

OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
ODFW	Oregon Department of Fish and Wildlife
OSU	Oregon State University
PA	Programmatic Agreement
PACPARS	Pacific Coast Access Route Study
PACW	Pacific Wind Lease Sale
PDC	Project Design Criteria
PFMC	Pacific Fishery Management Council
PLA	Project Labor Agreement
PSN	Proposed Sale Notice
PSO	Protected Species Observer
RPS	Renewable Portfolio Standard
SAP	Site Assessment Plan
SMS	Safety Management System
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
WEA	Wind Energy Area

BOEM-2024-0022-0055	Oceantic Network	Advocacy Group
BOEM-2024-0022-0050	Oregon AFL-CIO	Union
BOEM-2024-0022-0051	Oregon Coast Energy Alliance Network	Advocacy Group
BOEM-2024-0022-0033	Oregon Department of Fish and Wildlife	State Government
BOEM-2024-0022-0058	Oregon State Building and Construction Trades Council	Union
BOEM-2024-0022-0045	Oregon Trawl Commission	Industry-funded Commission
BOEM-2024-0022-0020	Oregon Trawl Commission	Industry-funded Commission
BOEM-2024-0022-0052	Pacific Fishery Management Council	Regional Fishery Management Council
BOEM-2-24-0022-0195	Raymond Van Eck	Individual
BOEM-2024-0022-0047	Renewable Northwest	Advocacy Group
BOEM-2024-0022-0054	Rogue Climate	Advocacy Group
BOEM-2024-0022-0037	RWE	Industry
BOEM-2024-0022-0018	Shrimp Producers Marketing Cooperative	Business/Trade Association
BOEM-2024-0022-0059	South Coast Energy Ventures	Industry
BOEM-2024-0022-0003	Stanley Vejtasa	Individual
BOEM-2024-0022-0036	Surfrider Foundation	Advocacy Group
BOEM-2024-0022-0049	The Nature Conservancy	Advocacy Group
BOEM-2024-0022-0021	Thena Larteri Lyons	Individual
BOEM-2024-0022-0043	ThinkPlace	Consulting Firm
BOEM-2024-0022-0026	U.S. Fish and Wildlife Service	Federal Agency
BOEM-2024-0022-0042	Washington Dungeness Crab Fishermen's Association	Business/Trade Association
BOEM-2024-0022-0017	Washington Dungeness Crab Fishermen's Association	Business/Trade Association
BOEM-2024-0022-0056	West Coast Pelagic Conservation Group	Business/Trade Association
BOEM-2024-0022-0053	West Coast Seafood Processors Association	Business/Trade Association
BOEM-2024-0022-0034	WhoPoo App	Other

Issue 5.7.2 – Conservation Activities Credit

Approximately six commenters wrote about conservation activities credits.

Comment Summary:

A few advocacy groups and a union asserted that BOEM should include a conservation bid credit for future offshore wind leasing, reasoning that such a bid credit should be additive, environmentally critical, regionally relevant, measurable and transparent, and attractive to developers.⁷⁹ Another advocacy group asserted that conservation-related projects have been missing in other approaches to offshore wind development, and that a conservation bid credit could help avoid and mitigate impacts to wildlife and ecosystems, but also help develop science needed to address biodiversity loss.⁸⁰

Yet another advocacy group echoed the recommendations of the National Wildlife Federation and asserted that a conservation bid credit is “the only tool available” to leverage offshore wind leases for conservation efforts.⁸¹

A federal agency recommended a conservation credit be provided to bidders who offer avoidance and mitigation measures for their agency’s trust resources.⁸² Another advocacy group urged BOEM to include environmental avoidance and mitigation measures as lease and bidding credit stipulations.⁸³

BOEM Response: BOEM is not planning a conservation bidding credit at this time, and it will not be included in the FSN for Oregon. However, BOEM is continuing to analyze the comments received and identify any actions needed to consider such credits in future lease sales.

Issue 6 – Leasing Sale Process

Comments associated with this issue are included in the sub-issues below.

Issue 6.1 – Deadlines and milestones

Approximately four commenters wrote about deadlines and milestones.

Comment Summary:

An industry-funded commission raised concerns that BOEM’s history of not cancelling any leases indicates that it intends to see every lease through to development.⁸⁴

Both a trade association and a regional fishery management council stated the leasing process is moving too quickly and not allowing time for thorough analyses of potential, negative impacts that can support responsible decision making.⁸⁵

⁷⁹ BlueGreen Alliance; Oregon AFL-CIO; National Wildlife Federation et al; The Nature Conservancy; Climate Solutions

⁸⁰ The Nature Conservancy.

⁸¹ Climate Solutions.

⁸² U.S. Fish and Wildlife Service

⁸³ National Wildlife Federation et al.

⁸⁴ Oregon Trawl Commission.

⁸⁵ Washington Dungeness Crab Fishermen's Association; Pacific Fishery Management Council.

BOEM Response: BOEM began planning for potential offshore wind energy development for Oregon in 2019. Through the course of five years, BOEM has reached out to Tribal governments, fishing communities, and local, state, and federal agencies as part of the planning process. Our commitment to thoughtful and meaningful engagement is reflected in the steps we have taken, which are described in the previously released Oregon Area Identification Memorandum⁸⁶.

BOEM's offshore wind authorization process spans across several years and includes two environmental reviews under NEPA. The first environmental review is conducted prior to lease issuance and analyzes the potential effects from site assessment and site characterization activities. The second environmental review is completed after a lessee submits a COP and provides for a thorough analysis of potential impacts of proposed activities and facilities for a project under a commercial lease using information gathered by a lessee during site assessment and characterization activities.

Although BOEM has not cancelled any offshore wind lease to date, BOEM's regulations at 30 CFR § 585.422 describes the circumstance under which BOEM could cancel a lease.

Issue 6.1.1 – Pause

Approximately four commenters wrote about a pause in the leasing process.

Comment Summary:

A few individual commenters expressed support for a pause.⁸⁷ A trade association said that BOEM should pause the leasing process to allow Oregonians the opportunity to consider offshore wind more completely, as part of Oregon's historical process for major developments.⁸⁸ Another individual commenter expressed general support for a pause on the lease process, suggesting that turbines would have negative consequences on the coastal environment.⁸⁹ A regional fishery management council recommended not proceeding with the FSN until information and further certainty on impacts to marine ecosystems and fisheries is available.⁹⁰

A trade association stated that BOEM's failure to agree to pause leasing in the two WEAs until the mapping team had a chance to thoroughly evaluate the effects of floating offshore wind and gain consensus, created a "wall of angst" amongst many Oregon residents, particularly the fishing community that has been "poorly treated" by BOEM over the years.⁹¹

BOEM Response: A lease does not authorize construction of a project. A lease grants to lessees the right to submit plans and conduct site characterization and site assessment activities to gather data that could be used to inform the siting of potential projects for submittal in a COP for BOEM's review. The rights granted to a lessee are limited by the lease-specific terms, conditions, and stipulations required by the BOEM as specified in Addendum C of the lease. These activities by a lessee will provide additional information and further certainty on impacts to marine ecosystems and fisheries to review siting of

⁸⁶ [https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Oregon Area ID Memo.pdf](https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Oregon%20Area%20ID%20Memo.pdf)

⁸⁷ D. Nightingale; K. Simas.

⁸⁸ West Coast Seafood Processors Association.

⁸⁹ J. & W. McCulloch.

⁹⁰ Pacific Fishery Management Council.

⁹¹ West Coast Pelagic Conservation Group.

potential projects and any potential negative consequences on the coastal environment that should be avoided, minimized or mitigated.

Issue 6.1.2 – Oregon Roadmap

Approximately 10 commenters wrote about the Oregon Roadmap being developed by Oregon Department of Land Conservation and Development (DLCD).

Comment Summary:

A couple of individual commenters, two trade associations, and an industry-funded commission urged BOEM to pause development until the Roadmap is implemented.⁹² An individual commenter suggested that, in general, adherence to the Oregon Roadmap may “lower costs” but raise “uncertainty into the developer side of the equation.”⁹³ Here, another trade association suggested that Oregon State legislation and policy efforts that accompany the Roadmap have been frustrated by BOEM’s decision to move forward with leasing prior to full implementation of the Roadmap.⁹⁴

An advocacy group said that it was unnecessary for BOEM to delay an auction until the Oregon Roadmap is complete, saying that the Roadmap is intended to inform BOEM as it evaluates impacts during the project NEPA analysis, which will not begin until after the Roadmap is complete. The commenter added that a lease sale is not included in the “covered projects” definitions of HB 4080.⁹⁵ Another advocacy group encouraged BOEM to coordinate with the DLCD as the state agency develops the Roadmap.⁹⁶

An advocacy group commented that the purpose of the Oregon Roadmap is to ensure responsible development of the Lease Areas to be auctioned.⁹⁷

BOEM Response: BOEM acknowledges that in March 2024, the Oregon legislature passed HB 4080, directing the DLCD to develop an Offshore Wind Roadmap that defines state standards to be considered in the processes related to offshore wind energy development and approval. HB 4080 also requires DLCD to provide a report to the state legislature summarizing the DLCD’s actions to develop the Roadmap by September 2025. The PACW-2 lease sale will be held in October 2024, with a likely lease effective date of January 1, 2025. A COP for any leases issued offshore Oregon is not expected to be submitted within two years and the review time for a COP and completion of an associated Environmental Impact Statement (EIS) is approximately two years. It is highly likely the DLCD report and Roadmap would be completed prior to any BOEM permitting decision.

Issue 6.2 – Lease Stipulations, Terms and Conditions

Comments associated with this issue are included in the sub-issues below as well as Issues 8, 9, and 10 for individual topics such as commercial and recreational fisheries.

⁹² Oregon Trawl Commission; Washington Dungeness Crab Fishermen's Association; West Coast Seafood Processors Association; K. Silva; K. Dickson; West Coast Seafood Processors Association.

⁹³ D. Nightingale.

⁹⁴ N. Edwards, Shrimp Producers Marketing Cooperative.

⁹⁵ Renewable Northwest.

⁹⁶ Climate Solutions.

⁹⁷ Oceantic Network.

Issue 6.2.1 – National Security Stipulations

Approximately two commenters wrote about national security stipulations.

Comment Summary:

An advocacy group and a union said that under OCSLA, BOEM must consider the protection of national security interests of the United States when establishing renewable energy Lease Areas in federal waters. The commenter stated that lease criteria that support domestic manufacturers and workers through preferences and incentives help to ensure that the United States does not have to rely on potentially hostile trading partners to supply our energy infrastructure construction needs.⁹⁸

BOEM Response: BOEM works closely with DoD to address issues related to national defense capabilities that may occur due to any OCS activity under foreign ownership, control, or influence occurring in the vicinity of those national defense capabilities and military operations. Section 4.4 in the Oregon leases requires the lessee to coordinate with the DoD regarding foreign interest.

Issue 6.2.2 – Other (ex. royalties and revenue share)

Approximately eighteen commenters wrote about other lease stipulations.

Comment Summary:

Three advocacy groups stated that lease stipulations must comply with BOEM's statutory obligations, such as protection of the environment, prevention of waste, protection of natural and cultural resources on the OCS, consideration of other uses of the sea or seabed, and oversight, inspection, research, monitoring, mitigation and enforcement relating to a lease.⁹⁹ A federal agency stated species and their habitats should be monitored, as part of the lease agreement, through all phases of project planning, construction and development, operation, and decommissioning.¹⁰⁰

An advocacy group and federal agency recommended BOEM require lessees to provide a plan to reduce the likelihood of the introduction of invasive species.¹⁰¹ Another advocacy group recommended that BOEM avoid issuing leases that overlap with existing and proposed conservation areas in the ocean, including protecting Oregon's Marine Reserves program. The same commenter suggested that a lease condition be included that lessees provide their proposed plans to the Oregon Department of Fish and Wildlife (ODFW) to receive approval of their SAPs. The commenter also recommended that lessees be required to employ Protected Species Observer (PSOs) onboard every survey vessel as a condition for concurrence.¹⁰²

Some commenters, including a state government and advocacy group, said that BOEM should require lease stipulations to protect birds and bats.¹⁰³

Multiple commenters, including a state government, a regional fishery management council, and an advocacy group, remarked that BOEM should require lease stipulations to protect marine mammals and

⁹⁸ BlueGreen Alliance; Oregon AFL-CIO

⁹⁹ Climate Solutions; National Wildlife Federation et al.; The Nature Conservancy.

¹⁰⁰ U.S. Fish and Wildlife Service

¹⁰¹ National Wildlife Federation et al.; U.S. Fish and Wildlife Service

¹⁰² Surfrider Foundation.

¹⁰³ Oregon Department of Fish and Wildlife; National Wildlife Federation et al.

sea turtles.¹⁰⁴ An advocacy group provided suggestions for best management practices (BMPs) to incorporate as lease requirements with regards to vessel strike, noise, and entanglement risk mitigations for marine mammals and sea turtles.¹⁰⁵

A few commenters, including a state government, a trade association, and an advocacy organization, said that BOEM should require lease stipulations to protect commercial and recreational fishing and fisheries.¹⁰⁶ A regional fishery management council and state agency also recommended that recreational fishing resources and communities have equal consideration in lease stipulations as commercial fisheries.¹⁰⁷

An advocacy group expressed support for the National Wildlife Federation's recommendation that "BOEM include a robust set of environmental measures as lease stipulations in the FSN."¹⁰⁸ Some advocacy groups, a state agency, a federal agency, and a regional fishery management council stated that BOEM should require several lease stipulations to protect benthic habitats.¹⁰⁹

Other Stipulations

A state government and a regional fishery management council recommended that BOEM include a lease stipulation allowing for research access.¹¹⁰ A federal agency requests inclusion in Addendum C the requirement to coordinate with National Marine Fisheries Service (NMFS) to avoid conflict of lessee survey activities with NMFS survey activities and a requirement that lessees develop a high frequency-radar wind turbine interference (WTI) mitigation plan.¹¹¹

Another advocacy group said that BOEM should consider frameworks that clarify agency responsibilities to provide proof for suspensions and provide compensation, clarifying provisions for lease term extensions, and setting timelines for agency action when petitioned with construction plan submissions.¹¹²

An advocacy group recommended BOEM include language in the lease encouraging all lessees to collaborate in planning cable routes and facilities to limit the total amount of infrastructure and to maximize the use of shared cable corridors where technically and economically practical and feasible. The commenter also suggested that general coordination of activities between the proposed lessees be required; lessees are likely to conduct overlapping site assessment activities, and coordination would help mitigate cumulative environmental impacts by reducing duplicative survey work or aligning activities strategically over time.¹¹³

¹⁰⁴ Rogue Climate; National Wildlife Federation et al.; Pacific Fishery Management Council.

¹⁰⁵ National Wildlife Federation et al.

¹⁰⁶ Oregon Department of Fish and Wildlife; West Coast Seafood Processors Association; National Wildlife Federation et al.

¹⁰⁷ Oregon Department of Fish and Wildlife; Pacific Fishery Management Council.

¹⁰⁸ Climate Solutions.

¹⁰⁹ Rogue Climate; National Wildlife Federation et al.; Pacific Fishery Management Council.

¹¹⁰ Oregon Department of Fish and Wildlife; Pacific Fishery Management Council.

¹¹¹ NOAA

¹¹² Oceantic Network.

¹¹³ National Wildlife Federation et al.

The same advocacy group recommended as a lease stipulation that “BOEM will require all lessees to create an operation plan,” as explicitly described in Oregon’s Territorial State Plan Part 5, Section D.3, for conducting site assessment and surveys.”¹¹⁴

An advocacy group stated that lease stipulations and development processes must comply with Oregon state coastal policies, including the Territorial Sea Plan.¹¹⁵

Another advocacy group urged BOEM to include sufficient lease stipulations to ensure that potential future offshore wind projects off Oregon meet standards for responsible development. The commenter urged BOEM to adopt a mitigation hierarchy that directs lessees to first avoid, then minimize and mitigate, potential environmental impacts. The commenter provided a letter submitted for Coastal Zone Management Act (CZMA) Consistency Review and urged BOEM to incorporate elements into lease conditions for resource baselines surveys, cable route planning, coordination between lessees, consultation with state agencies, and including an anchoring plan.¹¹⁶

A trade association encouraged a discussion with BOEM on the specific language and terms to be included in leases resulting from this proposed sale to ensure alignment with the BOEM and Bureau of Safety and Environmental Enforcement (BSEE) Final Modernization Rule.¹¹⁷ Finally, the trade association, advocacy group, and an industry commenter commented on changing the lease stipulation for Agency Communication Plans (ACPs) and Fisheries Communication Plans (FCPs) to be submitted 180 days and Native American Communication Plans (NATCPs) be due within 1 year after lease issuance to allow ample time to engage these partners and develop the plans.¹¹⁸

Another advocacy group raised general concerns that BOEM did not adequately consider the ancestral claim Native Americans hold over portions of the continental shelf; a claim which the advocacy group suggested dates to before the Ice Age. The commenter urged that tribal communities should receive royalties from the wind energy produced.¹¹⁹

BOEM Response: BOEM is including several lease stipulations in Addendum C of the lease related to reporting requirements, avoiding and minimizing potential future user conflicts and environmental impacts of potential site characterization and site assessment activities. In August 2024, BOEM published a Final Oregon Environmental Assessment (EA) which includes the most current measures to minimize potential adverse impacts, including Endangered Species Act (ESA)-listed species of marine mammals and sea turtles. BOEM has included in the lease these measures from the EA and the ESA Concurrence Letter and Essential Fish Habitat (EFH) Response issued on July 12, 2024. BOEM has also included conditions in the lease to address DLCD’s Oregon Coastal Management Program (OCMP) conditions of concurrence with BOEM’s Consistency Determination issued on July 17, 2024 that comply with OCMP and any applicable enforceable policies that may include the Oregon Territorial Sea Plan.

¹¹⁴ National Wildlife Federation et al.

¹¹⁵ Surfrider Foundation.

¹¹⁶ Surfrider Foundation.

¹¹⁷ American Clean Power Association.

¹¹⁸ American Clean Power Association; RWE; Renewable Northwest.

¹¹⁹ Coastal Tribal Resources.

If, and when, a COP is submitted to BOEM for the actual construction, operation, and decommissioning of a wind farm, BOEM will conduct environmental analyses and consultations in accordance with applicable statutes to examine potential impacts, including those from vessel traffic and noise.

Regarding the Renewable Energy Modernization Rule, BOEM updated the lease terms and language in the leases to align with recent changes from the new rule. BOEM retains the right to access, for research purposes, the site of any operation or activity conducted under the lease.

BOEM regulations also address lease suspensions, lease term extensions, and timelines for agency action. BOEM has updated the number of days for submission of ACPs, FCPs, and Native American Tribes Communication Plans (NATCPs) from 120 to 180 in response to comments and based on its experience with other wind energy leasing.

A lease stipulation states BOEM, its designated representative, or any entity to which BOEM provides access (such as NOAA), retains the right to access the Lease Area for purposes of future research.

Regarding comments to sharing royalties, 30 CFR 585.541 discusses, first, which projects qualify for revenue sharing and then, per 30 CFR 585.542, a State is eligible for payment of revenues if any part of the State's coastline is located within 15 miles of the announced geographic center of the project area of a qualified project. The Oregon Lease Areas are not considered a qualified project and are more than 15 miles from shore and would not be eligible for revenue sharing.

Issue 7 – Labor and Economy

Approximately nine commenters wrote about labor and economy.

Comment Summary:

General Labor and Economic Impacts of the PSN

Several commenters stated that the PSN would have labor and economic benefits for Oregon and the United States, bringing substantial economic benefits to Oregon, creating well-paid clean energy jobs, and generating revenue for the state, citing statistics.¹²⁰ An advocacy group and another commenter stated that offshore wind energy presents an opportunity to uplift the middle class with employment practices, equitable career pathways, and maximum job creation, while supporting good-paying union jobs and innovation of clean energy technologies and infrastructure.¹²¹ A union said avoiding sensitive habitat, requiring strong measures to protect wildlife such as monitoring are also essential for the responsible development of offshore wind energy.¹²²

Labor Protections

Several commenters discussed labor protections under the PSN. An advocacy group and a union recommended that union neutrality should be stipulated in a supplier engagement plan as well as bidding credit investments in supply chain facilities, which would help further the Administration's goals to support labor organization, as stated in several executive orders (EOs).¹²³ A union stated that safety is a

¹²⁰ American Clean Power Association.

¹²¹ BlueGreen Alliance; D. Stover.

¹²² Oregon AFL-CIO.

¹²³ BlueGreen Alliance; Oregon AFL-CIO.

key mandate in OCSLA and thus BOEM must work to ensure that requirements for safety management systems (SMSs) protect the health and safety of workers. The commenter added that as part of its requirements for an SMS, BOEM must ensure that developers commit not to retaliate or discriminate against any employee or contractor who raises a health and safety concern on the job.¹²⁴

An advocacy group and two unions stressed apprenticeship programs and the value it will bring for training Oregon trade workers.¹²⁵ The advocacy group stated that training and apprenticeship programs should prioritize long-term family wage jobs for local communities, local union hiring should be priorities, following the standards of PLAs set out by Oregon HB 4080.¹²⁶ Similarly, a union said that any future proposed lease sale for offshore wind in Oregon should reflect the labor provisions required by Oregon HB 4080.¹²⁷

Supply Chains and Fair Return

A few commenters provided input on the impacts of the PSN on regional and domestic supply chains. An advocacy group stated that offshore wind development in Oregon should maximize benefits to local and regional economies, building supply chains that are compatible with communities and the environment.¹²⁸ Another advocacy group and a union recommended that BOEM stipulate a preference for domestic content utilization to achieve the goals of a fair return to the United States, protect national security, and ensure expeditious and orderly development. The same advocacy group and union stated that requiring use of domestic content can help secure fair return to the United States for any lease associated with wind energy development offshore Oregon by maximizing the positive economic impacts of offshore wind development by increasing employment and investment and decreasing costs, citing research.¹²⁹

Other Recommendations Related to Labor and the Economy

An advocacy group recommended that BOEM entertain and explore mechanisms to extend the sustainable financial benefits of shore-based renewables to the counties whose coastlines where ocean side renewables are developed and facing the deepest impact from energy development.¹³⁰

A trade association stated that they failed to see where the associated high paying job growth with the PSN will be in Oregon. The commenter said Oregon should be able to help with basic maintenance once those marine industrialized projects are completed as there will be no need for additional manufacturing and assembly beyond Puget Sound and Long Beach.¹³¹

An advocacy group recommended that BOEM follow their “Just Transition” framework that approaches production and consumption cycles holistically and waste-free, while ensuring equity, addressing past harms, and creating new relationships of power for the future through reparations. The commenter additionally stated that as South Coast communities have some of the highest energy burden in the state,

¹²⁴ Oregon AFL-CIO.

¹²⁵ Rogue Climate; LIUNA Local 737; Oregon State Building and Construction Trades Council

¹²⁶ Oregon State Building and Construction Trades Council.

¹²⁷ Oregon AFL-CIO.

¹²⁸ Rogue Climate.

¹²⁹ BlueGreen Alliance; Oregon AFL-CIO.

¹³⁰ Oregon Coast Energy Alliance Network.

¹³¹ West Coast Pelagic Conservation Group.

*the State should protect coastal Oregonians from rate increases as the electric grid transitions away from fossil fuels.*¹³²

BOEM Response: Under the lease, lessee engagement must allow for early and active information sharing, focused discussion of potential issues, and collaborative identification of solutions. A lessee will make reasonable efforts to engage with Tribes and parties that may be potentially affected by a lessee's project activities on the OCS, including underserved communities, as defined in Section 2 of EO 13985. The lessee is also required to provide a progress report which includes documenting potential adverse effects from the lessee's project to the interests of Tribes and communities and how, if at all, the design or implementation of the project has been informed by or altered to address these potential effects (including by investing in, or directing benefits to, Tribes and communities).

Regarding the creation of a robust and resilient U.S.-based FOSW supply chain, recently, the DOI announced an offshore wind leasing path forward to help the nation meet the Administration's goal of 30 gigawatts (GW) of offshore wind energy capacity by 2030 and 15 GW of FOSW by 2035. This effort will provide a roadmap to increase certainty and transparency in the leasing process. BOEM has included bidding credits to incentivize investments in the floating offshore wind supply chain. This and the requirement for lessees to provide a Statement of Goals which describes any plans, including engagement with domestic suppliers, are intended to facilitate the creation of a robust and resilient U.S.-based FOSW supply chain and workforce.

BOEM appreciates the labor provisions set forth under Oregon HB 4080. BOEM offers a workforce training and/or domestic supply chain bidding credit and any contributions to workforce training may include contributions toward union apprenticeships, labor management training partnerships, stipends for workforce training, or other technical training programs or institutions focused on providing skills necessary for the planning, design, construction, operation, maintenance, or decommissioning of floating offshore wind energy projects on the United States OCS.

In the FSN, BOEM requires the complete the qualifying monetary contribution for workforce training and/or supply chain no later than the submission of the first FDR, or before the tenth Lease Anniversary, whichever is sooner, to provide flexibility in phasing funds as appropriate for programs and recipients best suited to meet the bidding credit purpose and goals. Though some commenters suggested allowing even more time to complete the contribution, BOEM believes that the FDR stage is appropriate as companies will have greater certainty in their project specifics and will be able to make meaningful contributions to domestic FOSW workforce and supply chain. Delayed investments beyond the FDR may come too late to be efficient.

Concerning worker safety, as part of its safety requirements, lessees must maintain all places of employment for activities associated with a wind lease in compliance with occupational safety and health standards, free from recognized hazards to employees of the lessee or of any contractor or subcontractor operating under a lease, and free from retaliation or discrimination against any employee or contractor who raises a health and safety concern on the job.

Issue 7.1 – Project Labor Agreements (PLAs)

Approximately nine commenters commented on PLAs.

¹³² Rogue Climate.

Comment Summary:

General Support for PLAs/LPAs

An individual commenter and a union voiced support for the PLA stipulation in the PSN and recommended BOEM adopt the stipulations after the comment period ends.¹³³

An advocacy group and a union requested that BOEM stipulate that lessees must enter into PLAs covering the construction of all renewable energy facilities within the BOEM lease and LPAs covering the operations and maintenance work involved in those facilities.¹³⁴ Several comments were provided on the positive impacts of PLAs on local labor and job growth¹³⁵, project efficiency and budgeting¹³⁶, impacts on worker protections and safety¹³⁷, equity¹³⁸, the environment¹³⁹, the economy¹⁴⁰, and labor peace agreements¹⁴¹.

BOEM Response: BOEM appreciates the positive impacts of PLAs discussed by commenters. Section 7 of the Lease Addendum C encourages the use of a PLA during the construction of lessee's projects and that applies to all contractors. BOEM has concluded that the use of PLAs when developing the leases will facilitate construction of the projects and potentially help achieve several of OCSLA's stated goals. If used, the PLAs would require all contractors working on the construction stage of a project to adhere to collectively bargained terms and conditions of employment, whether the contractors are union or nonunion. PLAs typically include prevailing wages provisions, no-strike clauses, dispute resolution procedures, and safety and training provisions.

PLAs are only available for use in the building and construction industries. See 29 U.S.C. § 158(f). Therefore, BOEM is only encouraging their use during the construction phase of an offshore wind project.

The traditional provisions of PLAs are consistent with BOEM statutory authorities. The additional provisions usually associated with a LPAs are beyond BOEM's purview.

Issue 8 – Stakeholder Engagement

Comments associated with this issue are included in the sub-issues below.

Issue 8.1 – Engagement Progress Reports

Approximately three commenters wrote about engagement progress reports.

Comment Summary:

¹³³ LiUNA Local 737 (Union Individuals); Oregon State Building and Construction Trades Council.

¹³⁴ BlueGreen Alliance; Oregon AFL-CIO.

¹³⁵ LiUNA Local 737; J. Jensen; D. Stover; Western States Regional Council of Carpenters

¹³⁶ LiUNA Local 737; BlueGreen Alliance; Oregon AFL-CIO.

¹³⁷ BlueGreen Alliance; Oregon AFL-CIO; LiUNA Local 737;

¹³⁸ BlueGreen Alliance; Oregon AFL-CIO; Oregon State Building and Construction Trade Council

¹³⁹ D. Stover.

¹⁴⁰ BlueGreen Alliance; Oregon AFL-CIO.

¹⁴¹ BlueGreen Alliance; Oregon AFL-CIO.

A state government agency voiced support for the lease requirement of the submission of a progress report every six months and requested to be included as a recipient to review and comment. The commenter noted that this would serve as an accountability measure for the lessee to report on the identified potential adverse effects of the project as well as demonstrate actions taken to minimize or reduce the potential of these effects and conflicts.¹⁴² An industry commenter requested clarification of when lessees are required to submit progress reports once the communications plans have been finalized, as there has been confusion in other regions.¹⁴³

BOEM Response: Progress reports will be posted on BOEM’s website. Section 3 of the Lease Addendum C requires that a progress report must be submitted every six months (unless the BOEM directs otherwise) during the site assessment term and the operations term (if a COP is approved) starting from the Effective Date of the lease. The submittal of the progress reports is not coupled with specific communications plans that are required for submittal within 180 days of lease execution and may be updated from time to time as necessary. Progress reports must include discussion of engagement with Tribes and other stakeholders.

Issue 8.2 -Engaging Underserved Communities (including Disadvantaged or Environmental Justice Communities)

Approximately three commenters wrote about engaging underserved communities.

Comment Summary:

An advocacy group encourages lessees work with environmental justice communities and the establishment of lessee-funded independent community-centered and governed working groups to ensure that community decision-making would be at all stages of the project beyond a consultative position. The commenter also supported that lessees and environmental justice communities may choose to develop a formal agreement to monitor community impacts and implement community benefits, which may be amended over time to reflect subsequent analysis of impacts and opportunities for environmental justice.¹⁴⁴

Two advocacy groups stated that BOEM has failed to build trust and transparency throughout the process so far, resulting in the spread of misinformation and growing concern in coastal communities. The commenters said that BOEM should be held to the same standard of meaningful community engagement as the requirements in Oregon Statewide Planning Goal 1.

The commenters said that through the Justice40 program in EO 14008, BOEM has a responsibility to understand and address the environmental justice issues faced by communities most impacted by FOSW, Lease Areas and requested that BOEM conduct more research and community engagement to fully consider the potential socio-economic and environmental justice impacts in these communities. The commenter recommended that BOEM engage with impacted communities to understand their specific needs and priorities in advance of a lease sale, and that BOEM should update impacted communities with progress reports and opportunities for ongoing engagement throughout the process.¹⁴⁵

¹⁴² Oregon Department of Fish and Wildlife.

¹⁴³ RWE.

¹⁴⁴ Surfrider Foundation.

¹⁴⁵ Surfrider Foundation; Rogue Climate

BOEM Response: BOEM appreciates the standards of Oregon Statewide Planning Goal 1 and agrees it has a responsibility to understand and address the environmental justice issues as outlined in EO 14008. Stakeholder engagement is a major focus of BOEM’s renewable energy program, which includes a number of processes to enhance outreach, coordination, and collaboration.

In response to comments, BOEM is building upon a previously used lease stipulation to require regular progress reports. Section 3 of the Lease Addendum C aims to improve lessee communication and transparency with affected Tribes, parties, and members of the public, and to encourage lessees to identify and engage with underserved communities, including those described in EO 12898.

BOEM has also included OCMP conditions of concurrence in Section 6 of the Lease Addendum C that encourages the Lessee to compensate community members for their time participating in engagement activities and events and to work with affected communities to develop specific frameworks for community leadership and capacity building.

Issue 8.3 -Other Comments on Stakeholder Engagement

Approximately 12 commenters wrote about other stakeholder engagement. Discussion on Tribal engagement can be found in Issue 10.2.

Comment Summary:

Fisheries Engagement

A state government voiced general support for the inclusion of a Fishery Communication Plan (FCP) and Fisheries Liaison, specifically supporting the selection of local industry fisheries liaisons. The commenter recommended that BOEM require lessees to work with state and Federal agencies and coordinate with the fishing industry to find locations with the least conflict.¹⁴⁶

Supplier Engagement

An advocacy group requested that BOEM stipulate a supply chain statement of goals that includes a detailed supplier engagement plan to achieve those goals, pointing to a 2022 National Renewable Energy Laboratory (NREL) report. The commenter suggested BOEM establish a process within the lease that supports such coordination noted in the NREL report, and a detailed supply chain statement of goals and supplier engagement plan that could create an effective framework to guide coordination.¹⁴⁷

Government Engagement

A trade association recommended that BOEM continue to work with state and federal agencies to determine the best way to ensure coastal communities are protected from the effects of offshore wind development throughout the leasing stage and, ultimately, development.¹⁴⁸ An advocacy group said that resolving challenges to siting and constructing offshore wind facilities off the Oregon coast, including potential impacts on communities and to environmental and cultural resources, will be dependent on a high degree of coordination with the State of Oregon and careful attention to stakeholder concerns.¹⁴⁹

¹⁴⁶ Oregon Department of Fish and Wildlife.

¹⁴⁷ BlueGreen Alliance.

¹⁴⁸ West Coast Seafood Processors Association.

¹⁴⁹ Climate Solutions.

*An advocacy group recommended that BOEM collaborate with the Oregon DLCD to ensure state policies such as the Territorial Sea Plan and Oregon Roadmap are properly incorporated.*¹⁵⁰

*A state government generally supported BOEM's lease requirement of an Agency Communication Plan (ACP) but recommended that the requirement for any ACP focus on a means to allow for early (pre-COP) discussions and engagement with the agency on important resource conflicts and the means to avoid, minimize, or mitigate conflicts.*¹⁵¹

Requests for Further Transparency or Engagement

*A commenter and industry-funded commission requested that there be more opportunities for in-person exchanges, listening sessions, and public comments, given the length of time that offshore wind may impact coastal communities.*¹⁵²

*An advocacy group voiced opposition to the ESA consultation not including a formal process for public comment. The advocacy group also requested greater data transparency and collaboration, and that science should be conducted in a collaborative and transparent manner, involve recognized marine and wildlife experts, engage relevant interested and affected parties, and results made publicly available.*¹⁵³

Other/General Discussion and Recommendations

*An advocacy group thanked BOEM for responding to their previous requests to engage NOAA's marine spatial planning tool and commended BOEM's efforts to provide increased transparency and public participation in the planning process.*¹⁵⁴

*A state government supported the proposed requirement for lessees to create a communication and engagement plan with agencies, Tribes, and fisheries, specifically the requirement that the lessee's engagement plan must allow for "early and active information, sharing, focused discussion of potential issues and collaborative identification of solutions." The commenter said that the recommendation would not reduce or limit stakeholder input but rather assist in increasing specified groups' capacity to participate and engage in communications with lessees on relevant topics.*¹⁵⁵

*A union expressed gratitude for what the union suggested was BOEM's willingness to engage the public and stakeholders through the development of the PSN.*¹⁵⁶

BOEM Response: BOEM acknowledges and appreciates all comments on its own engagement process and recommendations for improvement. Some comments above pertain to issues that will be addressed during the construction and operations phase which would be reviewed when BOEM receives a COP. If and when a COP is submitted, BOEM will conduct all applicable reviews and consultations, which will include stakeholder outreach and public comment periods.

For site assessment and site characterization activities that will be used to inform the contents of a COP, BOEM requires each lessee to develop publicly available communication plans that describe the

¹⁵⁰ Rogue Climate.

¹⁵¹ Oregon Department of Fish and Wildlife.

¹⁵² ThinkPlace; Oregon Trawl Commission.

¹⁵³ National Wildlife Federation et al.

¹⁵⁴ Oregon Coast Energy Alliance Network.

¹⁵⁵ Oregon Department of Fish and Wildlife.

¹⁵⁶ LiUNA Local 737.

strategies that the lessee intends to use for communicating with Tribes, fishing groups, and Federal, state, and local agencies (including harbor districts) with authority related to the Lease Areas and should outline specific methods for engaging with and disseminating information to these entities. Communication plans should describe the strategies that the lessee intends to use for communicating with commercial and recreational fisheries prior to and during activities in support of the submission of a plan, such as a SAP or COP.

Additionally, the FCP includes a Fisheries Liaison as a primary point of contact and a process to file complaints with the lessee and seek replacement of or compensation for lost gear. BOEM added a lease stipulation which recommends that the lessee's Fisheries Liaison be local to the region and have experience with West Coast fisheries to the extent practicable.

BOEM requires lessees to submit a Statement of Goals and describe any plans, including engagement with domestic suppliers, to contribute to the creation of a robust and resilient US-based floating offshore wind supply chain. If a COP is approved, the lessee must provide annual updates to BOEM on the lessee's progress in meeting these goals. The lessee must submit a final report evaluating the lessee's success in meeting these goals no later than the first Fabrication and Installation Report (FIR) submission. The lessee must submit two versions of the Statement of Goals, updates, and final report, one of which does not contain confidential information, so that BOEM can make it publicly available.

Regarding ESA public comment periods, informal ESA consultation regulations do not provide for any public comment period. However, the EA, which had multiple public comment opportunities, included discussion of many of the same impacts and BMPs.

Consistent with BOEM's commitment for high level coordination with the State of Oregon and ensuring that state policies are incorporated into BOEM's process, BOEM included OCMP's concurrence conditions as lease stipulations. For instance, BOEM added OCMP condition in the Lease Addendum C regarding making data publicly available per federal regulation 30 CFR 585.114 to the maximum extent feasible. BOEM is committed to continuing to work with the State on any leases that result from this sale and Oregon's roadmap process to inform review of projects that may be proposed for construction in the Lease Areas.

Issue 9 – Environmental Impacts/Concerns

One commenter wrote about general environmental impacts and concerns.

Comment Summary:

An advocacy group discussed how adaptive management on offshore wind sites is “essential” for flexible decision making when there are uncertainties regarding impacts to species and habitats, wind-driven upwelling, and entire marine food webs. The commenter used the management strategy implemented at “PacWave South” as an example for federal and state collaboration that addressed impacts as they were identified via monitoring and evaluation.¹⁵⁷

¹⁵⁷ Surfrider Foundation.

BOEM Response: BOEM will consider impacts to upwelling and other potential impacts related to construction and operation activities – as well as BMPs to avoid, minimize or mitigate such impacts – at the COP stage.

Issue 9.1 – Department of Defense (DoD) Impacts

One commenter wrote about DoD impacts.

Comment Summary:

An industry commenter recommended that BOEM provide additional information on mitigation measures that may be required in the FSN, including potential mitigations for military activities near the Brookings lease area.¹⁵⁸

BOEM Response: The lease includes conditions related to national security and military operations including coordination with military operations whereby the lessee, prior to entry into any designated defense operating area, warning area, or water test area, must coordinate planned survey, construction, or operations/maintenance activities with the appropriate command headquarters. The lease also requires that the lessee and DoD will develop a communication protocol to identify mission compatibility concerns or conflicts. Project-level NEPA environmental analysis and site-specific mitigation measures will be addressed for each WEA prior to construction or operation of offshore wind infrastructure in these areas. Any potential mitigation measures that may be required related to national security and military operations will be reviewed during the COP phase.

Issue 9.1.1 – PACPARS

One commenter wrote about the USCG Pacific Coast Port Access Route Study (PACPARS).

Comment Summary:

A trade association expressed support for the aliquots that BOEM excluded due to overlap with the PACPARS fairways and the collaboration that led to that exclusion. Because the proposed fairways are not yet finalized, the commenter also recommended that BOEM should continue to coordinate with the USCG, and any leases include stipulations requiring lessees to accommodate the final fairway layouts.¹⁵⁹

BOEM Response: The proposed PACPARS offshore fairways are avoided by the Brookings and Coos Bay Lease Areas. The southwest portion of the Brookings Lease Areas is within two nautical miles of the proposed PACPARS fairways. Lessees are required to submit a Navigational Safety Risk Assessment (NSRA) to the USCG as part of a COP. BOEM will continue to work with the USCG throughout the leasing and development process to address potential impacts of lease development on navigation.

Issue 9.2 – Noise

One commenter wrote about concerns of impacts from noise.

An advocacy group provided recommendations and best management practices to reduce impacts of noise levels from site assessment and characterization activities, including: document baseline acoustic conditions; include clearance and exclusion zones for whales, and other marine mammal species at

¹⁵⁸ RWE.

¹⁵⁹ American Waterways Operators.

*source levels (levels at or below a frequency of 180 kHz) known to injure or harm marine mammals; require monitoring protocols during pre-clearance and site assessment and characterization activities, such as using real-time passive acoustic monitoring; and require underwater and operational noise reduction as much as possible, including plans for sound source measurements and reduction.*¹⁶⁰

BOEM Response: To minimize interactions and avoid injury or disturbance to fish, marine mammals, and sea turtle species, lessees are required to follow BOEM's Best Management Practices (BMPs) and Project Design Criteria (PDCs), as described in the EA for the Oregon wind lease sale, as well as in the NMFS Section 7(a) consultation under the ESA. These BMPs and PDCs include the use of PSOs, clearance, and shutdown zones, as well as ramping up of electromechanical survey equipment when technically feasible. BOEM will review all survey plans, including the list of proposed electromechanical survey equipment, to ensure that the equipment will be able to acquire the necessary information required and comply with appropriate lease requirements, BMPs, PDCs, and relevant consultations.

BOEM is currently funding, and will continue to fund, environmental studies in the Pacific, that include collecting baseline acoustic soundscape data. BOEM's survey guidelines include guidance for passive acoustic baseline data collection over two annual cycles to capture inter-annual and seasonal variability. The data from BOEM-funded studies are made publicly available, and lessees are encouraged to deposit their data at publicly accessible archives.

Issue 9.3 – Vessel Traffic

Approximately three commenters wrote about vessel traffic.

Comment Summary:

Three advocacy groups recommended a 10-knot vessel speed restriction to reduce the risk of lethal vessel strikes to protected species under ESA and Marine Mammal Protection Act.¹⁶¹ One commenter cited multiple studies demonstrating the impact of vessel collisions on large whales and marine life and stated that a 10-knot vessel speed restriction is the only “proven” method to reduce lethal vessel strikes.¹⁶²

In addition to the 10-knot vessel speed, another advocacy group recommended all project-associated vessels travel at 4 knots, except for reasons of safety, “while transiting through areas of visible jellyfish aggregations or floating vegetation lines or mats” to improve protection for sea turtles and sea otters.¹⁶³

BOEM Response: BOEM requires in the lease that all vessels associated with a lease must travel at speeds of 10 knots or less within the action area as defined in the BA (San Francisco, CA to Astoria, OR). If a sea turtle is sighted within the operating vessel's forward path, the vessel operator must slow down to 4 knots (unless unsafe to do so) and steer away as possible. Additionally, vessels must avoid transiting through areas of visible aggregations of jellyfish and particularly for species that can occur in larger numbers including alcids, albatrosses, shearwaters, storm-petrels, and cormorants. If operational safety prevents avoidance of such areas, vessels must slow to 4 knots while transiting through such areas.

¹⁶⁰ National Wildlife Federation et al.

¹⁶¹ National Wildlife Federation et al.; Surfrider Foundation; Rogue Climate.

¹⁶² Surfrider Foundation.

¹⁶³ National Wildlife Federation et al.

Project-level NEPA environmental analysis would be conducted for each WEA prior to construction or operation of offshore wind infrastructure in these areas.

Issue 9.4 – Buoy Decommissioning

Approximately two commenters wrote about buoy decommissioning.

Comment Summary:

A federal agency urged caution in the process of construction, operation, and decommission of meteorological buoys as it could introduce invasive species. The commenter recommended complete removal of all buoys and equipment with the appropriate decontamination and cleaning methods to decrease the risk of introducing nonnative or invasive species.¹⁶⁴

A state agency recommended that BOEM clarify that either U.S. Army Corps of Engineers (USACE) or BSEE will require full decommissioning of met buoys at the end of the site assessment term, which would include a full anchor removal.¹⁶⁵

BOEM Response: The Renewable Energy Modernization Rule finalized the elimination of the existing regulations that required on-lease SAPs and BOEM permitting for meteorological buoys. Meteorological buoys will continue to require USCG ‘Private Aids to Navigation’ approval. The USACE may incorporate its own decommissioning requirements in permits applicable to meteorological buoys but the BSEE decommissioning requirements in Title 30, Chapter II.B, Part 285 will apply to meteorological buoys if the USACE has not required a decommissioning obligation. BSEE expects to utilize its regulatory authority for decommissioning of buoys in limited circumstances. Accordingly, BOEM has included a condition for Lessee to remove all anchors associated with meteorological and/or oceanographic buoys within the lease area, consistent with all applicable federal permits.

BOEM added a lease condition to protect against introduction of invasive species as a result of DLCD’s conditional concurrence for BOEM’s Consistency Determination under the CZMA.

Issue 9.5 – ESA/Threatened and Endangered Species

Approximately four commenters wrote about general ESA and threatened and endangered species.

Comment Summary:

A federal agency recommended that lessees further investigate the presence of federally listed species in the WEAs. The commenter’s primary species of concern were sea turtles, northern and southern sea otters, short-tailed albatross, and marbled murrelet. The commenter recommended removing the California least tern species from the list because that species does not range north of the San Francisco Bay area. The commenter also recommended monitoring prey species for seabirds such as sardines, anchovies, sand lance, and herring. The commenter inquired about the types of acoustic sound sources to be used, where they will be used, and how often. Finally, the commenter recommended adding Motus Wildlife Tracking and acoustic monitoring equipment to buoys or other monitoring platforms to capture seabird information.¹⁶⁶

¹⁶⁴ U.S. Fish and Wildlife Service.

¹⁶⁵ Oregon Department of Fish and Wildlife.

¹⁶⁶ U.S. Fish and Wildlife Service.

*A federal agency requested more information on identifying the pertinent aspects of the proposed action on which BOEM has completed consultation with NMFS. This commenter also proposed mitigation measures such as vessel speed limits for survey transiting and operations, and the use of NMFS-approved PSOs during surveys.*¹⁶⁷

*An advocacy group said that the draft WEA report did not include ESA-listed species including the endangered sperm whale, North Pacific right whale, and Western North Pacific gray whales, threatened Guadalupe fur seal, and Marine Mammal Protection Act (MMPA)-protected harbor porpoise, northern fur seals, California sea lion, northern elephant seals, and Cuvier's, Baird's, and Mesoplodon beaked whales, and Eastern North Pacific gray whales. The commenter said it would like to see these species included in the analysis and suggested lease stipulations that require highly protective mitigation measures.*¹⁶⁸

BOEM Response: Marine fish, marine and coastal birds, and marine mammals listed under the ESA are discussed and analyzed in the Oregon EA. The Proposed Action is described in detail in Chapter 2 of the EA and foreseeable activities and assumptions for the proposed action are discussed in detail in Section 2.5. Foreseeable activities include site assessment and site characterization surveys. Project-level NEPA environmental analyses will be conducted for each lease area prior to construction or operation of offshore wind infrastructure in these areas. BOEM recommends lessees incorporate BMPs into their SAPs and COPs to minimize any potential impacts.

In compliance with Section 7 of the ESA, BOEM consulted with NMFS regarding the potential impacts of the Proposed Action to ESA-listed species. If the lessee intends to design and conduct biological or other surveys to support offshore renewable energy plans that could interact with ESA-listed species, the surveys must be within the scope of activities described in ESA consultations, or the lessee must consult further with BOEM and the Services (NMFS and U.S. Fish and Wildlife Service [USFWS]). Noise generated from foreseeable activities would be associated with HR geophysical surveys and project vessels.

Marine mammals that were considered in this EA analysis are discussed in Oregon EA Section 3.4, Marine Mammals and Sea Turtles. Several of the species cited by commenters are included in the analysis such as the Sperm Whale and North Pacific Right Whale, northern fur seal, Northern Elephant Seal, and California Sea Lion.

Proposed BMPs, including the employment of PSOs, are listed in Appendix E of the Oregon EA and have been developed through years of conventional energy operations and refined through BOEM's renewable energy program and consultations with NMFS.

Under the lease, the lessee must comply with the protective measures identified by BOEM through its ESA consultation process and set out in the Letter of Concurrence regarding ESA and EFH consultation, from NMFS to BOEM, dated July 12, 2024.

Issue 9.6 – Climate Change

Approximately seven commenters wrote about climate change.

¹⁶⁷ NOAA.

¹⁶⁸ National Wildlife Federation et al.; Climate Solutions.

Comment Summary:

A trade association, an advocacy group, an industry commenter, and an individual commenter expressed support for utilizing offshore wind energy to meet the Nation's and Oregon's climate goals, reducing the need for fossil fuels, and increase the state's energy mix.¹⁶⁹

An individual commenter asserted that wind turbines are not a renewable or sustainable energy source, citing studies showing that climate change will make wind turbines less effective at generating electricity due to changes in wind patterns. The commenter also said that the manufacturing of wind turbines increases carbon in the atmosphere.¹⁷⁰ Another individual commenter said that windmills have not been proven to be effective except in "model" form, and generally expressed skepticism of the benefits of offshore wind to Oregon.¹⁷¹ A trade association said that it is "speculative" that offshore wind will help mitigate the effects of climate change.¹⁷²

BOEM Response: BOEM takes all concerns related to climate change seriously and will continue to collaborate closely with the State of Oregon as it strives to meet their renewable energy planning goals in an inclusive, collaborative way that considers public concerns and viewpoints, including one commenter's concern that climate change could make wind turbines less effective. As noted in the May 2024 NCCOS "Offshore Wind in Oregon" story map¹⁷³, the Oregon coastline holds great potential for wind energy development, as almost the entire area has sustained ideal wind speeds (between 10-22 mph). It should be noted that some organizations, such as offshore wind companies, climate change groups, and labor unions generally support renewable energy development offshore Oregon. These organizations all strongly recommend further considering and minimizing impacts to other offshore resources as well as encourage deep engagement with stakeholders throughout BOEM's renewable energy authorization process.

A 2021 NREL study "Life Cycle Greenhouse Gas [GHG] Emissions from Electricity Generation: Update"¹⁷⁴ demonstrated wind to be one of the lowest emitters of GHG among both conventional and renewable technologies. Although there are inevitably some GHG emissions associated with the manufacturing of wind turbines, these initial emissions are small in comparison to fossil fuels and are outweighed by the emissions saved by using offshore wind instead of fossil fuels over the project's lifetime.

Issue 9.7 – Commercial Fisheries

Approximately 11 commenters wrote about commercial fisheries.

Comment Summary:

Trade associations commented that offshore wind development will result in commercial fishing fleet displacement, putting pressure on other fishing grounds where turbines are not installed.¹⁷⁵ One of the commenters also stated that the wind turbines will also cause whales to migrate or feed in different areas,

¹⁶⁹ American Clean Power Association; Blue Green Alliance; RWE; D. Stover.

¹⁷⁰ L. Yetter.

¹⁷¹ T. Larteri Lyons.

¹⁷² West Coast Pelagic Conservation Group.

¹⁷³ <https://storymaps.arcgis.com/stories/41268123ec06496bba786cd8e2e1d6c3>

¹⁷⁴ <https://www.nrel.gov/docs/fy21osti/80580.pdf>

¹⁷⁵ Coalition of Coastal Fisheries; Washington Dungeness Crab Fishermen's Association.

which will put pressure on fishermen outside of the offshore wind areas.¹⁷⁶ A trade association said that the Dungeness crab fishery is sustainable and the most valuable single species fishery on the West Coast,¹⁷⁷ and an industry-funded commission asked what offshore wind will do to the Dungeness crab fishery.¹⁷⁸ A trade association discussed how the offshore wind project would prevent fisherman from fishing in their “best” areas where the strongest winds are.¹⁷⁹ A trade association commented that a lot of people’s livelihoods are on the line with this proposed lease sale.¹⁸⁰

A couple trade associations discussed the economic importance of commercial fisheries to many coastal fishing communities and voiced concern that their members could be impacted by the wind farms if there is a loss of the existing fisheries.¹⁸¹ An individual commenter expressed concern that the cumulative effects of offshore wind development could harm local fisheries, which local fishermen have worked hard to keep healthy.¹⁸² Another individual commenter said that use of sonar equipment and digging on the ocean floor will harm the fishing industry.¹⁸³

A regional fishery management council expressed concern that offshore development and vessel traffic will impact commercial fishing and recommended that BOEM establish or require leases to establish corridors of sufficient size to accommodate fishing and research vessel transit.¹⁸⁴

A state agency recommended that BOEM maintain consistency throughout the lease stipulations by changing “discuss potential conflicts” to “minimize potential conflicts,” identifying a process for coming to a resolution when consensus cannot be reached and including a mechanism for fishing stakeholders to provide comments to BOEM prior to the Lessee submitting a COP for approval.¹⁸⁵

A regional fishery management council voiced support for the continued use of communications plans for fisheries, Tribes and Tribal Nations, and government agencies. The commenter recommended including a requirement to work collaboratively with the fishing industry to identify optimum transmission and inter-array cable routes, and an optimum schedule for site assessment activities. The commenter also recommended that BOEM consider four national standards regarding effects of the proposed action on: the ability of fisheries to continue to achieve optimum yield from managed wild fish stocks; scientific information which informs conservation; the sustained availability of fishery resources to fishing communities near any proposed lease sale areas, and on the sustained participation of those fishing communities in fisheries including minimizing adverse economic impacts to fishing communities; and fishing vessel safety of navigation and safety of human life at sea.¹⁸⁶

An industry-funded commission said that the wind energy areas include NOAA fishery surveys which provide the foundation for stock assessments. The commenter also discussed the efforts between Oregon

¹⁷⁶ Coalition of Coastal Fisheries.

¹⁷⁷ Washington Dungeness Crab Fishermen's Association.

¹⁷⁸ Oregon Trawl Commission.

¹⁷⁹ West Coast Pelagic Conservation Group.

¹⁸⁰ M. Okoniewski.

¹⁸¹ West Coast Seafood Processors Association; West Coast Pelagic Conservation Group.

¹⁸² K. Dickson.

¹⁸³ T. Larteri Lyons.

¹⁸⁴ Pacific Fishery Management Council.

¹⁸⁵ Oregon Department of Fish and Wildlife.

¹⁸⁶ Pacific Fishery Management Council.

*trawl fisherman and NOAA Fisheries to survey West Coast bottom trawl fish ground and suggested more studies concerning this offshore wind project being pursued in a “unique” ecological region.*¹⁸⁷

BOEM Response: BOEM continuously refines analysis of the multiple use conflicts and other potential impacts of potential offshore wind development throughout the multiple stages of its leasing process. The information gathered during this initial stage includes extensive environmental data, as well as data on other uses of the OCS such as commercial and recreational fishing. Information gathering begins with the Call for Information and Nominations¹⁸⁸ and continues to the Area Identification stage. The Oregon Area Identification Memorandum¹⁸⁹ includes a description of BOEM’s understanding of use of the WEAs by fishermen and by NOAA fishery surveys. To enhance its process for identifying wind energy areas, BOEM partnered with NCCOS to adapt its suitability analysis tool for offshore wind siting offshore Oregon. In identifying the WEAs, BOEM considered comments and concerns about impacts to the commercial fishing industry and avoided 98% of the areas that the NMFS and ODFW recommended for exclusion due to conflicts with commercial fishing. BOEM prepared an EA for Coos Bay and Brookings WEAs, which represented an accumulation and analysis of further information-related commercial and recreational fishing within the WEAs. A comprehensive environmental review will be conducted by BOEM during the COP phase. If mitigation is determined to be necessary to address any loss of fishing grounds, the lessee may be responsible for compensation consistent with the terms and conditions of COP approval.

To continue the engagement by lessees with the fishing industry, lessees are required to engage and prepare a FCP that among other things, describes the strategies that the lessee intends to use for communicating with commercial and recreational fisheries prior to and during activities in support of the submission of a SAP or COP. The plan includes information on the distribution of “Notice to Mariners” and other outreach and coordination. Additionally, the plan includes a Fisheries Liaison as a primary point of contact and a process to file complaints with the lessee and seek replacement of or compensation for lost gear. In addition to the requirements in Lease Sections 3.14 and 5.4.1 to minimize conflicts between the offshore wind industry and the commercial fishing industry, BOEM also requires lessees to identify buoy locations that minimize conflicts between the lessee’s surveys and NMFS’ survey operations and reduce secondary entanglement to the maximum extent practicable.

To incentivize bidders to invest in measures to further address potential fishing conflicts, BOEM is providing bidding credits for Lease Area Use CBA(s) with one or more communities, Tribal entities, or stakeholder groups whose use of the geographic space of the Lease Area, or whose use of resources harvested from that geographic space, is expected to be impacted by the lessee’s potential offshore wind development. The Lease Area Use CBA may include payments into a special purpose fund, such as payments to support gear changes, navigation technology improvements, and other efforts to improve safety and navigation, or to compensate the fishing and related industries whose use of the geographic space is impacted by the Lessee’s potential offshore wind development.

Issue 9.8 – Recreational Fisheries

¹⁸⁷ Oregon Trawl Commission.

¹⁸⁸ <https://www.federalregister.gov/documents/2022/04/29/2022-09000/call-for-information-and-nominations-commercial-leasing-for-wind-energy-development-on-the-outer>

¹⁸⁹ Pages 20-27, [https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Oregon Area ID Memo.pdf](https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Oregon%20Area%20ID%20Memo.pdf)

Approximately three commenters wrote about recreational fisheries.

Comment Summary:

A regional fishery management council expressed concern that offshore development and vessel traffic will impact recreational fishing, especially in fishing-dependent coastal communities. The commenter recommended that BOEM establish or require leases to establish corridors of sufficient size to accommodate fishing and research vessel transit. The commenter plus a state agency also recommended that BOEM place the recreational fishing community on equal footing with the commercial fishing industry in lease stipulations, progress reports, engagement, and communication plans, as appropriate, and other points in the process where fishery impacts are possible.¹⁹⁰

A federal agency provided a fact sheet on best practices for biofouling management for recreational boats.¹⁹¹

BOEM Response: BOEM is not prescribing vessel routing measures at the leasing stage. Additional measures to accommodate fishing and research vessel transit will be reviewed during the COP phase when there is more information known on the proposed project configuration. Lessee engagement stipulations includes commercial and recreational fishing industries and stakeholders.

The reporting requirements and enhanced engagement discussed elsewhere in this comment response document were developed, in part, to increase communication and accountability among the parties to design a project reflective of the current and future uses of the common resource that is the OCS. See BOEM response to Issue 9.7 “Commercial Fisheries” for further details.

Issue 9.9 – Electromagnetic Fields (EMF)

Approximately two commenters wrote about electromagnetic fields.

Comment Summary:

An industry-funded commission commented that the electromagnetic field impacts to some species and their larvae in other wind development areas is very concerning because similar species are on the West Coast.¹⁹²

BOEM Response: In April 2022, BOEM published updated work titled “Supplemental Data Regarding the Behavioral Response of Rock Crabs to the EMF of Subsea Cables and Potential Impact to Fisheries”¹⁹³. This research tracked the behavior of red rock crab exposed to alternating current (AC) cable operating at 34.5 kV offshore Las Flores Canyon, California. This study suggests that the artificial magnetic field (the “electric fence”) generated by 34.5 kV AC submarine power cables is unlikely to affect crab harvest rates.

BOEM acknowledges that further consideration, and more analysis in the next steps of BOEM’s process are necessary to determine if any potential impacts to resources in these areas may occur and if so,

¹⁹⁰ Pacific Fishery Management Council; Oregon Department of Fish and Wildlife.

¹⁹¹ U.S. Fish and Wildlife Service.

¹⁹² Oregon Trawl Commission.

¹⁹³ https://espis.boem.gov/Final Reports/BOEM_2023-005.pdf

whether they could be avoided, minimized, or mitigated using data from BOEM-funded studies and additional information required to be submitted in future COPs.

Many topics of concern have been submitted as proposals for consideration in BOEM's annual studies planning process. These proposals will be vetted by subject matter experts and considered for funding for further scientific research. For additional information on BOEM's Environmental Studies Planning process, please visit the BOEM website at: <https://www.boem.gov/environment/environmental-studies-pacific>.

Issue 9.10 – Electric Cable Transmission Routes

Approximately four commenters wrote about electrical cable transmission routes.

Comment Summary:

A federal agency suggested that the decontamination of cable and mooring lines, anchors, and other equipment be required by a decommissioning plan to be submitted alongside the COP.¹⁹⁴

Two advocacy organizations stated that Oregon's Statewide Land Use Planning Goal 19 would require lessees to minimize potential impacts from cable routes and facilities construction to reduce the overall amount of infrastructure and suggested that BOEM should require this of lessees during their cable surveying processes. The commenters suggested requiring lessees to coordinate amongst themselves to share routes or facilities where technically and economically feasible.¹⁹⁵ Another advocacy organization also referenced Oregon's Statewide Land Use Goal 19 and requested that BOEM provide additional information to DLCDC to evaluate if cable placement activities and their associated impacts would be contrary to Oregon state law and impact the state's consistency determination.¹⁹⁶

BOEM Response: Decommissioning procedures for site assessment and characterization related activities, which also include decontamination of equipment and materials used in the marine environment and before and after deployment, are addressed in previous responses.

The lease requires that plans submitted to BOEM must demonstrate how activities will avoid placing anchors, equipment, or conduct sampling activities on or near sensitive seafloor habitats and require the inclusion of detailed maps with depicting sufficient distances from sensitive habitats, hazards, and other anthropogenic features (e.g., power cables).

Section 6.2 of the Lease Addendum C requires the lessee to coordinate engagement activities with other regional lessees, as relevant and appropriate, to increase efficiency and minimize impacts of survey activities on ocean users. We note that BOEM appreciates that not all engagement activities can be coordinated.

Should a commercial wind lease be issued, and a COP submitted to BOEM for review, it will detail the lessee's specific commercial wind development proposal (including potential locations of subsea cables) along with site-specific site characterization information. This information will be used to assess the impacts to existing infrastructure such as active, in-service submarine cables in addition to potential

¹⁹⁴ U.S. Fish and Wildlife Service.

¹⁹⁵ Surfrider Foundation; National Wildlife Federation et al.

¹⁹⁶ Rogue Climate.

mitigation measures such as cable crossing agreements and cable burial requirements. As part of BOEM’s review of a COP, BOEM can specify terms and conditions to be incorporated into the COP.

DLCD’s conditions required for BOEM’s proposed activity to be consistent with the enforceable policies of the Oregon’s coastal has been added to the lease under this sale.

Issue 9.11 – Habitats of Concern

Approximately three commenters wrote about other habitats of concern.

Comment Summary:

An industry-funded commission stated that the wind energy areas contain critical habitat for several protected species, including sponges and corals.¹⁹⁷ An advocacy group stated the Oregon Lease Areas overlap with leatherback sea turtle critical habit.¹⁹⁸

An advocacy group described the goals of Oregon’s Statewide Land Use Planning Goal 19 in conserving and protecting marine organisms and habitat above the development of non-renewable energy resources and provided specific conditions to support that goal for BOEM’s consideration. The suggested language would require lessees to develop an anchoring plan with detailed plans on how activities that could harm to sensitive habitats and organisms such as sponges and corals would be avoided.¹⁹⁹

A regional fishery management council stated both WEAs “overlap important benthic habitats for species important to our commercial and recreational fisheries [including] habitats that are present in low abundance, limited distribution, or are sensitive to long-term or permanent damage.” The commenter noted that if offshore wind lease area aliquots cannot avoid these sensitive habitats entirely, then significant buffers should be established. This effort would also require fine-scale mapping using HR multibeam data.²⁰⁰

BOEM Response: BOEM incorporated a lease condition to require an anchoring plan that describes how the lessee will avoid placing anchors on sensitive seafloor habitats, cultural resources, or existing infrastructure. The lease also requires the establishment of buffers to avoid important benthic habitats.

Issue 9.11.1 – California Current Ecosystem/Upwelling

Approximately six commenters wrote about the California Current.

Comment Summary:

A couple advocacy groups said that they see the California Current Large Marine Ecosystem (CCLME) as one ecosystem that affects migratory species²⁰¹ and one commenter stated that BOEM must consider the cumulative effects of the developments before moving forward.²⁰² A trade association expressed their concern for the CCLME in light of what the commenter described as a “rapid push for developing offshore wind” that lacked the robust scientific analysis to demonstrate that offshore development would

¹⁹⁷ Oregon Trawl Commission.

¹⁹⁸ National Wildlife Federation et al.

¹⁹⁹ Surfrider Foundation.

²⁰⁰ Pacific Fishery Management Council.

²⁰¹ Kalmiopsis Audubon Society; Surfrider Foundation.

²⁰² Surfrider Foundation.

not cause irreversible harm to the ecosystem.²⁰³ Another trade association commented their concern for the productivity of the CCLME and requested that BOEM only allow the Morro Bay project to move forward.²⁰⁴

A regional fishery management council reiterated their concern that the wind wake effects from offshore wind farms could reduce the upwelling in the proposed Lease Areas, and recommended that BOEM stipulate as part of the lease sale that the COP include an analysis of wind wake effects and identifies the lease area and site designs that mitigate impacts to protect upwelling processes.²⁰⁵ A trade association argued that there is not a good understanding of the larger impacts of removing this much wind energy from the California marine current.²⁰⁶

BOEM Response: BOEM understands that the CCLME is characterized by high primary productivity due to coastal winds that drive the upwelling of deep, cold, nutrient-rich waters to the surface. The productive upwelling areas off the coast of southern Oregon provide food for fish, marine mammals, and bird species, while also benefiting fishing communities.

The strong winds that generate this vertical mixing are also an ideal resource for renewable energy generation. BOEM recognizes the proximity of the two WEAs to the CCLME off the Oregon coast. The WEAs were sited to avoid the generally more productive waters that drive the higher nearshore densities of birds, marine mammals, and fisheries. To address existing information gaps, in 2023, BOEM worked in partnership with NOAA to build a more detailed ocean model of offshore wind infrastructure to display a range of oceanographic model outputs and build in biogeochemical processes (i.e., primary production) in the CCLME. The results of this modeling effort are expected prior to receiving potential COPs. BOEM understands the importance of the CCLME to the region and will continue to consider additional studies and possible impacts to upwelling in our offshore wind authorization process.

Issue 9.11.2 – Habitat of Particular Concern (HAPCs)/EFHs

Approximately five commenters wrote about HAPCs/EFHs.

Comment Summary:

An advocacy group stated that BOEM's EA failed to indicate how HAPCs, including biogenic structural habitats and essential fish habitats, would be affected by vessel and buoy anchoring activities. The commenter reiterated their suggestion that lessees should be required to develop an anchoring plan to detail how these special habitats would be protected. The commenter stated that the NMFS' Concurrence Letter for the California WEAs recommended buffer areas be established to protect habitats and hard bottom substrates from anchor and buoy activity and urged this to be applied in Oregon as well.²⁰⁷ Another advocacy group expressed concern about protecting HAPCs, especially biogenic structural habitat.²⁰⁸

²⁰³ West Coast Seafood Processors Association.

²⁰⁴ West Coast Pelagic Conservation Group.

²⁰⁵ Pacific Fishery Management Council.

²⁰⁶ Washington Dungeness Crab Fishermen's Association.

²⁰⁷ Surfrider Foundation.

²⁰⁸ National Wildlife Federation et al.

A regional fishery management council and a federal agency requested that aliquots identified to be sensitive, high-value habitats be excluded from leasing areas²⁰⁹ and that Section 5 of Addendum C of the leases include stipulations that are consistent with the NMFS recommendations and upcoming EFH conservation recommendations, including mapping, sampling, and observation report recommendations.²¹⁰

An industry-funded commission commented that the two WEAs contain spawning grounds for the Dover sole, which is one of the larger biomass groundfish species on the West Coast.²¹¹

An advocacy group commented that where surveys affirm the presence of HAPCs and other important habitats, the lessee's mitigation plan should include plans for a mooring system with a minimally invasive benthic footprint.²¹²

BOEM Response: BOEM consulted with NMFS for site assessment and site characterization activities and Appendix A of NMFS' Biological Assessment (BA) and EFH Assessment outlines BMPs specific to hard bottom avoidance (buffers) and marine debris prevention which are incorporated into BOEM's lease stipulations. In addition, the lease stipulations that resulted from DCLD's CZMA consistency review included a requirement for anchoring plans.

Issue 9.11.3 – Seafloor

Approximately eight commenters wrote about the seafloor.

Comment Summary:

A federal agency and a state government expressed their appreciation for the alert included in the PSN that portions of the Lease Areas may not be available for development because of sensitive seafloor habitats, including hard bottom substrates. Additionally, the commenters recommended that BOEM continue to require comprehensive benthic habitat HR mapping and utilize a high rate of seafloor sampling to understand the impacts of potential cable routes and protect sensitive seafloor habitats. The commenters also emphasized the use of buffers between sensitive habitats and bottom contact activities.²¹³

The state government commented that the PSN did not discuss the Coos Bay WEA area that overlaps with sensitive seafloor habitat, in addition to the Brookings WEA, and referenced a map of sensitive habitats that overlap with this leasing area.²¹⁴

A regional fishery management council recommended several environmental protection related precautions including fine-scale habitat classification mapping of the WEAs and potential cable routes, informing bidders of potential benthic area use restrictions, and conducting new high-resolution mapping of the sea floor prior assessment activities.²¹⁵

²⁰⁹ Pacific Fishery Management Council; NOAA.

²¹⁰ Pacific Fishery Management Council.

²¹¹ Oregon Trawl Commission.

²¹² National Wildlife Federation et al.

²¹³ NOAA; Oregon Department of Fish and Wildlife.

²¹⁴ Oregon Department of Fish and Wildlife.

²¹⁵ Pacific Fishery Management Council.

Another federal agency and an advocacy group discussed the potential for anchors and buoys that provide additional surface area, biofouling, and ballast water to act as pathways for invasive species to proliferate in the WEAs but said that this potential is not discussed as an impact to benthic habitats.²¹⁶ The advocacy group suggested lease stipulation language to protect benthic habitats modeled in the California state policies.²¹⁷

An advocacy group stated that BOEM should not defer the responsibility to restrict impacts to sensitive habitat to the COP review stage and encouraged BOEM to enact protective measures in lease stipulations now.²¹⁸

Another advocacy group noted BOEM should protect “biogenic structural habitat” and also supported an anchoring plan requirement that discusses “how the Lessee will avoid placing anchors on sensitive ocean floor habitats and pipelines”. The commenter recommended additional measures be included the FSN to protect benthic habitats such as detailed surveys of benthic habitats, box-core sampling prior to buoy anchoring, and bottom water characterization prior as part of site assessment and characterization activities.²¹⁹

An individual commenter stated that dredging the ocean floor to install wind turbines will create harm, much of which will not be realized until it is too late.²²⁰

BOEM Response: Heceta, Stonewall, Perpetua, Siltcoos, and Coquille Banks were excluded from consideration for the WEAs due to their biodiversity. To ensure potential impacts from proposed projects are available for analysis and supported by site-specific data, BOEM’s offshore wind regulations require the submission of information about the construction, operation, and decommissioning of a lessee’s proposed offshore wind facility with the submission of a COP. BOEM will continue to utilize the best available science on the definition and locations of sensitive or highly productive habitats when analyzing potential impacts from a COP. Additional information on the seabed and modeled grain size is available in a BOEM report from October 2020 called “Cross-Shelf Habitat Suitability Modeling: Characterizing Potential Distributions of Deep-Sea Corals, Sponges, and Macrofauna Offshore of the US West Coast”²²¹. The report also includes an updated interpretation of potential maximum extent of rocky (hard) substrate, and a map of the WEAs is available online at: <https://bit.ly/37WVz6f>.

Lessees in the Oregon Lease Areas will also be required to follow BOEM’s BMPs, as described in the Oregon EA. BOEM derived these BMPs based on relevant experience on the Pacific OCS, as well as through analysis of the best available data and coordination with NMFS Greater Atlantic Regional Office on SAPs submitted to BOEM for the Atlantic OCS. BOEM will implement BMPs through issuance of leases and review of proposed plans through Standard Operating Conditions (SOCs). These BMPs include conducting seafloor surveys in early phases of the project to minimize impacts associated with seafloor instability, hazards, valuable seafloor habitats, topographic features, seabed disturbance, and sediment dispersal. For instance, should a lease sale proceed, BOEM will require extensive, HR habitat mapping and data collection as described in the 30 C.F.R. Part 585.

²¹⁶ U.S. Fish and Wildlife Service; Rogue Climate.

²¹⁷ Rogue Climate.

²¹⁸ Climate Solutions.

²¹⁹ National Wildlife Federation et al.

²²⁰ L. Yetter.

²²¹ https://espis.boem.gov/final-reports/BOEM_2020-021.pdf

For lease issuance and associated site assessment and site characterization activities, BOEM also has consulted with NMFS. Appendix A of the NMFS BA and EFH Assessment outline BMPs specific to hard bottom avoidance and marine debris prevention which BOEM incorporated into lease stipulations.

Issue 9.12 – Geohazards

Approximately four commenters wrote about geohazards.

Comment Summary:

An individual commenter expressed concern about the volcanic and seismic activity in the area, commenting that the environment is not suitable for this kind of development.²²² Another individual commenter stated that the Pacific Northwest lies near the Cascadia Subduction Zone, which is due for a major earthquake.²²³ Finally, an advocacy group stated concern about the potential hazards of development in the Pacific Northwest and said that additional studies are needed to confirm suitability for development.²²⁴

An individual commenter requested that BOEM halt any further lease sales in the Pacific Northwest until a full Programmatic EIS is completed to evaluate the threat and impacts of a major earthquake and tsunami activity in the Cascadia Subduction Zone.²²⁵

BOEM Response: Earthquake and tsunami impacts to offshore wind development will be analyzed at the COP review stage through both technical and environmental reviews of the proposed project. Project specific information provided in a lessee’s COP allows for detailed analysis of impacts earthquakes and tsunamis events may have on the proposed project including the installation, operation, and maintenance of the facility.

In May 2020, the BSEE-funded a study by RPS Group, “Potential Earthquake, Landslide, Tsunami and Geo-Hazards for the U.S. Offshore Pacific Wind Farms”²²⁶ which provides both a general evaluation of geohazards for FOSW areas on the West Coast along with design considerations and criteria for structures to cope with extreme events. The study assessed the potential threats from earthquakes, landslides, tsunamis, and other geohazards to wind energy development off the U.S. Pacific coast. The study states that the Oregon coast is suitable for any type of FOSW turbines. Risks associated with the proximity to fault lines and probability of geohazards presence and/or activity such as earthquakes and tsunamis will continue to be evaluated throughout BOEM’s authorization process.

Since 2019, BOEM has supported the U.S. Geological Survey’s “Cascadia Subduction Zone Marine Geohazards Project”²²⁷ and continues to monitor data releases from the effort – including the March 2024 “Sediment core data from offshore southern Cascadia during field activity 2019-643-FA”²²⁸ to ensure environmental analyses contain the most up-to-date information. BOEM, USGS, and NOAA Office of

²²² J.&W. McCulloch.

²²³ T. Larteri Lyons.

²²⁴ Renewable Northwest.

²²⁵ C. Cameron.

²²⁶ <https://www.rpsgroup.com/projects/boem-report-potential-earthquake-landslide-tsunami-and-geo-hazards-for-the-us-offshore-pacific-wind-farms/>

²²⁷ <https://www.usgs.gov/centers/pcmsc/science/cascadia-subduction-zone-marine-geohazards#overview>

²²⁸ <https://cmgds.marine.usgs.gov/data-releases/datarelease/10.5066-P1E8GDZH/>

Coast Survey are also collaborating on a prospective April 2025 NOAA hydrographic survey cruise that is anticipated to conduct a systematic survey of the deformation front.

Issue 9.13 – Birds and Bats

Approximately five commenters wrote about birds.

Comment Summary:

A federal agency recommended that BOEM require lessees to adopt a bird and bat conservation plan during the site assessment and characterization phase, utilize standard minimization measures to reduce light attraction, gather bird and bat data utilizing using a before-after-control-impact (BACI) design and analysis, and reduce the impacts of noise and disturbance from increased vessel traffic. The commenter also suggested that lessees be required to report all injured or dead birds and bats during construction, operations, and decommissioning. To support conservation measures, the commenter also recommended that BOEM continue its consultation with USFWS to conduct research and develop best management practices to reduce impacts to birds, develop autonomous and remote monitoring technologies, and improve mortality tracking. The commenter said that location data was not included in the NCCOS model for the short-tailed albatross and marbled murrelet and stated additional data was needed to understand the potential impacts to these protected species. Lastly, the commenter also said that BOEM could remove the California least tern from the species list as it does not range north of the San Francisco Bay.²²⁹

A state government generally supported the inclusion of lease stipulations for lighting, tracking systems, and bird deterrents and requested that the ODFW be added to the list of recipients of bird and bat reports and avian surveys and data.²³⁰

An advocacy group stated that there are information gaps in the data provided to assess the potential impacts to migratory bird species.²³¹ Similarly, a trade association and an advocacy group commented that the environmental reviews omitted several avian species, including the short-tailed albatross.²³²

An advocacy group recommended lease stipulations to maintain healthy populations of birds and bats including, but not limited to, lighting specifications, collision monitoring, and turbine collision minimization strategies.²³³

A federal agency provided recommendations for the development of the SAP and COP, including conducting avian surveys at the appropriate temporal and spatial scales for each lease area, monitoring avoidance of and displacement from wind energy areas by marine birds through tracking studies, and gathering information on migratory and non-migratory bat activity patterns offshore, among others.²³⁴

BOEM Response: BOEM is working with USFWS and state agencies on addressing data gaps for birds and bats. Through BOEM’s environmental science program, BOEM funded multiple efforts to understand bird vulnerabilities and potential impacts to birds and bats along the US West Coast. In May 2020, BOEM published “Guidelines for Providing Avian Survey Information for Renewable Energy Development on

²²⁹ U.S. Fish and Wildlife Service.

²³⁰ Oregon Department of Fish and Wildlife.

²³¹ Rogue Climate.

²³² Washington Dungeness Crab Fishermen’s Association; National Wildlife Federation et al.

²³³ National Wildlife Federation et al.

²³⁴ U.S. Fish and Wildlife Service.

the Outer Continental Shelf Pursuant to 30 CFR Part 585”²³⁵. BOEM lists several best management practices in Appendix E of the EA to reduce the potential impacts to birds and bats.

The Short-tailed Albatross is federally listed as endangered and also listed as endangered by the State of Oregon. Most findings of the Short-tailed Albatross off the Oregon coast in recent years have been during the fall and early winter with a few recorded in late winter, early spring, and summer. There have been 20 recorded instances of the species off Oregon since 1961 with 16 records since 2000; 8 of these are off the Douglas, Coos, and Curry Counties coast. The rarity of the Short-tailed Albatross off the Oregon coast indicates that it is highly unlikely to be in the WEAs; its presence is anticipated to be limited to occasional occurrences even as the population continues to grow. Based on data from USFWS the marbled murrelet most commonly occurs in Alaska, but does occur along to coast of British Columbia, Washington, Oregon and California.

BOEM notes commenter’s request to remove the California least tern from the species list.

Issue 9.14 – Marine Mammals and Leatherback Sea Turtles

Approximately seven commenters wrote about marine mammals and leatherback sea turtles, generally. Additional details regarding concerns from noise and vessel strike impacts to marine mammals and sea turtles are found in previous Issues.

Comment Summary:

A federal agency stated that it was difficult to determine the impacts to listed species without further investigation.²³⁶ Two advocacy groups suggested that BOEM stipulate the use of marine mammal protection and monitoring measures, require marine mammal observers on board, stop assessments when entanglement or harassment is probable, and follow up with a report on the monitoring results that is sent to BOEM and state agencies.²³⁷ Other advocacy groups requested that BOEM include requirements for certain practices to avoid harm to marine mammals, such as reducing vessel speeds, in alignment with the MMPA.²³⁸ Two individual commenters and one advocacy group expressed concern of entanglement risk in cable anchors used to stabilize the floating turbine platforms.²³⁹ The advocacy group urged FOSW turbines be designed to avoid entanglement risk, robust monitoring protocols, establishment of clearance and exclusion zones, vessel-related measures, and mandatory reporting of marine mammals and sea turtles detected during pre-clearance, installation, and 30 minutes after installation activities.²⁴⁰ An advocacy group suggested protocol for monitoring and reporting ensnarement and entanglement of marine species on marine debris and project infrastructure.²⁴¹

BOEM Response: BOEM acknowledges the potential for marine mammal and sea turtle impacts during project construction and operation including the risk of vessel strike, entanglement, noise disturbance, and displacement. However, BOEM believes that through the lease area development process, significant efforts have been made to avoid as much overlap with critical habitat and Biologically Important Area

²³⁵ https://www.boem.gov/sites/default/files/documents/newsroom/Avian_Survey_Guidelines.pdf

²³⁶ U.S. Fish and Wildlife Service.

²³⁷ Surfrider Foundation; Rogue Climate.

²³⁸ Rogue Climate; National Wildlife Federation, et al.

²³⁹ S. Vejtasa; WhoPoo App.

²⁴⁰ National Wildlife Federation et al.

²⁴¹ National Wildlife Federation et al

(BIAs) as possible. BOEM added a lease stipulation for vessels to reduce speeds in the action area (Astoria, Oregon to just south of San Francisco, California) to 10 knots. BOEM also undertook the requisite consultation with NMFS regarding impacts to marine mammals, including whales, and sea turtles with respect to site assessment and site characterization activities (Letter of Concurrence regarding ESA and EFH consultation, from NMFS to BOEM, dated July 12, 2024).

The proposed action is for lease issuance and site assessment activities – not the construction and operation of wind turbines. Appropriate measures, including ones suggested by the commenters, are considered and applied when appropriate through ESA consultation with NMFS and/or the COP review stage. BOEM will consider the commenter’s proposed requirements in its environmental analysis of lessees’ COPs for offshore wind energy facilities.

Issue 9.15 – Social Factors (including Environmental Justice)

Approximately four commenters wrote about social factors.

Comment Summary:

An advocacy group and an union said that BOEM’s OCLSA authority to develop offshore wind provides an opportunity to create quality, high-paying jobs, expand US supply chains, and deliver community benefits to disadvantaged communities.²⁴² Another advocacy group stated that to ensure a just transition to a clean energy future, the benefits of offshore wind should be felt in nearby disadvantaged communities, including improved energy affordability, increased energy resiliency, and local workforce investment.²⁴³

A trade association stressed the importance of the commercial fisheries of the west coast to local communities’ wellbeing and economic survival. The commenter remarked that the CBA and Job Training Incentives would not be enough to sustain coastal communities if commercial fishing were to cease. The commenter also noted that costs of FOSW and government subsidies make it not profitable, adding costs to the consumer and U.S. taxpayer.²⁴⁴

Two other advocacy groups noted that the Oregon lease sale provided beneficial opportunities such as boosting investor confidence in the West Coast market and providing electricity particularly in the Coos Bay area.²⁴⁵

BOEM Response: The OCSLA does not authorize BOEM to prescribe labor provisions for offshore wind components used to construct OCS offshore wind projects. While BOEM encourages union apprenticeships and labor management training partnership, BOEM cannot require specific programs and has limited authority to “encourage” investments towards underserved communities. BOEM has the authority to include lease stipulations encouraging lessees to “identify and engage with underserved communities, including those described in EO 12898, on environmental justice that may be disproportionately impacted by a lessee’s activities on the OCS, in order to avoid, minimize, and mitigate potential adverse effects by, for example, investing in these communities.” Lessees can work with states

²⁴² BlueGreen Alliance; Oregon AFL-CIO.

²⁴³ Rogue Climate.

²⁴⁴ West Coast Pelagic Conservation Group.

²⁴⁵ Oregon Coast Energy Alliance Network; Oceanic Network

and stakeholders in making workforce investments to determine those that will provide the greatest value for advancing the domestic offshore wind industry.

Issue 9.16 – Other General Environmental Impacts

Approximately seven commenters wrote about other general environmental impacts.

Comment Summary:

A state and federal agency requested the FSN acknowledge NOAA extensive scientific activities, including NMFS surveys, and include mitigation measures to minimize impacts on these activities from offshore wind development.²⁴⁶

An advocacy group and a union urged BOEM to allow the development of offshore wind energy in an environmentally responsible manner that avoids undue harm to marine life and ocean users, utilizes the best available science in decision making, and meaningfully engages stakeholders throughout the process.²⁴⁷

Another advocacy group asked BOEM to ensure stronger environmental avoidance and mitigation measures in the FSN and require comprehensive monitoring of impacts from planning to decommissioning in the lease stipulations.²⁴⁸

A trade association asks that existing offshore wind leases in Morro Bay be used as an experiment to gather effects on the environment before any leases are issued on the West Coast.²⁴⁹

BOEM Response: The three most southern rows of aliquots of the Draft Brookings WEA were removed to allow NMFS to continue long-term sampling and surveys in the area and to protect sensitive habitats. Additional coordination with agencies, including NMFS will occur by both BOEM and the lessees who are required to enter into an ACP. The ACP is intended to ensure early and active information sharing, focused discussion of potential issues, and collaborative identification of solutions to improve the quality and efficiency of various agency decision-making processes, and to promote the sustainable development of offshore wind energy projects.

The Oregon EA includes practices, measures, and procedures to prevent or reduce impacts on resources. Appendix E “BMPs for Operations on the Pacific Outer Continental Shelf” are integrated into the Oregon EA analysis. The surveys must be within the scope of activities described in the existing ESA consultation (Letter of Concurrence regarding ESA and EFH consultation, from NMFS to BOEM, dated July 12, 2024), or the Lessee must consult further with BOEM and the Services.

BOEM will conduct a comprehensive environmental review and analysis at the COP review phase.

Issue 10 – Tribal Concerns

Comments associated with this Issue are included in the Issues below.

²⁴⁶ NOAA; Oregon Department of Fish and Wildlife.

²⁴⁷ BlueGreen Alliance; Oregon AFL-CIO.

²⁴⁸ The Nature Conservancy.

²⁴⁹ West Coast Pelagic Conservation Group.

Issue 10.1 – Environmental Impacts/Concerns

Approximately one commenter wrote about environmental impacts and concerns.

Comment Summary:

An advocacy group generally expressed concern about impacts to environmental and cultural resources from offshore wind in Oregon but reasoned that a “high degree of coordination with the State of Oregon and careful attention to stakeholder concerns” could help resolve these problems, including considering indigenous communities, coastal communities, and wildlife advocates in developing the FSN.²⁵⁰

BOEM Response: BOEM agrees with the commenter and has provided lease terms and conditions intended to ensure high degree of coordination with the State of Oregon and careful attention to stakeholder concerns.

Additionally, BOEM recognizes that it has a unique legal relationship with Tribal Nations set forth in the Constitution of the United States, treaties, statutes, and court decisions, and therefore, consultation with a Tribal Nation must recognize the government-to-government relationship between the federal government and Tribal governments. BOEM acknowledges that Tribal Nations possess special expertise and BOEM will continue to invite consultation with Tribal Nations and, as appropriate, their representatives, including the Tribal Historic Preservation Officer (THPO), regarding offshore wind projects on the OCS; additionally, BOEM will continue to invite potentially affected federally recognized Tribes to participate as a Cooperating Tribal Nation in the environmental review process under NEPA.

Issue 10.2 – Engagement

Approximately seven commenters wrote about engagement.

Comment Summary:

A Tribal government reiterated to BOEM that government-to-government consultation means decision makers from both the Tribe and BOEM discuss the implications of a proposal to the Tribe. The commenter provided specific edits and recommendations on Section I (3) of the PSN to include in the FSN, stating that it should disclose the status of the Programmatic Agreement (PA) under the NHPA and mention that an EIS will be completed prior to any construction.²⁵¹

An advocacy group discussed the Oregon DLCD’s Tribal relations policy and suggested BOEM incorporate similar recommendations in the Oregon PSN, including facilitating better relations between Tribes and state and local governments, working with Tribal governments to continue relations while using fewer resources, and proactively contacting Tribes to make them aware of actions taken. They asserted that they “are deeply concerned with the lack of consultation that BOEM has demonstrated with Tribal Governments in the region,” referenced comments made and concerns raised by the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI), and recommended that BOEM prioritize Tribal consultation and engagement, including Tribes that are not federally recognized, and require lessees to engage with Tribes, among other things. The commenter expressed formal support for CTCLUSI’s request for “additional meaningful engagement.”²⁵² A couple of advocacy groups echoed

²⁵⁰ Climate Solutions.

²⁵¹ Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians

²⁵² Surfrider Foundation.

many of the above points and added that BOEM should provide a Tribal-specific CBA as a bid credit in the PSN.²⁵³

*An advocacy group asserted that BOEM and developers need to work closely with Tribal nations “above and beyond the proposed bid credits,” as well as include Tribes in the CBA discussion.*²⁵⁴

*An industry commenter asserted that bidding credits for CBAs should be used to support consistent engagement with local communities, including Tribes, and existing ocean-users. The commenter along with a trade association and an advocacy group, expressed support for the continued use of communications plans and progress reports as long as BOEM updates lease term requirements to provide for more time, including extending the 120-day requirement for communication plans.*²⁵⁵

BOEM Response: Engagement with Tribal Nations and stakeholders is a major focus of BOEM’s renewable energy program, which includes a number of processes to enhance outreach, coordination, and collaboration. BOEM engages with the Tribal Nations and the public at multiple steps in the lease sale and environmental review processes, holding scoping meetings, public meetings, and government-to-government consultations and information sharing meetings with Tribal Nations. BOEM also requires lessees, through stipulations in the lease, to have early and active information sharing, focused discussion of potential issues, and collaborative identification of solutions with Tribes and parties that may be potentially affected by the Lessee’s project activities on the OCS. The status of the PA will be reflected i on the BOEM website in the future. BOEM will conduct additional environmental reviews upon receipt of a lessee’s COP. COPs received by BOEM thus far have required an EIS.

A Tribal-specific CBA was not added into the FSN; however Tribal Nations are specifically included as potential beneficiaries of both the CBAs. BOEM has not proposed standard terms for the agreements, as the CBAs are unique agreements between the Lessee and a potentially impacted community, and BOEM has determined it most beneficial for the affected communities if the counterparties to a CBA can tailor the agreements to their specific goals, so long as the agreements fit within the terms of the lease and a bidder’s conceptual strategy.

With regards to extending the 120-day requirement for developing a NATCP, BOEM is extending the 120-day to a 180-day requirement for submission of ACPs, FCPs, and NATCPs to allow additional time for lessees to submit their plans.

Issue 10.3 – Archaeological Sites

Approximately three commenters wrote about archaeological sites.

Comment Summary:

A Tribal government provided specific edits and recommendations on Section II of the PSN concerning submerged cultural resources. Specially, the commenter stated this Section should be expanded to state, “Potential bidders are advised that portions of the Lease Areas may not be available for future development (i.e., installation of wind energy facilities) because of archaeological and cultural resources,” consistent with requirements of the NHPA. The commenter also recommends that BOEM

²⁵³ Rogue Climate; National Wildlife Federation et al.

²⁵⁴ The Nature Conservancy.

²⁵⁵ RWE; American Clean Power Association; Renewable Northwest.

*should require further data collection and evaluation of submerged cultural resources and cultural significant viewshed and impose restrictions on impacts to these resources during the COP review.*²⁵⁶

*An individual commenter wrote that offshore wind turbines will destroy cultural and sacred sites of Indigenous Peoples.*²⁵⁷

*An advocacy group recommended that BOEM “protect submerged archaeological resources and culturally significant viewsheds, and limit development as needed.”*²⁵⁸

BOEM Response: BOEM has added additional text to Section II of the FSN concerning submerged cultural resources to advise potential bidders that portions of the Lease Areas may not be available for future development due to potential presence of archaeological and cultural resources.

The BOEM Pacific Region has been proactive in efforts to better understand areas and resources of concern to Tribal Nations through our work with submerged landforms modeling and Tribal Cultural Landscapes. BOEM partnered with the Udall Foundation’s National Center for Environmental Conflict Resolution to work with interested West Coast Tribes in developing Tribal Cultural Landscapes assessments. BOEM has also drafted, in consultation with Oregon Tribes, State Historic Preservation Office (SHPO), and Advisory Council on Historic Preservation staff, a Section 106 PA for BOEM’s leasing activities offshore Oregon. The PA has several stipulations outlining how BOEM will consult on historic properties, including the identification of Traditional Cultural Property (TCP) and Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSIT), throughout the lease or grant issuance process and the approval of plans. BOEM is committed to upholding its Tribal Nation trust responsibilities and fostering working relationships based on meaningful consultation. BOEM will continue to engage and invite consultation throughout the offshore wind authorization process.

BOEM notes that the Lease Areas avoid potential submerged landform features, which the Coquille Indian Tribe, CTCLUSI, and other Tribes previously expressed as an area of concern.

Issue 11 – Industry Standards for Environmental Protection

Approximately one commenter wrote about industry standards for environmental protection.

Comment Summary:

A federal agency provided recommendations for industries with regards to environmental protections while performing site assessments:

- *Correlate results from preliminary siting and regional scale assessments regarding the presence of species, resources, habitat features, or hotspots;*
- *Provide species and resource data to determine potential exposure during stressor analysis;*
- *Provide project-area baseline data for any post-construction comparison of actual project effects;*
and

²⁵⁶ Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians

²⁵⁷ L. Yetter.

²⁵⁸ National Wildlife Federation et al.

- *Provide information to be used for environmental assessment documents required for Tribal, Federal, and State regulations (e.g., ESA, MBTA, NEPA).*²⁵⁹

BOEM Response: The lease provides terms and conditions for lessees to follow while performing site assessments. The surveys must be within the scope of activities described in the existing ESA consultation. Oregon’s Coastal Zone Consistency Conditions are also included in the lease. BOEM is also requiring lessees to establish communications plans with Tribes, fishing communities, and local, state, and federal agencies for engagement proceedings and sharing information on site assessment and site characterization activities.

Issue 12 – Additional Studies/Data

Approximately seven commenters wrote about additional studies and data.

Comment Summary:

*An individual commenter encouraged BOEM to conduct additional studies and collect more data before any leases are let.*²⁶⁰ *An industry-funded commission expressed disappointment that there have been no programmatic studies of the impacts of meta scale offshore wind development on the West Coast.*²⁶¹

A federal agency recommended a variety of additional research on the effect of Oregon offshore wind development on seabirds, including:

- *Satellite and GPS tracking studies;*
- *Effects of EMFs on seabird prey species;*
- *Seasonal distribution and abundance of seabirds; and*
- *How to reduce collision risk for birds, among other things.*

*The commenter detailed the need for survey and monitoring data to understand the impacts of offshore wind, specifically for bird species most vulnerable to development. They outlined a variety of survey and monitoring recommendations and attached a document outlining best management practices for minimizing risk.*²⁶²

*An advocacy group asserted that all documents and data resulting from research and surveys should be made publicly available and discussed a variety of necessary resource baseline surveys, including but not limited to surveys of benthic habitat and environmental conditions, high resolution seafloor mapping, sediment composition testing, and more.*²⁶³ *Another advocacy group asserted that later survey data can help refine exclusions and stipulations to certain leasing areas.*²⁶⁴

Another individual commenter suggested BOEM update its Report 2020-040 entitled “Potential Earthquake, Landslide, Tsunami and Geo-Hazards for the U.S. Offshore Pacific Wind Farms” as it fails to include work from the past 10 years on Cascadia margin earthquake and tsunami hazards and lacks

²⁵⁹ U.S. Fish and Wildlife Service.

²⁶⁰ K. Dickson.

²⁶¹ Oregon Trawl Commission.

²⁶² U.S. Fish and Wildlife Service.

²⁶³ Surfrider Foundation.

²⁶⁴ Climate Solutions

*tsunami related hazards. The commenter also requests that geoscience and hazard data and reports on potential offshore call areas should be made available as part of any future lease sale data package.*²⁶⁵

BOEM Response: BOEM continuously considers information about habitats, protected species, and other natural resources. Throughout the leasing and plan review process, BOEM will continue to compile information and refine its analyses. For example, during its review of a COP, BOEM will evaluate potential impacts of a proposed project on habitats or protected species and will consider appropriate mitigation measures. BOEM acknowledges that further consideration, and more analysis in the next steps of BOEM's process, are necessary to determine if any potential impacts to resources in these areas may occur and if so, whether they could be avoided, minimized, or mitigated using data from BOEM-funded studies and additional information required to be submitted in future COPs. The data from BOEM-funded studies are made publicly available, and lessees are encouraged to deposit their data at publicly accessible archives.

Many topics of concern noted above have been submitted as study ideas for consideration in BOEM's annual environmental studies planning process. All environmental study idea suggestions received by the BOEM Pacific Region during the annual nation-wide call for recommendations are vetted by subject matter experts and considered for funding.

For additional information on BOEM's Environmental Studies Planning process, please visit the BOEM website at: <https://www.boem.gov/environment/environmental-studies/environmental-studies-planning>

For BOEM responses on studies pertaining to earthquakes and tsunami hazards, please see previous Issue 9.12 "Geohazards" for further information.

Issue 13 – Other Comments

Comments associated with this Issue are included in the sub-issues below.

Issue 13.1 – Comments for the FSN

BOEM received many other comments and suggestions on the FSN, below are some of the comments received. Other FSN related comments received concerned bidding credits, CBAs, labor and economy, and other lease sale process related items which are discussed previously, see Issues 5, 6, and 7 for further comments and BOEM responses.

Comment Summary:

A state government agency provided recommendations to Sections 6 and 13 in the PSN that BOEM should be included in the FSN. For Section 6 "Project Easement(s)", the commenter recommends clarification on the mechanisms and entities the lessees will have to coordinate with to authorize activities for the development of easements shoreward of federal waters.

*A federal agency also recommended that Section II (3) of the FSN include a requirement for further data gathering, high-resolution mapping, and sampling in evaluation of seafloor habitats and recommended adding restrictions on disturbance of sensitive seafloor habitats during COP review.*²⁶⁶

²⁶⁵ C. Cameron.

²⁶⁶ NOAA.

*An advocacy group and business association said that it assumed BOEM will update the language in the PSN and draft leases to align with the Modernization Rule finalized on May 15, 2024 by BOEM and the BSEE. The commenters welcomed a discussion with BOEM on the specific language and terms to be included in leases to ensure alignment with the Modernization Rule.*²⁶⁷

*A business association requests BOEM to only limit cost-share spending associated with federal programs as state and local programs could be a valuable tool to promote investment that also leverages private investment.*²⁶⁸

BOEM Response: BOEM added a condition requiring lessees, prior to survey activities, to provide Oregon DLCD a list of all permits and authorizations applicable to survey activities occurring in state waters and a statement indicating whether such authorization or approval has been applied for or obtained. Required easements shoreward of federal waters will be provided in the COP when there is more information on cable routing and points of interconnection to the grid.

BOEM has also provided updates to the FSN and leases to align with the Modernization Rule and clarified that limits for cost-share spending are specific to federal programs.

Issue 13.2 – Comments on Energy Alternatives

Approximately six commenters wrote about energy alternatives.

Comment Summary:

*An individual commenter encouraged BOEM to explore other green energy alternatives.*²⁶⁹ *A trade association suggests nuclear, solar, and other forms of power generation appear to be less costly than offshore wind.*²⁷⁰

*A federal agency suggests BOEM expand its leases to provide multi-use ocean energy such as marine hydro-kinetic devices.*²⁷¹ *Similarly, an advocacy group encouraged BOEM to consider “co-locating additional energy resources” with offshore wind, such as integrating electrolyzers into platforms or using wave energy technology.*²⁷² *An advocacy group notes that there should be no development of fossil fuel-based hydrogen production related to offshore wind development due to inefficiencies and energy loss.*²⁷³

*An advocacy group noted that offshore wind can be complementary to onshore wind and solar by adding to grid reliability when these energy alternatives are not producing electricity.*²⁷⁴

BOEM Response: BOEM recognizes the importance of pursuing renewable energy resources throughout the State of Oregon; however, BOEM’s jurisdiction only covers offshore renewable energy development in Federal waters. BOEM defers to Oregon’s energy resource planning and procurement processes to compare renewable energy alternatives to meet demand. BOEM appreciates the commenters suggestions

²⁶⁷ Renewable Northwest; American Clean Power.

²⁶⁸ American Clean Power.

²⁶⁹ J.&W. McCulloch.

²⁷⁰ West Coast Pelagic Conservation Group

²⁷¹ U.S. Fish and Wildlife Service.

²⁷² Climate Solutions.

²⁷³ Rogue Climate.

²⁷⁴ Renewable Northwest

about other ocean energy alternatives and synergies with offshore wind. With the leases, BOEM is not authorizing construction of projects, the lease only grants lessees the rights to submit plans to BOEM for review.

Issue 13.3 – Comments on Legal/Regulatory Authority

Approximately two commenters wrote about legal/regulatory authority.

Comment Summary:

A state agency recommends BOEM consider resource protections contained within Oregon’s relevant statutes, rules, and policies as well as the Statewide Land Use Planning Goals, the Oregon Territorial Sea Plan, the CZMA Geographic Location Description (GLD) for Renewable Energy, and the Oregon Nearshore and Conservation Strategies.²⁷⁵

An advocacy group provided BOEM recommendations they made to the OCMP for consideration on the Oregon PSN including reviewing enforceable and relevant policies affecting coastal resources, as well as consult with state agencies to address gaps in policies. They added that addressing policy gaps will ensure that conditions are enforced with adequate mitigation measures.²⁷⁶

BOEM Response: The state reviewed BOEM’s federal consistency determination, held public meetings, and ultimately concurred, with conditions on BOEM’s determination. BOEM added DLCD’s specific conditions to the lease to ensure that the lease activities are consistent to the maximum extent practical with OCMP.

Issue 13.3.1 – CZMA

Approximately three commenters wrote about the CZMA.

Comment Summary:

An advocacy group stated that BOEM has not provided sufficient information for Oregon to complete their state consistency determination and provided suggested language regarding the analyses they believe should be required to protect affected resources to ensure consistency with state-level policies. Here, the advocacy group expressed concerns that while the cable corridor and turbine infrastructure plans outlined in the proposal are activities with broad potential consequences, BOEM did not adequately address such activities as “reasonably foreseeable” within the standards imparted by federal court decisions. Additionally, the commenter argued that without a comprehensive review of the proposal’s full life cycle, leases within the designated area would be inconsistent with Oregon’s enforceable policies.²⁷⁷

Two advocacy groups argued that BOEM should adopt regulatory language that would require the agency to adopt the “best available science” to ensure that Oregon’s enforceable policies are considered in the development of the Lease Areas.²⁷⁸

²⁷⁵ Oregon Department of Fish and Wildlife.

²⁷⁶ Surfrider Foundation.

²⁷⁷ Surfrider Foundation.

²⁷⁸ Surfrider Foundation; National Wildlife Federation et al.

*Another advocacy group stated that BOEM's site assessment on the OCS does not meet the scope of the CZMA since the EA does not list sufficient information about the impacts of the action on state coastal uses and resources.*²⁷⁹

BOEM Response: Oregon's enforceable policies in its coastal management program are considered during the federal consistency review process under CZMA with the Oregon DLCDC. The state reviewed BOEM's consistency determination, held public meetings, and ultimately concurred, with conditions with BOEM's determination. BOEM has added DLCDC's specific conditions to the lease to ensure that the lease activities are consistent to the maximum extent practical with Oregon's coastal management program.

Issue 13.3.2 – NEPA Process

Approximately three commenters wrote about the NEPA process.

Comment Summary:

*An individual commenter said that BOEM's separation of impact analyses from activities associated with development are "an embarrassment" to NEPA professionals. The commenter urged BOEM to address the inaccuracies in the Draft EA that reviewers have identified. Finally, the commenter asked what type of oversight will be provided to leaseholders as they execute site and related site surveys, given that the commenter said the guidance documents are not up to the levels provided by NOAA.*²⁸⁰

*An advocacy group reasoned that BOEM is legally required to undertake NEPA analysis at this stage, given that future construction and operation on the leased sites is a probable future project.*²⁸¹ *A trade association commented that the Oregon EA does not analyze the impacts of leasing, leading to an agenda not driven by data and impacts analysis.*²⁸² *An advocacy group agreed, saying that BOEM narrowly limits its assessment of the project's impacts to the issuance of leases, ignoring the likely outcome of the action: development of wind energy facilities off the coast of Oregon.*²⁸³

*A Tribal government argued that Section I (3) of the EA should disclose the status of the development of the PA under the NHPA.*²⁸⁴

BOEM Response: Prior to any lease sale, BOEM prepares an environmental review and conducts appropriate consultation on the proposed action, which is issuance of a lease, which confers the exclusive right to submit plans to BOEM for potential offshore wind development but does not authorize the construction and operations of wind energy facilities. In this case, BOEM prepared an EA analyzing the pre-construction activities expected to take place within the Lease Areas should a lease be issued.²⁸⁵ The Oregon EA considered the environmental consequences associated with issuing commercial wind leases in the Oregon WEAs, and considered associated site characterization activities (i.e., biological, archeological, geological, and geophysical surveys and core samples) and site assessment activities (i.e., installation of meteorological buoys) offshore Oregon. In this case, BOEM also hosted two virtual meetings for the public to learn more about the leasing process, the draft EA, ask questions about the

²⁷⁹ Rogue Climate.

²⁸⁰ C. Moffitt.

²⁸¹ Surfrider Foundation.

²⁸² Washington Dungeness Crab Fishermen's Association.

²⁸³ Surfrider Foundation.

²⁸⁴ Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.

²⁸⁵ <https://www.boem.gov/renewable-energy/state-activities/oregon-wind-energy-areas>

The proposed action is for lease issuance and site assessment activities – not the construction and operation of wind turbines. Appropriate measures, including onshore landings and infrastructure, are considered and applied when appropriate through ESA consultation with NMFS and/or the COP review stage. BOEM will consider the commenter’s proposed requirements in its environmental analysis of lessees’ COPs for offshore wind energy facilities.

Issue 14 – Out of Scope

Approximately three commenters wrote about out-of-scope topics.

Comment Summary:

*An advocacy group shared the results of an opinion survey it conducted regarding wind development offshore Oregon.*³⁰⁶

*An individual and another commenter voiced concern over potentially violating the ESA, specifically over the North Atlantic right whale. The commenter discussed the “unusual mortality event” of North Atlantic right whales beginning in 2017 and the dangers posed from the industrialization of their habitat. The commenter referenced NOAA scientists’ discussion that the construction and operation of wind turbines could result in their extinction.*³⁰⁷

BOEM Response: BOEM appreciates the commenters survey of their constituents regarding their positions and understandings of offshore wind energy development on the Oregon OCS. The North Atlantic right whales are not found off the U.S. West Coast and so considerations of potential impacts to that species is out of scope.

To date, no whale mortality has been attributed to offshore wind activities. According to NOAA, at this time, there is no scientific evidence that noise resulting from offshore wind site characterization surveys could potentially cause mortality of whales. There are no known links between recent large whale mortalities and ongoing offshore wind surveys.

Issue 14.1 – COP Related Topics

Approximately two commenters wrote about other COP related topics.

Comment Summary:

*An individual commenter argued that offshore wind turbines “destroy delicate ecosystems” and add to the carbon footprint through the mining of raw materials, the transportation of those materials, and the manufacturing of the components used to build the wind turbines.*³⁰⁸

*A trade association commented environmental impacts from sourcing raw materials for FOSW infrastructure, such as mining for metal ore, have not been properly evaluated.*³⁰⁹

BOEM Response: BOEM regulations require that lessees acquire detailed data on the environmental setting of proposed project activities to ensure that BOEM can evaluate potential environmental impacts.

³⁰⁶ Surfrider Foundation.

³⁰⁷ WhoPoo App; Oregon Trawl Commission

³⁰⁸ L. Yetter.

³⁰⁹ West Coast Pelagic Conservation Group.

These comments relate to the construction of a wind energy project, which is not authorized by lease issuance and will be subject to a detailed environmental analysis that provides for ample stakeholder participation. At the COP stage, BOEM will prepare a NEPA analysis (typically an EIS), which will address impacts to the environment from lease development. BOEM would include conditions in its COP approval to try to address these and other impacts.

While wind energy does have a carbon footprint, it is one of the lowest emitters of GHG of all electricity generation technologies powered by renewable resources and has much less of a climatic impact than nonrenewable energy sources per the 2021 NREL study “Life Cycle [GHG] Emissions from Electricity Generation: Update”³¹⁰

Issue 14.2 – Turbine Array and Uniform Layout

Approximately one commenter wrote about turbine arrays.

Comment Summary:

*An individual commenter stated that many other offshore wind farms are not even being built due to the cost to construct and maintain them.*³¹¹

BOEM Response: BOEM provides access to the OCS for potential energy uses. Power procurement processes outside of BOEM’s jurisdiction determine the cost efficiency of proposed offshore wind projects relative to other available resources to meet energy demand.

Issue 14.3 – Leaks and Spills from Turbines

Approximately one commenter wrote about leaks/spills from turbines.

Comment Summary:

*An individual commenter expressed concern about wind turbines corroding due to the salt water, causing lubricants to leak into the water.*³¹²

BOEM Response: The technical review of a project proposed in a COP will include how it is supported by relevant design criteria to ensure safe operations including spill prevention measures. An oil spill response plan (OSRP) is required to be submitted to BSEE under 30 CFR 585.627(c) as part of COPs.

Issue 14.4 – Onshore Habitats

Approximately four commenters wrote about onshore habitats.

Comment Summary:

*An advocacy group urged BOEM to complete an onshore landings and nearshore infrastructure impacts analysis to understand the impacts to local shore communities and to coordinate with Oregon and California state agencies on assessments and planning.*³¹³

³¹⁰ <https://www.nrel.gov/docs/fy21osti/80580.pdf>

³¹¹ J.&W. McCulloch.

³¹² J.&W. McCulloch

³¹³ Surfrider.

*A federal agency commented that they should be consulted with on six federally listed species for onshore activities. The commenter said that four of these species have designated critical habitat that should be evaluated for potential exposure to stressors associated with onshore landings and facilities and that BOEM should incorporate onshore impacts into the environmental analysis.*³¹⁴

*An advocacy group recommended that BOEM model potential impacts to nearshore beaches and ocean recreation activities, because recreation activities generate socioeconomic benefits for Oregon's coastal communities. The commenter argued that offshore wind can have an impact on atmospheric and oceanic circulation, so modeling can help mitigate unintended consequences on recreation. The commenter also provided descriptions and location of recreational resources in nearshore and onshore areas adjacent to the Brookings and Coos Bay WEAs that could be impacted by visual impacts of offshore wind associated infrastructure.*³¹⁵

BOEM Response: The proposed action is for lease issuance and site assessment and site characterization activities – not the construction and operation of wind turbines. Appropriate measures, including onshore landings, onshore recreational activities, and infrastructure, are considered and applied when appropriate through ESA consultation with NMFS and/or the COP review stage. BOEM will consider the potential impacts of project construction and operations in its future environmental analysis of lessees' COP for offshore wind energy facilities. For example, at the construction and operation phase for each lease, as part of a future, in-depth environmental review, BOEM requires lessees to submit COPs that include detailed visual impact assessments.

³¹⁴ U.S. Fish and Wildlife Service.

³¹⁵ Surfrider Foundation.