetings (January 2021 – December 2022)
Tribal Governments	41
BOEM NEPA	9
BOEM Auction Related	2
BOEM Task Force	2
Fishing, North Coast	6
Fishing, Central Coast	7
Fishing, Pacific Fishery Management Council (PMFC)	14
Fishing, Recreational	2
Fishing, Mitigation	6
State Agency, California Coastal Commission (CCC)	2
State Agency, California Energy Commission (CEC)	8
Coastal Community, City Council	4
Industry, Maritime Community	9
Industry, Offshore Wind	4
Research and Academia	11
Offshore Wind Meetings/Conferences	6
Environmental Non-Government Organizations (NGOs)	16
TOTAL	151

On May 25, 2021, the Departments of the Interior and Defense and the State of California announced their agreement to advance areas for wind energy development offshore of the northern and central coasts of California. The Humboldt Call Area was designated as a Wind

Energy Area (WEA) in July 2021. On November 12, 2021, BOEM announced the designation of the Morro Bay WEA. After designating the Morro Bay and Humboldt Wind Energy Areas (WEAs), BOEM conducted a NEPA environmental assessment to gather essential data on site assessment, characterization, and impacts on other ocean users. This information aims to aid decision makers during the leasing process. In addition to meetings with Tribal governments, BOEM held virtual scoping and public meetings on the EA to seek input from interested and affected stakeholders and the public to help BOEM identify the issues to be included in the analysis.

On May 26, 2022, the Department of the Interior (DOI) announced proposed auction details and lease terms for offshore wind energy development in the Morro Bay WEA and Humboldt WEA. The California Proposed Sale Notice (PSN), which included a 60-day public comment period, provided detailed information about potential areas that could be available for leasing, proposed lease provisions and conditions, auction details (e.g., criteria for evaluating competing bids and award procedures), and lease execution.

BOEM and the State convened the fourth and fifth meetings of the BOEM California Intergovernmental Offshore Renewable Energy Task Force (Task Force) in June of 2021 and July of 2022, respectively. The Task Force discussed several topics, including the status of BOEM’s leasing process, potential impacts on existing ocean uses, and economic impacts of offshore wind development. Other stakeholder engagement included meetings with fishing communities, coastal communities, industry groups, environmental groups, and members of the public.

Key input from Tribal government engagement meetings is summarized in Section 3.1. Stakeholders who provided input included members of local, state, and federal agencies on the Task Force; coastal communities; fishing representatives; environmental and renewable energy industry groups; and members of the public. Tribal governments also provided input and attended meetings with BOEM. The perspectives summarized in this document reflect input gathered directly from Tribal governments and the mentioned stakeholder groups. A high-level overview of key input received from public and stakeholder engagement meetings is presented in Table 2 below and explored in greater detail in Section 3 of this Addendum.

Table 2: High-level overview of input received from Tribal, public, and stakeholder engagement meetings.

Transition to Renewable Energy and Wind Energy Areas
<ul style="list-style-type: none">• A cross-section of commenters spoke of the importance of renewable energy development to meet the State of California’s renewable energy goals, reduce greenhouse gases, protect against climate change, and protect people, economies, species, and habitats.• Commenters stated direct support for developing offshore wind energy in the WEAs proposed by BOEM.

- Others saw offshore wind energy’s place in the State’s renewable energy strategy but stressed that any siting and development must be done in a way that avoids the greatest environmental impacts.

OSW Environmental Review and Development

- Commenters thought that the pace with which BOEM was moving toward offshore wind development was appropriate, while others believed planning was happening too quickly to engage stakeholders, consider impacts sufficiently, and/or ensure accountability.
- Fishing community stakeholders and representatives stated that they believed an Environmental Impact Statement (EIS) to be a more appropriate level of environmental review.

Stakeholder Engagement and Tribal Consultation

- Commenters expressed gratitude for BOEM’s engagement efforts.
- Fishing community stakeholders expressed frustration over communication and engagement with BOEM and other agencies and offered suggestions for improving it.
- Tribal representatives requested details and gave input on communication and consultation.
- Commenters suggested that BOEM should provide assistance and special outreach to Tribes and communities that might have limited capacity to engage, like a number of Tribes and disadvantaged communities.

Economic Impacts

- A cross section of commenters expressed enthusiasm for the potential new job creation and economic benefits that offshore wind development in California might promote.
- Fishing community participants stressed the importance of understanding the potential economic impacts to the fishing industry.
- Fishing community stakeholders expressed concern for negative impacts to the fishing industry and associated businesses.
- Fishing community stakeholders held various opinions on what economic mitigation should be provided.
- Fishing community stakeholders and Tribal representatives gave thoughts on the bid credit rate for community benefit agreements and what community benefits should be.

Potential Impacts on Existing Ocean Uses

- A cross section of commenters expressed the need to understand impacts to habitat and wildlife.
- Tribal representatives expressed concern over impacts to culturally significant sites and resources.
- Commenters expressed concerns about negative impacts, and some noted that the WEAs might provide a refuge for wildlife.
- Commenters discussed impacts to navigation and ports and harbors and offered alternatives and adjustments for consideration.

Data and Monitoring

- Stakeholders, mainly in the fishing community, expressed concern about data being missing or inaccurate.
- Agency stakeholders talked about the need for ongoing monitoring of impacts.
- Stakeholders discussed the need for adaptive management.
- Some fishing community stakeholders suggested that a pilot project might be the best way to gather information about impacts.

Accountability

- Fishing community members and Tribal representatives expressed concerns about who would be accountable for enforcing community benefit agreements.
- Fishing community members were also concerned about accountability for maintaining infrastructure and addressing potentially dangerous issues after construction.

1.2 Wind Energy Areas

Humboldt Wind Energy Area

In May 2021, BOEM identified a suitable area for wind energy development in northern California off the coast of Humboldt County, through outreach efforts and stakeholder feedback. The area now identified as the Humboldt Wind Energy Area (Humboldt WEA) was initially analyzed in BOEM’s Call for Information and Nominations (Call) published on October 19, 2018. The Humboldt WEA begins 21 miles (34 km) offshore from the city of Eureka in northern California and is about 28 miles (45 km) in length from north to south and about 14 miles (23 km) in width from east to west. The entire area is approximately 206 square miles (132,369 acres). Figure 1 below shows the location of the Humboldt WEA.

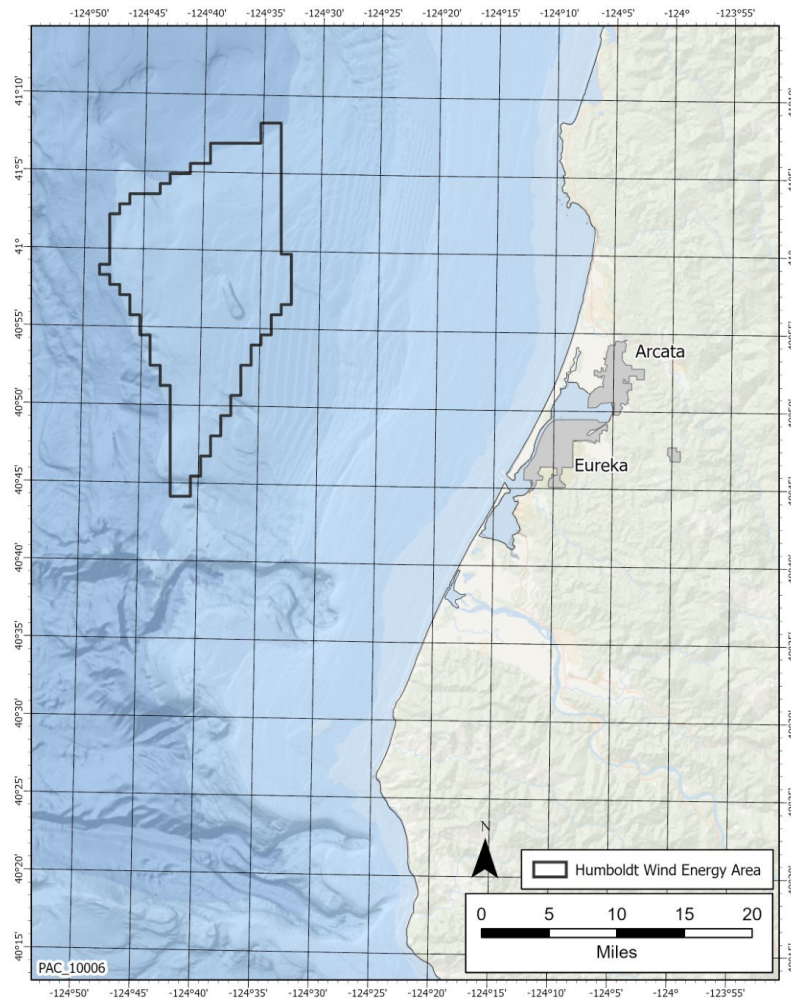


Figure 1: Map of Humboldt Wind Energy Area for Wind Power Development

Morro Bay Wind Energy Area

In November 2021, BOEM announced the designation of the Morro Bay WEA. The boundary of the Morro Bay WEA was initially analyzed in BOEM’s Call for Information and Nominations (Call) published on October 19, 2018. The WEA is located approximately 20 miles offshore from the central California coastline and contains approximately 240,898 acres (376 square miles). Figure 2 below shows the location of the Morro Bay WEA.

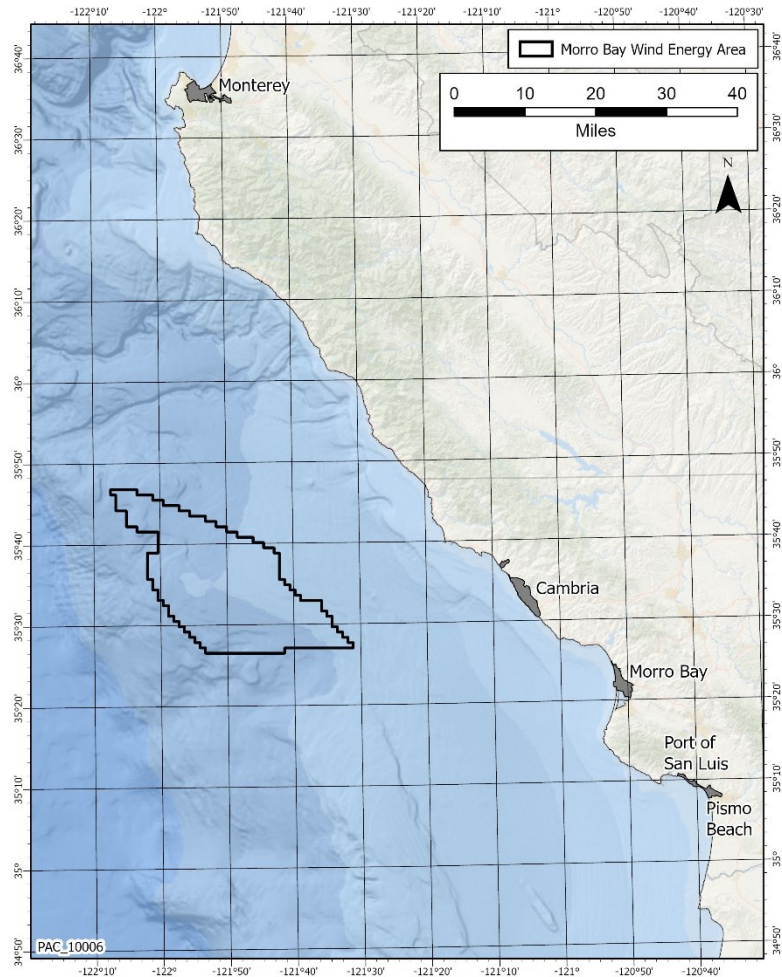


Figure 2: Map of Morro Bay Wind Energy Area for Wind Power Development

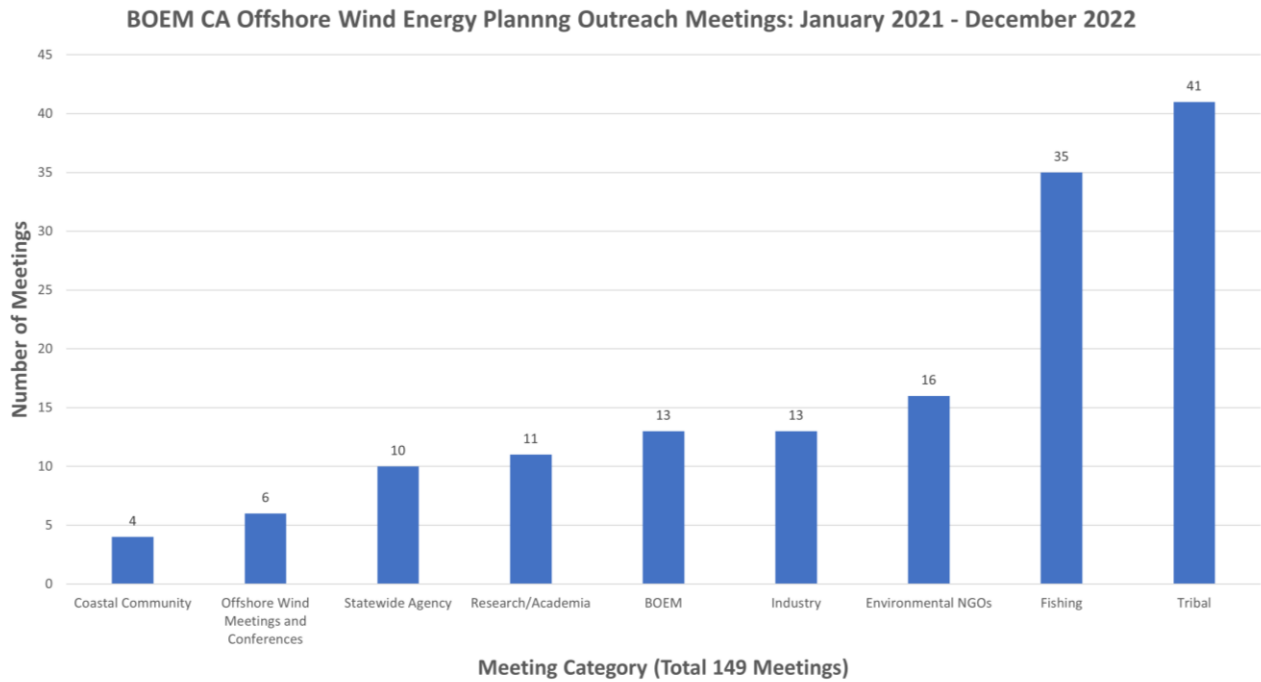
2. Overview of Outreach Conducted from January 2021-December 2022

2.1 Outreach Activities

Between January 2021 and December 2022, BOEM conducted public outreach using online meetings, webinars, and briefings, with limited in-person engagement due to COVID-19. These online meetings, webinars, and in-person meetings involved Tribal governments, local, state, and federal agencies, fishing community representatives, local coastal communities, academics and scientists, environmental non-governmental organizations (NGOs), renewable energy developers, and members of the public. Figures 3 below shows the categories of meetings

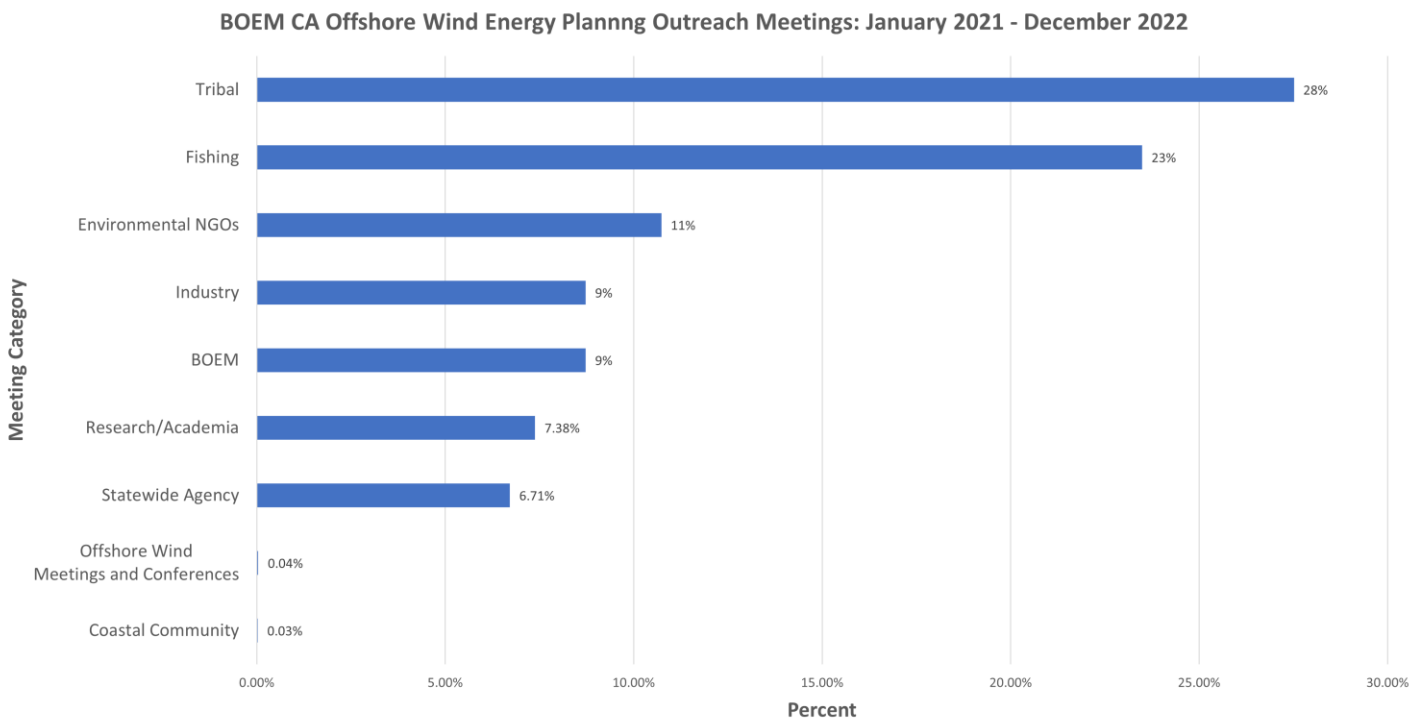
including how many meetings held per category and Figure 4 shows the percentage of meeting attendance per sector.²

Figure 3: Number of Meetings Per Type: January 2021 – December 2022



² Out of the 151 meetings conducted from January 2021 through December 2022, 47 meeting summaries were assessed. Not all the meetings recorded were assessed. Figures created are based on available information to the best of our knowledge.

Figure 4: Percentage of Meetings per Type: January 2021-December 2022



3. Outreach & Engagement Results

Outreach and engagement activities conducted by the State and BOEM have prompted a variety of questions, concerns, and recommendations regarding the development of OSW for California. This section summarizes key input received through outreach and engagement activities over the two-year period from January 2021 through December 2022 with Tribal governments, coastal communities, fishing communities, and local, state, and federal agencies via the Intergovernmental Renewable Energy Task Force and meetings held during this period.

3.1 Tribal Engagement

BOEM invited engagement and consultation with Tribal governments between January 2021 and December 2022. Most engagement occurred as bi-lateral meetings between BOEM and individual Tribes, and as joint meetings led by the CEC, with participation from other State agencies, BOEM, and Tribes on the north and central coast. The themes below were summarized from the input from Tribal government representatives at these meetings. Each summary point represents input shared by a specific Tribe. Tribal government attributions were removed to ensure confidentiality. Table 3 below lists the meetings that were held between BOEM and Tribes between January 2021 and December 2022.

Table 3: List of Meetings with Tribes

No.	Meeting Name	Meeting Date
California (CA) Tribal Meetings		
1.	Tribal Meeting on Climate Resiliency	1/12/2021
2.	Staff-level Tribal Meeting, Santa Ynez Band of Chumash Indians Pre-Consultation Meeting	1/13/2021
3.	Tribal Meeting, Listening Session for Tribal Leaders hosted by BOEM in coordination with NOAA and the White House Office of Science and Technology Policy	1/26/2021
4.	Tribal Outreach, BOEM Tribal Ocean Summit	3/2-3/4/2021
5.	Tribal Outreach, BOEM Tribal Ocean Summit	3/16-3/18-2021
6.	CEC-led North Coast Inter-Tribal Roundtable	6/14/2021
7.	CEC-led All-Chumash Tribal Roundtable	6/15/2021
8.	BOEM CA Task Force	7/13/2021
9.	Government-to-Government, Santa Ynez Band of Chumash Indians	8/30/2021
10.	Staff-level Tribal Meeting, Blue Lake Rancheria	11/8/2021
11.	Staff-level Tribal Meeting, Wiyot Tribe	11/15/2021
12.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	11/17/2021
13.	CEC-led Tribal Meeting, Chumash Tribes	11/29/2021
14.	CEC-led Tribal Meeting, Chumash Tribes	11/30/2021
15.	CEC-led Tribal Meeting, Salinan Tribe	12/1/2021

No.	Meeting Name	Meeting Date
16.	Staff-level Tribal Meeting, Yurok	12/8/2021
17.	Staff-level Tribal Meeting, Yurok	12/10/2021
18.	Government to Government Consultation, Santa Ynez Band of Chumash Indians	1/10/2022
19.	Staff-level Tribal Meeting, Blue Lake Rancheria	2/1/2022
20.	Staff-level Tribal Meeting, Santa Ynez Band of Chumash Indians	3/10/2022
21.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	4/20/2022
22.	Tribal Outreach	4/21/2022
23.	Tribal Meeting with Yurok Councilmembers	5/4/2022
24.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	5/18/2022
25.	BOEM CA Task Force	5/23/2022
26.	Government to Government Consultation, Yurok	6/15/2022
27.	CEC-led Tribal Meeting	7/11/2022
28.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	7/20/2022
29.	Government to Government Consultation, Santa Ynez Band of Chumash Indians	7/22/2022
30.	Staff-level Tribal Meeting, Yurok Tribe	7/23/2022
31.	Tribal Meeting, BOEM Regional Quarterly Update	7/26/2022
32.	Staff-level Meeting Tribal, Yurok	8/26/2022
33.	Government to Government Consultation, Yurok	9/7/2022

No.	Meeting Name	Meeting Date
34.	Staff-level meeting, Blue Lake Rancheria	9/16/2022
35.	Staff-level Tribal Meeting, Yurok	9/16/2022
36.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	9/21/2022
37.	Staff-level Tribal Meeting, Yurok Tribe	10/6/2022
38.	Staff-level Tribal Meeting, Blue Lake Rancheria	10/14/2022
39.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	10/19/2022
40.	Leadership meeting, Yurok Tribe	12/1/2022
41.	Tribal Outreach, West Coast Tribal Caucus	12/19/2022

Interests, Concerns, and Recommendations

- Tribal representatives discussed the ancestral ocean territory and expressed that Tribes had not ceded jurisdiction to the U.S. Federal Government. Tribal representatives noted that many Tribal members depend on the ocean for their livelihood and stated that wind development was moving into a new technological era while specific Tribes lack basic energy infrastructure, such as an updated grid system.
- Tribal representatives also expressed concern that offshore wind projects may repeat the harmful impacts federal dams built in the 20th century had on Tribes and on the environment. Tribal representatives requested a Community Benefit Agreement and for Tribes to be included in lease negotiations.
- Tribal representatives talked about how to consult with their Tribes, citing the [Joint Secretarial Order No. 3403](#) (Nov. 15, 2021) from the Departments of Agriculture and Interior on fulfilling the Trust responsibility to Tribes in the stewardship of federal lands and waters.
- Tribal representatives spoke of Morro Bay's and Morro Rock's cultural significance to the Chumash people. Requests were made for BOEM to support ethnographic research regarding traditional cultural property and traditional cultural landscape processes. Support was noted for the proposed Chumash Heritage National Marine Sanctuary, along with concern that offshore wind would impact the proposed marine sanctuary. A

request was made for BOEM to include funding for the proposed sanctuary to offset impacts.

- Tribal representatives talked through recommendations and comments submitted to BOEM regarding the Proposed Sale Notice. Representatives asked questions about the legality and feasibility of their recommendations. They discussed the potential for a community benefits agreement, noting that little new industry has come to the region in 60 years. They discussed the appropriate percentage of the community benefits agreement credit and how developer compliance would be assured and by whom.

CEC Tribal Pre and Post BOEM-CA Task Force Meetings

- Participants at the pre-meeting workshops asked questions about California’s renewable energy goals and their relation to BOEM’s efforts to identify areas for offshore wind leasing. Participants expressed concern about potential impacts to the coastline and asked that more information be gathered. Participants asked about the leasing process and if they would have the ability to comment on the Sale Notice and the leasing stipulations. Participants discussed potential archaeological sites offshore and the need to avoid impacting those features. Post meeting comments touched on Tribal communication and consultation, specifically receiving a draft Native American Tribes Communications Plan and consultation notices being sent to Tribal key players in addition to Tribal Chairs. Community benefit agreements were discussed again, and participants asked about collaborating with the National Marine Sanctuary Center.

3.2 NEPA Meetings

BOEM conducted two virtual public scoping meetings during a 45-day scoping period to outline its formal environmental review process under the National Environmental Policy Act and to solicit public input on issues to be considered in the Environmental Assessments (EAs) for the Humboldt and Morro Bay Wind Energy Areas. BOEM then hosted two virtual meetings for each area to provide information, answer questions, and solicit comments on the Draft EAs for both areas. Table 4 below summarizes the NEPA meetings that were held between January 2021 and December 2022.

Table 4: List of Meetings Conducted for the Environmental Review Process Under the National Environmental Policy Act (NEPA)

No.	Meeting Name	Meeting Date
BOEM Public Meetings, NEPA Meetings		
1.	North Coast, 1 st Scoping Meeting	8/24/2021

No.	Meeting Name	Meeting Date
2.	North Coast, 2 nd Scoping Meeting	8/24/2021
3.	Central Coast, 1 st Scoping Meeting	12/1/2021
4.	North Coast, 1 st Draft EA Meeting	1/25/2022
5.	North Coast, 2 nd Draft EA Meeting	1/26/2022
6.	Central Coast, 2 nd Scoping Meeting	1/5/2022
7.	Central Coast, 1 st Draft EA Meeting	4/14/2022
8.	Central Coast, 2 nd Draft EA Meeting	4/19/2022

3.2.1 North Coast

Decision-Making Process & Timeline

- *Environmental Analysis Process:* Participants asked questions and expressed concern about the environmental planning process steps, stating that impacts to the environment, human uses, or fisheries should be understood during the call area phase to identify suitable areas to avoid for wind energy development early in the process. It was suggested that environmental and technical review should take place after plans and designs are submitted. Participants expressed appreciation that the process was starting due to an urgent need for renewable energy. Others thought that the process was rushed, causing difficulties for those in the fishing community to participate. Stakeholders expressed gratitude for the public involvement process, and noted it was an important part of choosing the best lease areas.

Potential Impacts on Existing Ocean Uses

- *Economic Impacts to Fishing Industry:* Participants asked questions and provided comment on the importance of understanding the potential economic impacts to the fishing industry during scoping meetings. Comments included whether the Draft EA adequately highlighted the importance of the fishing industry or how the fishing industry would be displaced from the call area.
- *Habitat and Wildlife Impacts:* Participants said they would like to see impacts to reefs, fish, mammals, and other marine wildlife considered in the EA.

3.2.2 Central Coast

Decision-Making Process

- *Environmental Assessment:* Commenters expressed their belief that an Environmental Impact Statement (EIS) would be more appropriate than an Environmental Assessment (EA). They noted their belief that an EIS would offer information concerning impacts and alternatives at a stage in the process where significant decisions could be made to avoid or minimize adverse effects.
- *Public Involvement:* Commenters expressed a desire for BOEM do conduct more engagement with stakeholders, including hosting more meetings and increasing communication.

Potential Impacts on Existing Ocean Uses

- *Fishing and Economic Impacts:* Participants spoke about potential impacts to recreational and commercial fishing due to development of offshore wind, noting that many fisheries were in the call area. Commenters suggested that offshore wind development projects could be built with a local workforce and offer re-training and apprenticeships. Other comments said that the focus should be on growing jobs instead of replacing fishing jobs with construction jobs.
- *Habitat and Wildlife Impacts:* Participants commented that impacts to wildlife, especially whales, should be considered. Participants noted that WEAs might provide habitat and refuge for fish. Other habitat and ecosystem concerns included effects on water quality and nutrient upwelling.

California's Energy Portfolio

- *Transition to Renewable Energy:* Commenters voiced support for offshore wind development in the Morro Bay Call Area. It was also noted that this initiative could help meet the state's renewable energy goals. Commenters shared input that offshore wind energy is perceived to be more environmentally friendly than oil and gas development and reduce the likelihood of oil spills in the area.

3.2.3 California Proposed Sale Notice Auction Seminar

BOEM held a virtual public meeting to inform potential bidders and the public of the California Offshore Wind Auction for the North and Central Coast Wind Energy Areas. Participants asked about bidding credits and qualifying and bidding procedures in each region. Table 5 below summarizes the California Proposed Sale Notice and Auction-Related meetings that were held between January 2021 and December 2022.

BOEM held an offshore wind energy lease sale on Dec. 6-7, 2022, for areas on the Outer Continental Shelf (OCS) off central and northern California. The lease sale drew competitive winning bids from five companies totaling over \$757 million. The online auction was held online

in a series of rounds and allowed qualified offshore wind developers to bid on five lease areas – the first-ever offered along the Pacific coastline – as described in BOEM’s Final Sale Notice (FSN). Winners and high bids for each of the lease areas and a Round-by-Round Summary are available on the [BOEM California page](#) under “History” (direct link: <https://www.boem.gov/renewable-energy/state-activities/pacw-1-round-round-results>).

Table 5: List of BOEM California Auction-Related Public Meetings

No.	Meeting Name	Meeting Dates
BOEM Public Meetings, Auction-Related Meetings		
1.	Proposed Sale Notice, Auction Seminar	6/16/2022
2.	CA Offshore Wind Lease Sale	12/6/2022-12/7/2022

Bidding Process

- *Bid Credits*: Participants asked about the basis for the bidding credit percentage and what about the evaluation process for the Bid Credits Conceptual Strategy. It was suggested that BOEM consider raising the percentage. Participants also asked about bidding credits for Community Benefits Agreements that could be applied to fishing communities. They asked how the percentages were calculated, if credits will only be given to specific boats or fisheries, and if this percentage had been analyzed and found sufficient to engage bidders with the commercial fishing industry.
- *Regions*: Participants asked other questions about rules to qualify for an auction in a region and the process to bid in each region.

3.3 Intergovernmental Renewable Energy Task Force

The BOEM California Intergovernmental Renewable Energy Task Force (“Task Force”), established in 2016, reflects a partnership between federal, state, and local agencies, as well as Tribal governments. It serves as a forum to discuss issues and concerns, and exchange data and information about biological and physical resources and ocean uses and priorities. The themes below reflect the comments and questions from participants at two meetings in 2021 and 2022. The meeting in 2021 focused on discussing next steps for offshore wind off California’s central and north coasts. The 2022 meeting was a public meeting with Task Force members to facilitate early and continual dialogue and collaboration opportunities on the Proposed Sale Notice (PSN) and other Task Force related updates. The themes below summarize comments made by Task Force members and the attending public. Table 6 below summarizes the BOEM California

Intergovernmental Renewable Energy Task Force meetings that were held between January 2021 and December 2022.

Table 6: List of BOEM California Intergovernmental Renewable Energy Task Force Meetings

No.	Meeting Name	Meeting Date
BOEM CA Intergovernmental Renewable Energy Task Force Meeting		
1.	BOEM Intergovernmental Task Force Meeting	7/13/2021
2.	BOEM Intergovernmental Task Force Meeting	6/3/2022

Tribal and Stakeholder Engagement

- *Tribal Engagement:* Task Force members encouraged BOEM to continue its engagement with Tribal Nations and noted some Tribes, especially smaller ones, have limited capacities to engage. Task Force members suggested that BOEM make funding available to support ongoing participation by Tribal members. Another Task Force member suggested that funding be made available to support the engagement of other constituencies of limited means, including local fishing communities. Participants noted that Morro Bay and Diablo Canyon are ancestral lands of cultural, ceremonial, and spiritual importance to the Santa Ynez Band of Chumash Indians Tribe.
- *Fishing Community Engagement:* Attendees voiced concern about potential impacts on fisheries and were worried that BOEM was not adequately engaging with the fishing industry and fishing communities. They stated that offshore wind development needs to be done in a transparent way with meaningful input from these constituencies. Others noted that data on potential fisheries impacts needs to be brought in at the beginning of the process. Commentors said that BOEM should also consider providing funding to support participation of local fishing representatives in this process.

Potential Impacts on Existing Ocean Uses

- *Fishing and Economic Impacts:* Participants expressed concern about impacts on commercial fishing and fishing communities. Attendees shared concerns that offshore wind energy development could overwhelm existing infrastructure of the ports as well as water resources.
- *Ecological Impacts:* Members of the public expressed concerns about the ecological impacts of offshore wind development on marine ecosystems and processes, such as upwelling. Commentors suggested instituting an adaptive management structure that would provide community oversight of the offshore wind activities.

Economic Impact Mitigation

- *Jobs and Community Benefits:* Attendees noted the important opportunity for new job creation coming from offshore wind development in California. Participants recommended support for tribal economic partnerships and providing electrical grid upgrades. Task Force members discussed who would be an “impacted stakeholder” in relation to the Community Benefit Agreement Bid Credit. There was also a request to increase the 2.5% bid credit and use the community benefit agreement to invest in the infrastructure of tribal and local communities. Members of the public expressed the need to provide investment in transparent, equitable, engagement for community benefit agreements.

Support for Offshore Wind Energy

- *Importance of Renewable Energy:* Attendees expressed support for the development of offshore wind energy off the north and central coasts. Attendees shared that taking advantage of offshore wind resources in the north and central coasts will be a key step in combatting the climate crisis and achieving California’s decarbonization goals.

3.4 Fishing Community

BOEM conducted outreach to stakeholders in the fishing community in multiple formats. The themes summarized in the four sections below were captured from (1) a meeting with a recreational fishing group, and (2) the California Department of Fish & Wildlife (CDFW) Multi-Agency Offshore Wind Meetings on the north and central coast, hosted by CDFW and attended by BOEM. These meetings were held to gather comments on mitigating potential impacts of offshore wind development on commercial and recreational fishing.

3.4.1 North Coast

Themes in this section were summarized from several California Department of Fish & Wildlife (CDFW) Multi-Agency Offshore Wind Meetings with North Coast fishermen that took place in 2021. Table 7 below summarizes the CDFW Multi-Agency Offshore Wind meetings with North Coast fishermen that were held between January 2021 and December 2022.

Table 7: List of North Coast Fishing Community Meetings

No.	Meeting Name	Meeting Date
Fishing Community – North Coast		
1.	General Outreach Meeting, Eureka	11/3/2021
2.	General Outreach, Crescent City	11/3/2021

No.	Meeting Name	Meeting Date
3.	General Outreach, Fishing, Fort Bragg	11/4/2021
4.	Draft EA Meeting, Fishing, Fort Bragg	3/17/2022
5.	Draft EA, Fishing, Crescent City	3/18/2022
6.	Proposed Sale Notice, Eureka	7/14/2022

Potential Impacts on the Commercial Fishing Industry

- Economic Impacts: Fishing community members expressed concern about loss of income or livelihood due to exclusion from fishing areas within the proposed WEAs and potential buffer areas around associated infrastructure like transmission cables. Another concern was that turbine construction and transportation from ports could interfere with fishing, resulting in financial losses. Numerous fishing community members believed that WEAs overlapped with significant portions of the Humboldt fishing area, which fishermen believed would significantly impact bottom trawling since half of the state’s ground fish are from the Eureka area. It was noted that there could be a ripple effect on the local economy if there is also loss of fish processing plants.
- Mitigation: Fishing community members commented on the potential of compensatory mitigation. Several stated that fisherman do not want monetary compensation if it means a loss of fishing work or employment. Fishermen believed transitioning to employment opportunities with lessees was an option, but others were not interested in retraining for new employment opportunities. Fishing community members noted that it could be difficult to compensate for the loss of a multi-generational business. It was suggested that opening new fishing areas consistent in size with areas closed due to wind energy development could be a mitigation option. Other suggestions related to mitigation approaches included offering marine vessel or port infrastructure upgrades such as cold storage facilities; requiring developers to have a mitigation plan that BOEM could vet with the fishing community; funding for fishing organizations to protect fishing infrastructure like processing facilities and ice plants; and agreements that address lost fishing gear.
- Habitat and Wildlife Impacts: Fishing community members noted concerns over the potential for fish and wildlife behavioral changes and impacts to ecosystems in and around the OSW project areas. Input was shared on how wind energy infrastructure might affect wildlife migratory behavior, travel, and feeding. Members also raised specific concern about birds striking turbines and specific species, like prawns and anchovies, that could be more sensitive to offshore wind development. Fishing community members asked questions about how wind farms might affect whale

behavior; what impact electromagnetic fields from transmission lines might have; and if ocean water temperature and salinity might be affected. Members noted that the WEAs could create beneficial habitat for marine life.

- *Navigation Impacts:* Fishing community members noted a need for transit lanes between individual turbines, noting that additional navigation around the restricted areas could lead to increased fuel consumption and lost time. Discussion included questions related to mooring and the line drifts into navigable waters.

Decision-Making Process & Timeline

- *Communication and Engagement:* Fishing community members expressed a desire for more communication and engagement with agencies and offered suggestions for improving communication. It was expressed that increased communication and engagement could help mitigate impacts from OSW and provide benefits to the fishing industry. Fishing community members noted a desire for BOEM to incorporate data shared from fisheries and clear communication from agencies about how their data is being used. They shared challenges to attending meetings relating to loss of income, and noted that meetings should take place when significant information can be shared. Fishing community members requested stronger relationships with agencies, with suggestions for BOEM to create a fisherman's stakeholder group and to engage beyond fishing associations to businesses like processing plants. They also suggested agencies form communication opportunities to gather fishing communities as a larger West Coast effort.

California's Energy Portfolio

- *Costs and Renewable Energy Targets:* Fishing community members had questions about costs of renewable energy, inquiring if the cost of renewable energy has decreased such that OSW projects will be economically feasible and if citizens can afford the energy they generate. They asked if the energy from wind turbines will offset the amount of energy used to maintain them. Other questions related to how the 10GW target in Assembly Bill 525 was set and whether inflation and supply chain issues factor into energy targets. Others asked about the carbon footprint of constructing, moving, implementing, and maintaining wind turbines.
- *Wind Energy Development Siting:* Fishing community members asked questions about why wind projects could not be located on land, farther offshore, or in unfishable waters. Other fishing community members expressed concern that ocean conditions and natural hazards could impact turbines. Previous extreme weather events were noted, including a tsunami that impacted the harbor, and an active subduction fault line in the area that could potentially damage transmission cables.

Data and Studies

- *Missing Data and Pilot Studies:* Fishing community members asked agencies to consider the studies of European fixed bottom wind turbines, specifically sections describing

cables breaking and causing dragging and damaging lines across the ocean floor. They expressed concerns about data sources and whether additional data is needed. This includes data on productive fishing areas and data that addresses current species range compared to historic ranges. Fishing community members expressed a belief that the current buoy off Humboldt Bay might not provide an accurate model as it does not account for context of the changing current within Humboldt Bay. Others talked about the desire for more local data, noting that block maps might not accurately reflect the current fishing activity. Some fishing community members expressed a preference for pilot projects testing wind energy over proposed models and studies.

Accountability

- *Developer Accountability:* Fishing community members asked questions related to accountability for maintaining infrastructure and addressing issues like wind turbines becoming unmoored. They also expressed concern about decommissioning, with comparisons to historic oil and gas infrastructure, and how it could impact navigation and fishing. Fishing community members requested BOEM to identify a trigger that would stop a project if impacts are too significant, and that criteria needs to be clear before future lease sales.
- *Agency and State Response:* Fishing community members requested more information on appropriate actions to take if site assessment work violated the agreements set forth in the consistency determination, and if BOEM has the power to terminate site assessment activities. They expressed curiosity as to the timing of the leasing process alongside the ongoing site assessment and planning activities. There were questions related to the State’s ability to work with federal agencies if it received sufficient feedback from environmental, fishery, and other stakeholder groups indicating that proposed OSW activities would significantly impact the community and environment.

3.4.2 Central Coast

Themes in this section were summarized from comments made at several California Department of Fish and Wildlife Multi-Agency Offshore Wind Meetings with Central Coast fishermen in 2021 and 2022. Table 8 below summarizes the CDFW Multi-Agency Offshore Wind meetings with Central Coast fishermen that were held between January 2021 and December 2022.

Table 8: List of Central Coast Fishing Community Meetings

No.	Meeting Name	Meeting Date
Fishing Community – Central Coast		
1.	Fishing Meeting, Santa Barbara	8/4/2021

No.	Meeting Name	Meeting Date
2.	Fishing Meeting, Santa Barbara	11/29/2021
3.	Fishing Meeting, Morro Bay	11/30/2021
4.	Fishing Meeting, Morro Bay	11/30/2021
5.	Fishing Meeting, Santa Barbara	5/16/2022
6.	Fishing Meeting, Morro Bay	5/17/2022
7.	Proposed Sale Notice, Morro Bay	7/19/2022

Potential Impacts on Existing Ocean Uses

- Economic Impacts:* Fishing community members listed ways in which wind energy development in the call areas might impact them economically. There were concerns over equipment catching fire and impacting fishing insurance rates. Fishing community members brought up previous costs of cable exposure in other windfarms. They shared data related to increases in traveling distance for fisherman as well as an increase in cable route problems in some European fishing communities. There was also input related to navigation impacts, radar equipment functionality, and visibility due to wind farm development.
- Wildlife and Habitat:* Fishing community members had various concerns about impacts on wildlife and habitat that might affect the fishing industry. General concerns related to pollution, nutrient upwelling, water temperature, wind vortex directions, oxygen levels, and phosphorous levels. They noted that reduced fishing areas may affect their ability to fish. There were concerns about impacts to albacore and sablefish. Stakeholders noted concerns about perceived impact of electromagnetic fields from cables on certain species (sharks, crabs, eels, etc.) Fishing community members said that the Morro Bay WEA could lead to bluefin and groundfish recreational fishing closures.
- Community Benefit Agreements and Developer Credits:* Members of the fishing community expressed a desire to see community benefit agreement money go to groups directly impacted by offshore wind and that an agreement should be finalized before the construction and operations (COP) phase. Fishing community members appreciated working with Castle Wind on a community benefits agreement and would like to use it as a model. They described a collective benefits process that brought together fishing representatives, four industry representatives, agency representatives, and a professional mediator. Two examples referenced in the meeting include the Joint

Oil Fisheries Liaison Office (JOFLO) mechanism and the Pacific Fishery Management Council. Fishing community representatives noted a negative experience with cable companies and community benefit agreements; however, others referenced the Joint Liaison Cable/Mutual Benefits Agreement as a positive example as it allowed fishermen to purchase equipment and cover travel costs associated with their contributions. Fishing community members mentioned financial support for updated safety equipment was used in past community fishing agreements. They requested that federal and State agencies work together to identify methods to offset impacts to fishing communities. Members of the fishing community about enforcement of community benefits agreements. They also discussed the 2.5% credit, and whether it was a significant enough incentive for lessees to collaborate with the fishing community.

Decision-Making Process

- *Engagement and Communication:* Fishing community members discussed strategies for increasing the influence the fishing community could have on the implementation of future mitigation strategies. An example of this is the formation of organized groups that are actively working on a community benefits agreement. This agreement would then serve as the foundation for future engagement with the fishing community. It was also suggested to provide a per diem for the fishing community members to attend working group meetings. Fishing community members also noted that communication and coordination with the fishing community regarding site assessment and characterization surveys could help prevent gear and fishing conflicts and suggested a minimum 21-day notice to fisheries. They also shared that a fishing liaison and a dedicated primary government contact would be helpful.
- *Accountability and Representation:* The fishing community provided input on the enforceability of agreements between developers and fisheries, and whether agencies can advocate for and protect their interests. Fishing community members recommended creating enforceable written agreements between fishing communities and agencies. Additionally, they suggested embedding fishing industry representation at the agency level. Others suggested having a legal entity that energy companies and BOEM could work with to present consistent agreements to fishing communities. Suggestions include an ombuds advocate or a Sea Grant Fellow. Fishing community members suggested a liaison, such as regional port-centered entities, could represent fishing communities in community benefits negotiations. Additional input from the fishing community included a preference by some to work directly with OSW developers, pointing to how early conversations with developers, like Castle Wind, had worked effectively with fishermen in the past.

California's Energy Portfolio

- *Support for Renewable Energy and Questions about Offshore Wind:* Fishing community participants had concerns about how much renewable energy might be developed in the WEAs. They shared concern that the size of the optimal area for energy demand

would lead to the development of wind farms along the entire coast. Fishing community members provided input on their perceived input of the efficiency of wind farms as a renewable energy source.

Data

- *Data Sources and Pilot Studies:* Fishing community participants talked about data sources. Examples include the opinion that fish tickets do not count as an accurate source of data collection and a discussion on the sources of data used to calculate energy production estimates. Participants suggested BOEM and the State of California consider current and historical changes in fishing as some fishing community members believed Morro Bay has fishing cycles that rotate every 6-7 years. Participants noted the importance of having baseline control data to measure before and after offshore wind development impacts. Other fishing community members thought that more data needed to be collected through conducting tests by placing turbines on buoys before building structures, creating a corridor within the Morro Bay WEA to measure the effects of offshore wind, or construction of a pilot wind farm prior to a commercial wind farm, such as the proposed projects off the coast of Vandenberg Space Force Base. Fishing community stakeholders believed that the leasing process should move forward after surveys are conducted around the WEA and after BOEM studies the potential impacts.

3.4.3 National Fisheries Mitigation Meetings

This section includes themes from three meetings hosted by BOEM to gather comments on draft guidance on mitigating potential impacts of offshore wind development on commercial and recreational fishing. Table 9 below summarizes the National Fisheries Mitigation meetings that were held between January 2021 and December 2022. Two meetings were specifically geared towards fishing communities on the Pacific Coast.

Table 9: List of West Coast Fisheries Mitigation Meetings

No.	Meeting Name	Meeting Date
Fishing Community – Mitigation Meeting		
1.	Fisheries Mitigation Meeting, Pacific Coast	12/13/2021
2.	Fisheries Mitigation Meeting	12/13/2021
3.	Fisheries Mitigation Meeting, Pacific Coast	7/15/2022

Potential Impacts on Existing Ocean Uses

- *Economic Impacts:* Participants voiced concern over impacts to commercial industries and associated entities and businesses like harbors, processors, bait shops and restaurants. Participants said that mitigation should consider a variety of impacts. Participants noted that BOEM should compensate for potential social and other economic losses from declining long-term capital investments and infrastructure. Participants also asked questions about how cumulative impacts would be considered and compensated for. There were questions about whether the 2.5% credit for the fishing community is too low of an incentive for developers.
- *Navigation:* Participants expressed concerns about navigation. Some said that new traffic/channels from offshore wind will disperse traffic into other areas and impact existing fishing areas. Others noted that multi-day drifting for ground fish in wind areas could become a safety hazard and proposed 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. It was also suggested that Automatic Identification System, monitoring for service traffic, be used to assess whether vessels stay within traffic lanes.
- *Wildlife and Habitat:* Participants voiced concern about perceived impacts from electromagnetic fields on wildlife migration, impacts from wind and swells due to platforms on the water, and how projects might interact with the Chumash Heritage National Marine Sanctuary.

Accountability

- *Developer Accountability and Decommissioning:* Participants asked what oversight within BOEM exists to determine the accuracy of economic impact estimates, how the fishing industry could contest these estimates if they wanted to, and whether BOEM would consider a formal rulemaking process where outcomes can be enforced on the lessee and fisheries could be protected. Others asked if there will be a fund to pay for decommissioning, how maintenance works, and how traffic will be handled.

Data

- *Missing Data:* Participants expressed concern about perceived missing data, noting their belief that some maps leave out fishing grounds. Others noted the difficulty of commenting on guidance when they believed data on impacts to fish, birds, and marine life were insufficient.

3.4.4 Pacific Fisheries Management Council (PFMC)

BOEM presented updates at multiple meetings of the PFMC in 2021 and 2022. The below themes are summarized from council member discussions and public comment at those meetings. Table 10 below summarizes the PFMC meetings that were held between January 2021 and December 2022 where BOEM attended.

Table 10: List of Pacific Fishery Management Council (PFMC) Meetings

No.	Meeting Name	Meeting Date
Fishing Community – Pacific Fishery Management Council (PFMC)		
1.	General Outreach, Pacific Fishery Management Council	2/24/2021
2.	General Outreach, Pacific Fishery Management Council	3/9/2022
3.	General Outreach, Pacific Fishery Management Council	6/21- 6/26/2021
4.	General Outreach, Pacific Fishery Management Council	7/22/2021
5.	General Outreach, Pacific Fishery Management Council	7/23/2021
6.	General Outreach, Pacific Fishery Management Council	9/1/2021
7.	General Outreach, Pacific Fishery Management Council	9/11/2021
8.	General Outreach, Pacific Fishery Management Council	9/13/2021
9.	General Outreach, Pacific Fishery Management Council	11/10/2021
10.	General Outreach, Pacific Fishery Management Council	11/16/2021
11.	General Outreach, Pacific Fishery Management Council	2/1/2022
12.	General Outreach, Pacific Fishery Management Council	3/11/2022
13.	General Outreach, Pacific Fishery Management Council	3/22/2022
14.	General Outreach, Pacific Fishery Management Council	7/26/2022

Decision-Making Process

- *Letters to BOEM:* In the meetings, Council members discussed initiating letters to BOEM and sometimes adjustments to the letters. In March 2021, the Council approved sending comment letters on the Morro Bay Extensions and the Humboldt Wind Energy Area (and a letter to the California State Lands Commission on two pilot projects proposed in state

waters off Vandenberg Space Force Base). In September 2021, the Council approved preparing a letter to BOEM in response to the pending comment opportunity on the Morro Bay Wind Energy Area Environmental Assessment notice for comment. In November 2021 the Council approved developing and sending a cover letter and suggested attachments on BOEM research priorities, including the Council’s Research and Data Needs Document and previous comments on study needs related to offshore wind development and planning activities. In March 2022, the Council directed staff to develop comment letters on Oregon offshore wind energy Call Areas and the Morro Bay Wind Energy Area Draft Environmental Assessment.

- *Engagement:* Council members spoke about the opportunities to provide input and the engagement process. Council members expressed appreciation to the BOEM representatives at the meeting for their work and continued engagement. Council members discussed how best the Council could coordinate to provide timely input and comment. They noted that BOEM might be able to help them understand their process better and identify opportunities for comment. Some council members expressed concern that BOEM was moving quickly on offshore wind development and that their concerns would not matter.
- *Environmental Analysis:* Council members discussed the environmental review process and stated that the NEPA analysis should examine the impacts beyond the initial exploratory phase, including foreseeable actions such as those from development and operations. It was suggested that an environmental impact statement might be more appropriate than the environmental assessments that were being developed. Council members stressed the need for cumulative impacts to be considered.

Potential Impacts on Existing Ocean Uses

- *Fishing Grounds and Economic Impacts:* Council members spoke generally about concerns with economic impacts to fishing and the fishing industry from offshore wind development.

Data

- *Data Accuracy and Demonstration Project:* The Council expressed concerns about how data is being used and about ensuring accurate fisheries-related information. They stated their belief that an offshore wind demonstration project is a better way to gather information about potential impacts.

3.4.5 Recreational

BOEM met with representatives from the American Sportfishing Association in November of 2022. Participants expressed frustration that the differences in commercial and recreational fishing have not been acknowledged and asked that BOEM consider a council process for receiving input. Table 11 below summarizes the meetings held with recreational fishermen that were held between January 2021 and December 2022.

Table 11: List of Recreational Fishing Meetings

No.	Meeting Name	Meeting Date
Fishing Community - Recreational		
1.	Fishing Meeting, Mike Okoniewski, Senior Adviser at Pacific Seafood	1/31/2022
2.	Fishing Meeting, American Sport Fishing Association	11/16/2022

3.5 State Agency Meetings

3.5.1 California Energy Commission (CEC)

In 2021, BOEM presented at CEC virtual workshops which were focused on the next steps to consider offshore wind energy in federal waters off the California coast. In 2022, CEC virtual workshops were held to explore the requirements of Assembly Bill 525 directing the CEC to evaluate and quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits and establish megawatt offshore wind planning goals for 2030 and 2045. The themes below summarize the public comments from this workshop. Table 12 below summarizes the CEC virtual workshops on offshore wind energy that were held between January 2021 and December 2022.

Table 12: List of California Energy Commission (CEC) Meetings

No.	Meeting Name	Meeting Date
State Agency Meetings, California Energy Commission (CEC)		
1.	General Outreach	6/21/2021
2.	General Outreach	3/3/2022

Potential Impacts on Existing Ocean Uses

- Economic Potential of Offshore Wind:*** Public commenters spoke about the potential for offshore wind development to replace old jobs and create new jobs. Commenters expressed worry that there might be impediments to offshore wind creating jobs due to high lease payments forcing developers to import materials. Commenters discussed the use of project labor agreements to deliver more economic benefits to the local

communities, build a skilled workforce and strengthen offshore wind workforce development pathways to long term sustainable careers. It was suggested this could be promoted through a multiple factor bidding system that incentivizes project-wide labor agreements.

- *Ports and Harbors*: Commenters noted that the impacts on harbors and port development should be considered.

California’s Energy Portfolio

- *Transition to Renewable Energy*: Public commenters expressed support of offshore wind development in California to aid in the transition to clean energy and combat climate change. They urged the CEC to set goals for offshore wind development for the future, with commenters asking for higher targets than the ones proposed.

3.5.2 California Coastal Commission (CCC)

BOEM presented updates at several CCC public hearings in 2021 and 2022 on federal consistency of the proposed WEAs. Federal consistency is a part of the Coastal Zone Management Act that requires the federal government to comply with a state's Coastal Management Program when taking actions which are likely to affect coastal resources. The themes below are summarized from discussions between the commissioners and comments from the attending government agency representatives and public. Table 13 below summarizes the CCC hearings that were held between January 2021 and December 2022.

Table 13: List of California Coastal Commission (CCC) Meetings

No.	Meeting Name	Meeting Date
State Agency Meetings, California Coastal Commission (CCC)		
1.	Coastal Commission Hearing	6/8/2021
2.	Coastal Commission Hearing	9/9/2021
3.	Coastal Commission Hearing	11/18/2021
4.	Coastal Commission Hearing	12/16/2021
5.	Coastal Commission Hearing	1/12-1/13/2022
6.	Coastal Commission Hearing	3/9/2022

No.	Meeting Name	Meeting Date
7.	Coastal Commission Hearing (North Coast Consistency Determination Hearing)	4/7/2022
8.	Coastal Commission Hearing (Central Coast Consistency Determination Hearing)	6/8/2022

Decision-Making Process & Timeline

- Stakeholder and Tribal Engagement:* Public commenters, agency representatives, and commissioners spoke about the continued need for active and meaningful engagement. Speakers expressed the need for more resources to conduct local engagement to reach Tribal governments, county and other local governments, community-based organizations, disadvantaged communities, and communities with environmental justice concerns. It was noted that some Tribes might need financial assistance to engage in consultation and a Tribal liaison. Commenters expressed a need for stakeholders such as the vessel industry and the United States Coast Guard and Marine exchanges to contribute more input to the consistency determination.

Potential Impacts on Existing Ocean Uses

- Fisheries:* Speakers expressed concern about impacts on fisheries and related industries. Commenters asked that the consistency determination include language barring the abandonment of equipment at any stage of the exploration, development, or decommissioning process. Recommendations included a fisheries liaison officer funded by the developer and hired by commercial fisherman’s associations. There was also the request for state agencies to adopt the template for fishing community benefit agreements that was submitted to the CCC. Commenters requested analysis of impacts to Indigenous fisheries.
- Habitat and Wildlife Impacts:* Speakers noted the importance of understanding and addressing impacts to habitat and wildlife. It was noted that maintaining connectivity between Marine Protected Areas should be protected. Speakers expressed that marine wildlife are already experiencing impacts from ocean infrastructure, fishing vessel traffic, and climate change impacts. Ongoing monitoring of wildlife impacts was also identified as a need. Commentors stated that equal amount of credit and incentives should be given to restore habitat as is given to offset economic impacts.
- Others:* Speakers at the meeting addressed other potential impacts. It was noted that offshore wind energy development will require major redevelopment and expansion of several California ports. Speakers noted that offshore wind energy would add lights to an otherwise dark ocean sky, interfering with the ability to stargaze.

Economic Impacts

- *Job and community benefits:* Speakers talked about the potential economic impacts of offshore wind and expressed enthusiasm for the new jobs and opportunities they believed offshore wind development would bring to communities. Details for community benefits agreements and associated workforce development programs were also discussed. Speakers expressed that the bidding credits were too low.

Data and Monitoring

- *Data Sharing and Adaptive Management:* Speakers talked about data gathering and sharing. Commenters noted that Tribes have their own confidential information that they might be willing to share. Another recommendation was for granular mapping of Habitat Areas of Particular Concern ahead of leasing and detailed benthic surveys ahead of development. Other suggestions included secondary entanglement monitoring along with daily visual inspections, bird strike and collision monitoring, and requiring protected species observers on vessels. Commenters noted the importance of an adaptive management plan and stated that they thought an offshore wind demonstration project would be more appropriate.

Renewable Energy Development

- *Meeting Renewable Energy Goals and Pace of Development:* Speakers at the meetings spoke of the importance of renewable energy development to meet the State of California's goals, reduce greenhouse gases, protect against climate change, and protect people, economies, species, and habitats. Speakers stated direct support for developing offshore wind energy in the WEAs BOEM proposed. Commenters noted offshore wind energy's place in a renewable energy strategy but expressed that siting and development must be done in a way that avoids significant environmental impacts. The pace at which BOEM was moving toward offshore wind development was a point of discussion. Some were in favor of the current pace while others felt that planning was happening too quickly to consider impacts sufficiently and ensure accountability. Speakers stated that a programmatic EIS approach would be needed to consider cumulative impacts.

3.6 Coastal Communities

- BOEM made a presentation on the Humboldt Offshore Wind Energy Area to the Trinity City Council Meeting in Humboldt County. The meeting was open to the public and included public comment, summarized below. Table 14 below summarizes coastal community meetings held between January 2021 and December 2022. A member of the public asked what would be visible from the shore in Trinidad.

Table 14: List of Coastal Communities Meetings

No.	Name	Date
Coastal Community – City Council / County		
1.	San Luis Obispo County and Santa Barbara County Regional Economic Action Coalition (REACH) Meeting	7/5/2021
2.	City Council Meeting, Trinidad City	9/14/2021
3.	CA Marine Security Council, Long Beach	11/10/2021
4.	Humboldt County Meeting	7/20/2022

3.7 Industry

3.7.1 Maritime Community

BOEM held meetings with various maritime industry members and organizations. Themes are summarized below for the two meetings held in 2022 with shipping industry stakeholders that had meeting notes available for analysis. Table 15 below summarizes the maritime industry meetings that were held between January 2021 and December 2022.

Table 15: List of Meetings with Industry

No.	Meeting Name	Meeting Date
Industry- Offshore Wind Developer		
1.	Meeting with American Waterways Operators (AWO)	9/20/2021
2.	Regional U.S. Coast Guard (USCG) and American Waterways Engagement	3/8/2022
3.	Regional Quality Steering Committee	3/9/2022
4.	General Outreach, Pacific Merchant Shipping Association (PMSA)	4/20/2022
5.	General Outreach, Pacific Merchant Shipping Association (PMSA)	5/23/2022

No.	Meeting Name	Meeting Date
6.	General Outreach, Shipping Industry	5/23/2022
7.	General Outreach, Pacific Merchant Shipping Association (PMSA)	7/28/2022
8.	General Outreach, Shipping Industry	7/29/2022
9.	General Outreach, Shipping Industry	11/30/2022
Industry - Offshore Wind Developer		
10.	General Outreach, American Waterways Operators (AWO)	9/20/2021
11.	General Outreach, Cierco Wind Energy	7/20/2022
12.	General Outreach, CA Offshore Wind Developers	7/27/2022
13.	General Outreach, Reach Subsea ASA	8/22/2022
14.	General Outreach, American Clean Power (ACP)	8/24/2022

Decision-Making Process

- *Communication and Engagement*: Participants noted that marine exchanges, NOAA notifications and contact lists, pilot associations, trade associations, and Coast Guard sector commander meetings are all good channels for reaching mariners. Regular engagement and a maritime communications plan were also discussed.

Potential Impacts on Existing Ocean Uses

- *Shipping Lanes and Navigation*: Participants discussed shipping lanes noting that setback from the WEAs might be needed, and if shipping lanes were moved they need to have the proper depth. Participants asked if BOEM was doing the navigational risk assessment or if developers were. It was suggested that the navigational risk assessment be open for public comment. Participants also asked if existing shipping lanes could be added to the lease in advance so developers could account for them.

Appendix

Appendix 1. Summary of All Outreach and Engagement Meetings

Table 16: All outreach that took place between January 2021 and December 2022

No.	Meeting Name	Meeting Date
California (CA) Tribal Meetings		
4.	Tribal Meeting on Climate Resiliency	1/12/2021
3.	Staff-level Tribal Meeting, Santa Ynez Band of Chumash Indians Pre-Consultation Meeting	1/13/2021
4.	Tribal Meeting, Listening Session for Tribal Leaders hosted by BOEM in coordination with NOAA and the White House Office of Science and Technology Policy	1/26/2021
6.	Tribal Outreach, BOEM Tribal Ocean Summit	3/2-3/4/2021
7.	Tribal Outreach, BOEM Tribal Ocean Summit	3/16-3/18-2021
6.	CEC-led North Coast Inter-Tribal Roundtable	6/14/2021
8.	CEC-led All-Chumash Tribal Roundtable	6/15/2021
39.	BOEM CA Task Force	7/13/2021
40.	Government-to-Government, Santa Ynez Band of Chumash Indians	8/30/2021
41.	Staff-level Tribal Meeting, Blue Lake Rancheria	11/8/2021
42.	Staff-level Tribal Meeting, Wiyot Tribe	11/15/2021
43.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	11/17/2021
44.	CEC-led Tribal Meeting, Chumash Tribes	11/29/2021

No.	Meeting Name	Meeting Date
45.	CEC-led Tribal Meeting, Chumash Tribes	11/30/2021
46.	CEC-led Tribal Meeting, Salinan Tribe	12/1/2021
47.	Staff-level Tribal Meeting, Yurok	12/8/2021
48.	Staff-level Tribal Meeting, Yurok	12/10/2021
49.	Government to Government Consultation, Santa Ynez Band of Chumash Indians	1/10/2022
50.	Staff-level Tribal Meeting, Blue Lake Rancheria	2/1/2022
51.	Staff-level Tribal Meeting, Santa Ynez Band of Chumash Indians	3/10/2022
52.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	4/20/2022
53.	Tribal Outreach	4/21/2022
54.	Tribal Meeting with Yurok Councilmembers	5/4/2022
55.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	5/18/2022
56.	BOEM CA Task Force	5/23/2022
57.	Government to Government Consultation, Yurok	6/15/2022
58.	CEC-led Tribal Meeting	7/11/2022
59.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	7/20/2022
60.	Government to Government Consultation, Santa Ynez Band of Chumash Indians	7/22/2022
61.	Staff-level Tribal Meeting, Yurok Tribe	7/23/2022
62.	Tribal Meeting, BOEM Regional Quarterly Update	7/26/2022

No.	Meeting Name	Meeting Date
63.	Staff-level Meeting Tribal, Yurok	8/26/2022
64.	Government to Government Consultation, Yurok	9/7/2022
65.	Staff-level meeting, Blue Lake Rancheria	9/16/2022
66.	Staff-level Tribal Meeting, Yurok	9/16/2022
67.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	9/21/2022
68.	Staff-level Tribal Meeting, Yurok Tribe	10/6/2022
69.	Staff-level Tribal Meeting, Blue Lake Rancheria	10/14/2022
40.	Tribal Outreach, West Coast Ocean Alliance (WCOA)	10/19/2022
42.	Leadership meeting, Yurok Tribe	12/1/2022
43.	Tribal Outreach, West Coast Tribal Caucus	12/19/2022
BOEM Public Meetings, NEPA Meetings		
44.	North Coast, Scoping Meeting (1)	8/24/2021
45.	North Coast, Scoping Meeting (2)	8/24/2021
46.	Central Coast, Scoping Meeting (1)	12/1/2021
47.	North Coast, Draft EA Meeting (1)	1/25/2022
48.	North Coast, Draft EA Meeting (2)	1/26/2022
49.	Central Coast, Scoping Meeting (2)	1/5/2022
50.	Central Coast, Draft EA Meeting (1)	4/14/2022
51.	Central Coast, Draft EA Meeting, (2)	4/19/2022

No.	Meeting Name	Meeting Date
BOEM Public Meetings, Auction-Related Meetings		
52.	Proposed Sale Notice, Auction Seminar	6/16/2022
53.	CA Offshore Wind Lease Sale	12/6/2022
BOEM CA Intergovernmental Renewable Energy Task Force Meeting		
54.	BOEM Intergovernmental Task Force Meeting	7/13/2021
55.	BOEM Intergovernmental Task Force Meeting	6/3/2022
Fishing Community – North Coast		
56.	General Outreach Meeting, Eureka	11/3/2021
57.	General Outreach, Crescent City	11/3/2021
58.	General Outreach, Fishing, Fort Bragg	11/4/2021
59.	Draft EA Meeting, Fishing, Fort Bragg	3/17/2022
60.	Draft EA, Fishing, Crescent City	3/18/2022
61.	Proposed Sale Notice, Eureka	7/14/2022
Fishing Community – Central Coast		
62.	Fishing Meeting, Santa Barbara	8/4/2021
63.	Fishing Meeting, Santa Barbara	11/29/2021
64.	Fishing Meeting, Morro Bay	11/30/2021
65.	Fishing Meeting, Morro Bay	11/30/2021
66.	Fishing Meeting, Santa Barbara	5/16/2022

No.	Meeting Name	Meeting Date
67.	Fishing Meeting, Morro Bay	5/17/2022
68.	Proposed Sale Notice, Morro Bay	7/19/2022
Fishing Community – Mitigation Meeting		
69.	Fisheries Mitigation Meeting, Pacific Coast	12/13/2021
70.	Fisheries Mitigation Meeting	12/13/2021
71.	Fisheries Mitigation Meeting, East Coast	7/11/2022
72.	Fisheries Mitigation Meeting, Pacific Coast	7/15/2022
73.	Fisheries Mitigation Meeting, Gulf of Mexico	7/18/2022
74.	Fisheries Mitigation Meeting	7/21/2022
Fishing Community – Pacific Fishery Management Council (PFMC)		
75.	General Outreach, Pacific Fishery Management Council	2/24/2021
76.	General Outreach, Pacific Fishery Management Council	3/9/2022
77.	General Outreach, Pacific Fishery Management Council	6/21-6/26/2021
78.	General Outreach, Pacific Fishery Management Council	7/22/2021
79.	General Outreach, Pacific Fishery Management Council	7/23/2021
80.	General Outreach, Pacific Fishery Management Council	9/1/2021
81.	General Outreach, Pacific Fishery Management Council	9/11/2021
82.	General Outreach, Pacific Fishery Management Council	9/13/2021
83.	General Outreach, Pacific Fishery Management Council	11/10/2021

No.	Meeting Name	Meeting Date
84.	General Outreach, Pacific Fishery Management Council	11/16/2021
85.	General Outreach, Pacific Fishery Management Council	2/1/2022
86.	General Outreach, Pacific Fishery Management Council	3/11/2022
87.	General Outreach, Pacific Fishery Management Council	3/22/2022
88.	General Outreach, Pacific Fishery Management Council	7/26/2022
Fishing Community - Recreational		
89.	Fishing Meeting, Mike Okoniewski, Senior Adviser at Pacific Seafood	1/31/2022
90.	Fishing Meeting, American Sport Fishing Association	11/16/2022
State Agency Meetings, California Energy Commission (CEC)		
91.	General Outreach	6/21/2021
92.	General Outreach	3/3/2022
State Agency Meetings, California Coastal Commission (CCC)		
93.	Coastal Commission Hearing	6/8/2021
94.	Coastal Commission Hearing	9/9/2021
95.	Coastal Commission Hearing	11/18/2021
96.	Coastal Commission Hearing	12/16/2021
97.	Coastal Commission Hearing	3/9/2022
98.	Coastal Commission Hearing (North Coast Process)	4/7/2022

No.	Meeting Name	Meeting Date
99.	Coastal Commission Hearing (Central Coast Process)	6/8/2022
100.	Coastal Commission Hearing	1/12-1/13/2022
State Agency Meetings, California Independent System Operator		
101.	Meeting with CEO of CA Independent System Operator (CAISO)	3/18/2021
Coastal Community – City Council / County		
102.	Stakeholder Outreach for CA Central Coast	7/5/2021
103.	City Council Meeting, Trinidad City	9/14/2021
104.	CA Marine Security Council, Long Beach	11/10/2021
105.	Humboldt County Meeting	7/20/2022
Industry - Maritime Community		
106.	Meeting with American Waterways Operators (AWO)	9/20/2021
107.	Regional U.S. Coast Guard (USCG) and American Waterways Engagement	3/8/2022
108.	Regional Quality Steering Committee	3/9/2022
109.	General Outreach, Pacific Merchant Shipping Association (PMSA)	4/20/2022
110.	General Outreach, Pacific Merchant Shipping Association (PMSA)	5/23/2022
111.	General Outreach, Shipping Industry	5/23/2022
112.	General Outreach, Pacific Merchant Shipping Association (PMSA)	7/28/2022

No.	Meeting Name	Meeting Date
113.	General Outreach, Shipping Industry	7/29/2022
114.	General Outreach, Shipping Industry	11/30/2022
Industry - Offshore Wind Developer		
115.	General Outreach, American Waterways Operators (AWO)	9/20/2021
116.	General Outreach, Cierco Wind Energy	7/20/2022
117.	General Outreach, CA Offshore Wind Developers	7/27/2022
118.	General Outreach, Reach Subsea ASA	8/22/2022
119.	General Outreach, American Clean Power (ACP)	8/24/2022
Research and Academia		
120.	BOEM-NOAA National Marine Fisheries Service (NMFS) Offshore Wind Coordination Meeting	2/18/2021
121.	Pacific Standing Committee on Environmental Science and Assessment for Ocean Energy Management (COSA) Meeting	6/1/2021
122.	Pacific Standing Committee on Environmental Science and Assessment for Ocean Energy Management (COSA) Meeting	6/2/2021
123.	Oceans Conference 2022	9/22/2021
124.	Vulnerability Index to Scale Effects of Offshore Renewable Energy on Marine Mammals and Sea Turtles of the U.S. West Coast (VIMMS) study	12/14/2021
125.	Bat and Bird Interactions with Offshore Wind Energy	2/8/2022
126.	Fish and Bird Interactions with Offshore Wind Energy	5/4/2022
127.	ECON Alliance Energy Transition to Net Zero Forum	6/15/2022

No.	Meeting Name	Meeting Date
128.	Committee on Offshore Science and Assessment Meeting	7/11/2022
129.	ESRI GIS Forum on Ocean, Climate, and Weather	11/9-11/10/2022
130.	West Coast Ports Strategy Study	11/10/2022
Offshore Wind Meetings and Conferences		
131.	General Outreach	11/19/2021
132.	Wind Energy Technology Acceptance Workshop	4/20-4/29/2022
133.	Transmission Alternatives for CA North Coast Offshore Wind	5/25/2022
134.	EUCI (Electric Utility Consultants, Inc.) Conference	7/13/2022
135.	Offshore Wind Power Conference	10/18/2022
136.	Reuters Floating Wind Conference	11/7-11/9/2022
Environmental Non-Governmental Organizations (NGOs)		
137.	West Coast Ocean Alliance (WCOA) Meeting	3/24/2021
138.	West Coast Ocean Alliance (WCOA) Meeting	4/2/2021
139.	General Outreach, (Audubon, Defenders of Wildlife, Natural Resources Defense Council, Surfrider)	11/19/2021
140.	General Outreach (Natural Resources Defense Council, Sierra Club, etc.)	11/19/2021
141.	General Outreach, Big Sur Historical Society (BSHS)	1/27/2022
142.	General Outreach, West Coast Ocean Alliance (WCOA)	2/4/2022
143.	Offshore Wind Panel at the Annual Pacific Seabird Group Meeting	2/25/2022

No.	Meeting Name	Meeting Date
144.	General Outreach, U.S. Offshore Wind Synthesis of Environmental Effects Research (SEER)	3/3/2022
145.	West Coast Ocean Alliance (WCOA) Meeting	4/1/2022
146.	West Coast Ocean Alliance (WCOA) Meeting	6/10/2022
147.	General Outreach, NRDC Meeting	8/24/2022
148.	West Coast Ocean Alliance (WCOA) Meeting	9/7/2022
149.	West Coast Ocean Alliance (WCOA) Meeting	9/29/2022
150.	West Coast Ocean Alliance (WCOA) Meeting	10/7/2022
151.	General Outreach, Western Society of Naturalists	11/10-11/12/2022
152.	West Coast Ocean Alliance (WCOA) Meeting	12/2/2022

Appendix 2. Summary of Outreach and Engagement Meetings (Attendance Assessment)

The following table summarizes the various meetings conducted from January 2021-December 2022, categorized by meeting type. The columns of information show the number of attendees within each meeting type. This summary includes an assessment of meetings with detailed meeting notes, thus the number of meetings assessed for attendance in this report does not equate to the total number of meetings conducted³.

Table 17: Summary of Outreach and Engagement Meetings (Attendance and Assessment)

Meeting Type	Attendance Recorded	Number of Meetings Assessed	Total Number of Meetings
Tribal	91	6	41

³ Meeting summaries and attendance data were not always available for each meeting type.

Meeting Type	Attendance Recorded	Number of Meetings Assessed	Total Number of Meetings
NEPA	757	8	9
Auction-Related	156	1	2
Task Force	805	2	2
Fishing, North Coast	111	6	6
Fishing, Central Coast	103	5	7
Fishing, Pacific Fishery Management Council	184	5	14
Fishing, Recreational	4	2	2
Fishing, Mitigation	854	5	6
State Agency, California Coastal Commission	42	2	2
Statewide Agency, California Energy Commission	40	1	8
Coastal Community, City Council	25	1	4
Industry, Maritime Community	23	2	9
Industry, Offshore Wind	0	0	4
Research/Academia	0	0	11
Offshore Wind and Conferences	0	0	6
Environmental NGOs	13	1	16

Meeting Type	Attendance Recorded	Number of Meetings Assessed	Total Number of Meetings
TOTALS	3208	47	150

Appendix 3. List of Tribes Engaged and Contacted

The following table identifies the Tribes notified and invited to consult from January 2021-December 2022.

Table 17: List of Federally recognized Tribes contacted from January 2021-December 2022

No.	Federally recognized Tribes
1.	Barona Band of Mission Indians
2.	Bear River Band of the Rohnerville Rancheria
3.	Big Lagoon Rancheria
4.	Big Pine Paiute Tribe of the Owens Valley
5.	Big Valley Band of Pomo Indians
6.	Blue Lake Rancheria Tribe
7.	Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
8.	Cahto Tribe
9.	Cahuilla Band of Indians
10.	Campo Kumeyaay Nation
11.	Cher-Ae Heights Indian Community of the Trinidad Rancheria
12.	Cloverdale Rancheria of Pomo Indians
13.	Coquille Indian Tribe (Oregon)
14.	Coyote Valley Band of Pomo Indians
15.	Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians (Oregon)
16.	Dry Creek Rancheria Band of Pomo Indians

No.	Federally recognized Tribes
17.	Elem Indian Colony
18.	Elk Valley Rancheria
19.	Ewiiapaayp Band of Kumeyaay Indians
20.	Federated Indians of Graton Rancheria
21.	Fort Bidwell Indian Community
22.	Grindstone Indian Rancheria of Wintun-Wailaki Indians
23.	Guidiville Band of Pomo Indians
24.	Habematolel Pomo of Upper Lake
25.	Hoh Tribe (Washington)
26.	Hoopa Valley Tribe
27.	Hopland Band of Pomo Indians
28.	Iipay Nation of Santa Ysabel
29.	Inaja-Cosmit Band of Indians
30.	Jamul Indian Village
31.	Karuk Tribe
32.	Kashia Band of Pomo Indians of the Stewarts Point Rancheria
33.	Kletsel Dehe Wintun Nation
34.	Koi Nation of Northern California
35.	La Jolla Band of Luiseño Indians

No.	Federally recognized Tribes
36.	La Posta Band of Diegueño Mission Indians
37.	Los Coyotes Band of Cahuilla and Cupeño Indians
38.	Lytton Rancheria (of California)
39.	Makah Tribe (Washington)
40.	Manchester Point Arena Band of Pomo Indians
41.	Manzanita Band of the Kumeyaay Nation
42.	Middletown Rancheria of Pomo Indians
43.	Morongo Band of Mission Indians
44.	North Fork Rancheria of Mono Indians of California
45.	Pala Band of Mission Indians
46.	Pauma Band of Luiseño Indians
47.	Pechanga Band of Luiseño Indians
48.	Pinoleville Pomo Nation
49.	Pit River Tribe
50.	Potter Valley Tribe
51.	Quileute Tribe (Washington)
52.	Quinault Indian Nation (Washington)
53.	Ramona Band of Cahuilla
54.	Redding Rancheria

No.	Federally recognized Tribes
55.	Redwood Valley Little River Band of Pomo Indians
56.	Resighini Rancheria
57.	Rincon Band of Luiseño Indians
58.	Robinson Rancheria of Pomo Indians of California
59.	Round Valley Indian Tribes
60.	San Pasqual Band of Mission Indians
61.	Santa Rosa Band of Cahuilla Indians
62.	Santa Ynez Band of Chumash Indians
63.	Scotts Valley Band of Pomo Indians
64.	Sherwood Valley Band of Pomo Indians
65.	Soboba Band of Luiseño Indians
66.	Sycuan Band of the Kumeyaay Nation
67.	Tolowa Dee-ni' Nation
68.	United Auburn Indian Community of the Auburn Rancheria
69.	Viejas Band of Kumeyaay Indians
70.	Wilton Rancheria
71.	Wiyot Tribe
72.	Yocha Dehe Wintun Nation
73.	Yurok Tribe

Table 18: The following Table identifies additional California Tribes Invited to consult under Section 106 of the National Historic Preservation Act

No.	Tribal Governments
1.	Amah Mutsun Tribal Band
2.	Amah Mutson Tribal Band of Mission San Juan Bautista
3.	Barbareño Band of Chumash Indians
4.	Barbareño/Ventureño Band of Mission Indians
5.	Costanoan Ohlone Rumsen-Mutsun Tribe
6.	Costanoan Rumsen Carmel Tribe
7.	Coastal Band of the Chumash Nation
8.	Esselen Tribe of Monterey County
9.	Northern Chumash Tribal Council
10.	Ohlone Costanoan Esselen Nation
11.	Salinan Tribe of Monterey & Sn Luis Obispo Counties
12.	Xolon Salinan Tribe
13.	yak tit ^{Yu} tit ^{Yu} yak ti ^h ini