Floating Offshore Wind Study

Public Meeting 3

May 11, 2022

OREGON DEPARTMENT OF ENERGY

OREGON DEPARTMENT OF ENERGY

Leading Oregon to a safe, equitable, clean, and sustainable energy future.

Our Mission

The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

What We Do

On behalf of Oregonians across the state, the Oregon Department of Energy achieves its mission by providing:

- A Central Repository of Energy Data, Information, and Analysis
- A Venue for Problem-Solving Oregon's Energy Challenges
- Energy Education and Technical Assistance
- Regulation and Oversight
- Energy Programs and Activities

AGENDA

- **Welcome & Logistics**
  - Opening Remarks - Oregon Rep. David Brock Smith
- **Oregon FOSW Study - Preliminary Key Findings**
  - ODOE - Overview of Preliminary Key Findings
  - Clarifying Questions about Key Findings
- **Federal/State Offshore Wind Energy Planning Process**
  - BOEM - Overview of Call for Information and Nominations (Call) for commercial leasing for wind energy development offshore Oregon
  - DLCD – Overview of Oregon Offshore Wind Mapping Tool (OROWindMap)
  - Clarifying Questions for BOEM and DLCD
- **Public Comment - Oregon FOSW Study**
  - ***Note:*** *Comments on the BOEM Oregon Call are outside the scope of this public comment agenda item*

Rep. David Brock Smith Remarks

HOW THIS MEETING WILL BE FACILITATED

In-person Attendees as well as WebEx Panelists and WebEx Attendees

- **WebEx Panelists =** ODOE Staff supporting the meeting
- **WebEx Attendees** = virtual meeting participants.

Community Agreements:

- Be present and ready to learn.
- Be respectful to others.
- Learning happens outside of our comfort zones.
- Listen to learn first, and to supply information or perspectives second.
- Thank you for being flexible and patient around any technology needs or changes.
- If you need something at this meeting, please ask for it!
- Technical issues or questions: Contact **"Host"** in the chat or send an email to Linda.Ross@energy.oregon.gov or Christy.Splitt@energy.oregon.gov

OPTIONS TO PROVIDE FEEDBACK

Oral Feedback Today - we will be forming a comment queue for anyone wishing to provide oral feedback during today's *public comment agenda item*.

- *Public comments will alternate between **In-Person** and **Online** attendees.*
  - **In-Person List**: Please add your name to the sign-up list and you will be called during the timeframe for public comment.
  - **Online List:** Please use the chat **or** "raise hand" feature in WebEx to indicate you'd like to speak and your name will be called during the timeframe for public comment.

Written Feedback

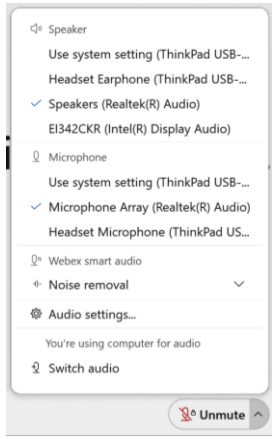
- **Comment cards for people in the room.**
- **WebEx chat for people online.**
- **Online webportal for feedback after today's meeting – *please submit by May 27*.**

USING WEBEX

Audio Options

Mute — *Microphone On*

Unmute — *Microphone Off*

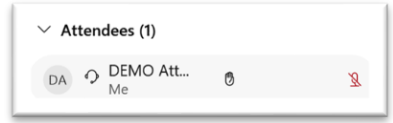


You can check Speaker and Microphone settings by clicking the arrow next to Mute/Unmute.

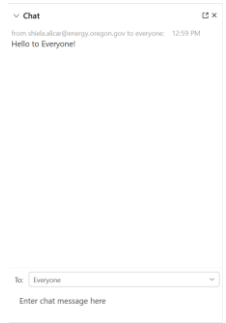
Second Raise Hand Option

You can also click on the hand next to your name in the Participant list to raise your hand.

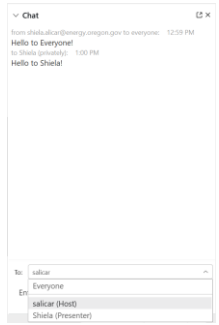
Click on Lower hand when you are done.



Chat

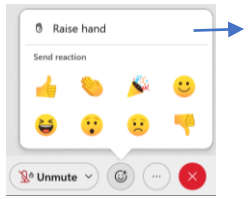


You can chat to Everyone in the meeting.

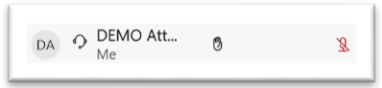


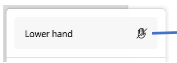
You can send a private message to the Host or Presenter (or all Panelists when there is a Panel).

Reactions



Click to Raise your hand.





Click on Lower hand when you are done.

ODOE FOSW Study

- Recap of HB 3375 & Prior Public Meetings
- Overview of Preliminary Key Findings
- Next Steps

WHAT IS HB 3375?

- **“Whereas statements” - Recognize the merits of studying FOSW**
  - Vast potential, BOEM activity, decarbonization, other benefits & challenges

- **Describes Oregon goal to plan for up to 3 GW of FOSW by 2030**
  - “Goal to plan” only – doesn’t direct how to plan
  - Directs ODOE to report on benefits & challenges

- **Does not commit to deployment targets**
  - **Unlike NY**
    - State commitment to a target of 9 GW by 2035
  - **Unlike CA**
    - AB 525 directs CEC to develop a state plan
    - CEC plan will identify a capacity target

CORE ELEMENTS OF HB 3375

1. Literature Review

- Review studies and reports relevant to benefits & challenges of FOSW

2. Stakeholder Feedback

- Several state, regional and national entities listed in bill to consult
- Additional stakeholders identified by ODOE, including those from BOEM Task Force
- Develop topical questions based on lit. review to prompt stakeholder feedback

3. Public Remote Meetings

- Convene at least two public remote meetings with stakeholders

4. Report to Legislature by 9/15/2022

- Summarize key findings from literature review and stakeholder feedback, including opportunities for future study and engagement

https://www.oregon.gov/energy/energy-oregon/Pages/fosw.aspx

TIMELINE FOR IMPLEMENTATION

Data Gathering & Engagement

- **2/18:** Initial Feedback Due
- **4/7:** Public Meeting #2
- **4/22:** Additional Feedback Due

Jan | Feb | Mar | April

- **1/19:** Lit. Review and Qs on Website
- **1/20:** Stakeholder Kick-Off Mtg.
- **3/10:** Public Meeting #1
- **3/25:** Additional Feedback Due

Report Drafting & Submission

- **5/11:** Public Meeting #3
- **5/27:** Additional Feedback Due
- Share draft findings
- **9/15:** Submit Report to Legislature

May | Jun | Jul | Aug | Sep

- Begin Drafting Report

RECAP OF PRIOR PUBLIC MEETINGS

Public Meeting #1

March 10, 2022
9:30 a.m. – 2 p.m.

- Siting and Permitting
- Port Infrastructure & Sea Vessels
- Economic Development
- Equity
- Local Reliability & Resilience

Public Meeting #2

April 7, 2022
9:30 a.m. – 2 p.m.

- 100% Clean Energy Targets
- Technologies
- Transmission Infrastructure
- Energy Markets
- State & Regional Reliability

https://www.oregon.gov/energy/energy-oregon/Pages/fosw.aspx

FEEDBACK RECEIVED

- More than 30 different comments received from a variety of perspectives, including:
  - Members of the public
  - Ports
  - Fisheries
  - State Agencies
  - Federal Entities
  - NGOs
  - Utilities and transmission providers
  - Developers and supply chain
  - Research consortiums and national labs

- Feedback received can be viewed at the following link:
  - https://odoe.powerappsportals.us/en-US/fosw/foswview/

Key Preliminary Findings

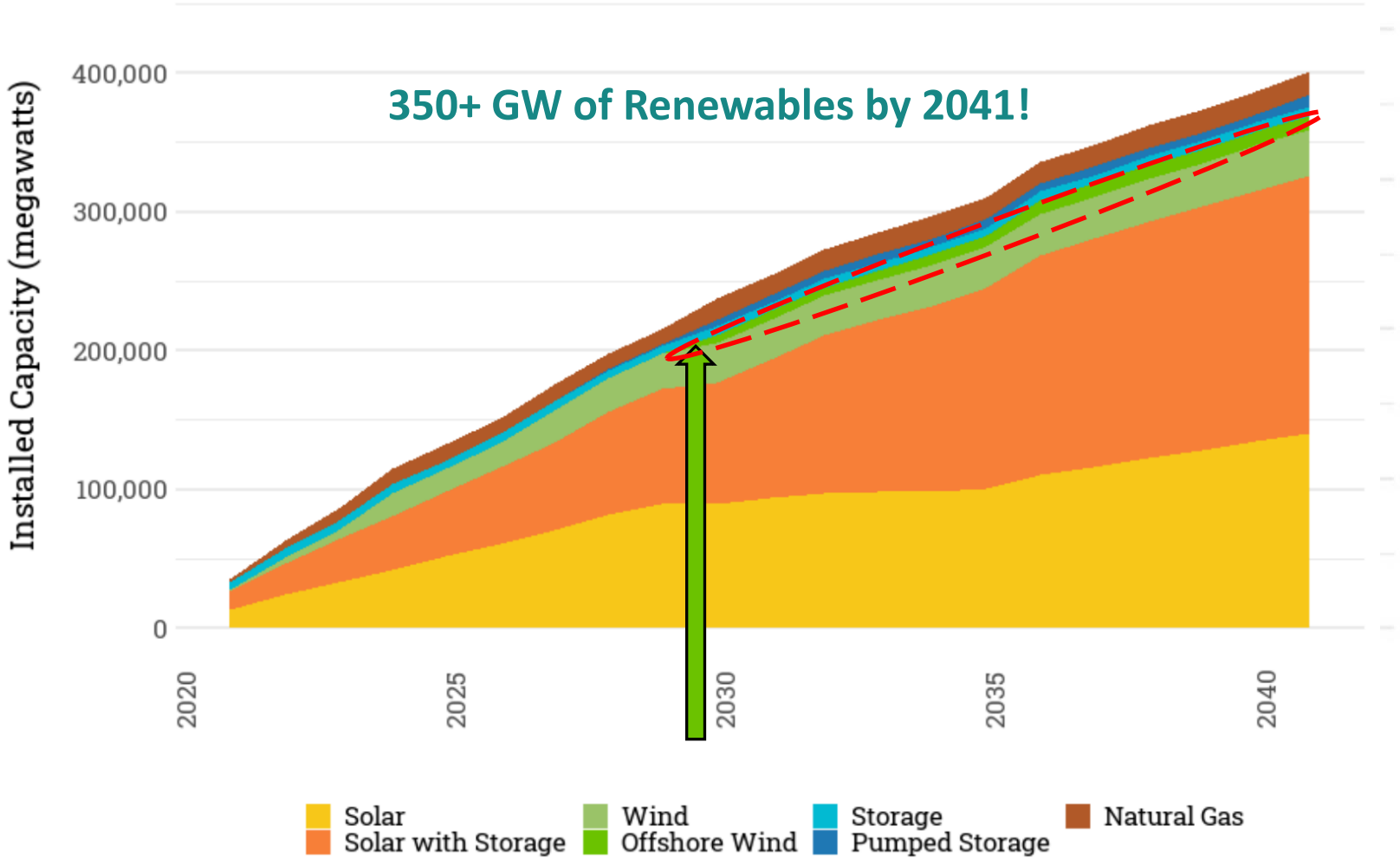
- Key preliminary findings are based on:
  - Existing literature.
  - Common themes from feedback.

- Summary report to the Legislature:
  - **Will** include a summary of key findings.
  - **Will** include recommendations for future study and engagement.
  - **Will** include references to literature reviewed and feedback received.
  - **Will not** reconcile opposing perspectives.

Study Objective:

To gather and synthesize a range of information and perspectives on the benefits and challenges of integrating up to 3 GW of FOSW into Oregon's electric grid to inform a summary of key findings in a report to the Legislature, including opportunities for future study and engagement.

FOSW Context: Highest-Level Key Findings



THE 2021 NORTHWEST POWER PLAN
FOR A SECURE & AFFORDABLE ENERGY FUTURE

Source, p. 51

West-wide Projection: Baseline projection for what will be required across western states to meet clean energy targets

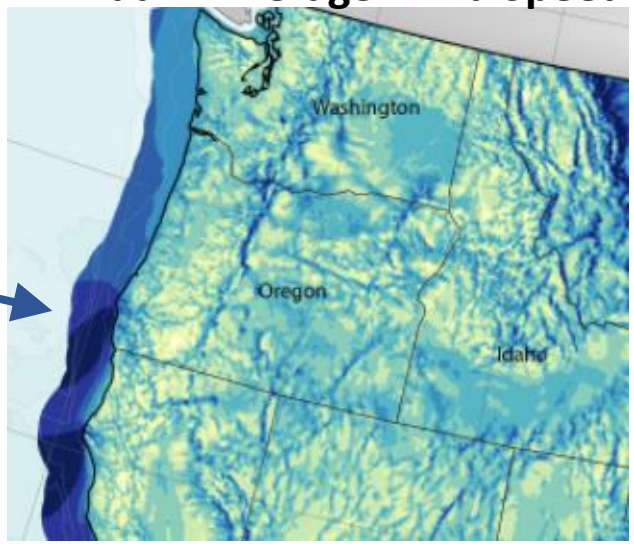
Diversity is least cost, least risk.

Can It All Get Built In Time? Where?

FOSW Context: Highest-Level Key Findings

- 2050 Clean Targets - 100s of gigawatts (GWs) of new renewables are necessary across the West to achieve policy goals.
- Oregon has outstanding offshore wind resources - **strong & consistent.**
  - Ocean depth requires floating offshore wind (FOSW) technology.
  - Nascent tech, global deployments total ~100 MW.
- FOSW and supporting transmission can have potential effects to ocean users and the environment.
- FOSW is a unique renewable technology because it requires:
  - GW-scale for commercial development.
  - Floating platforms.
  - Port upgrades.
  - Transmission upgrades.
    - New offshore & expanded onshore transmission.

Annual – Average Wind Speed



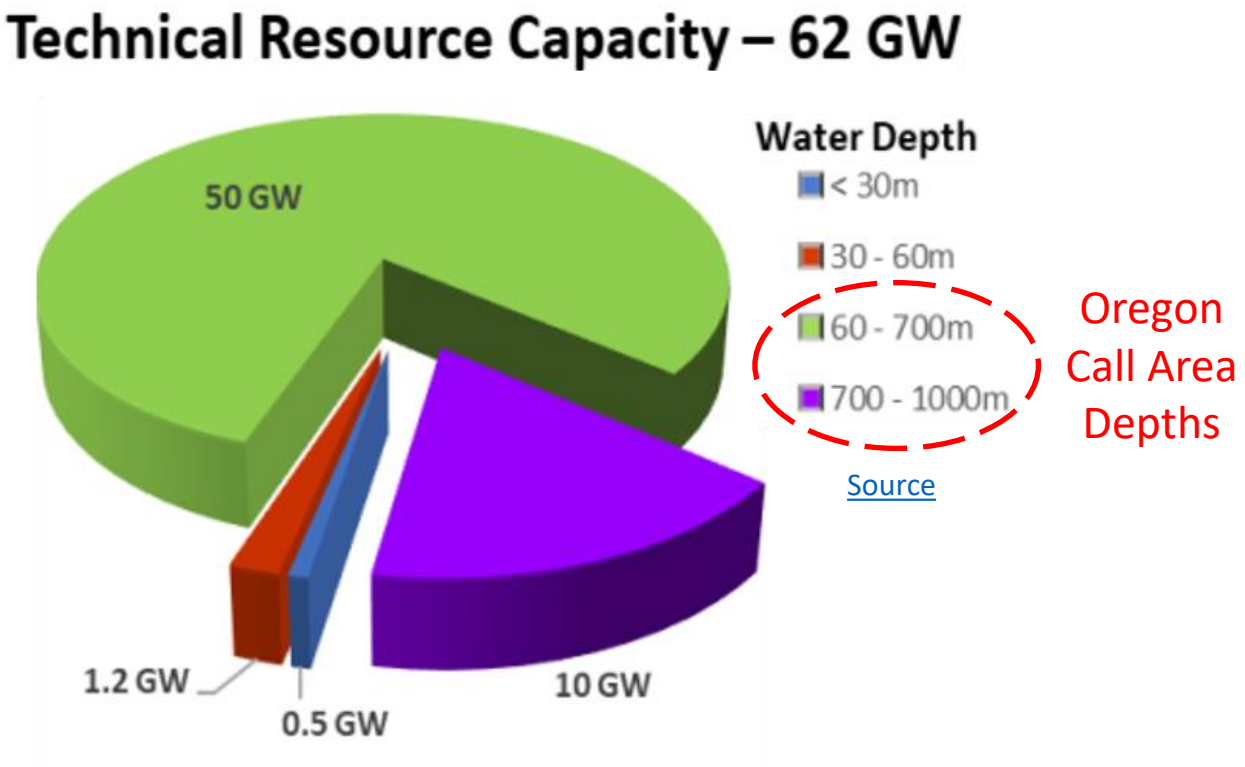
Source

Potential Effects

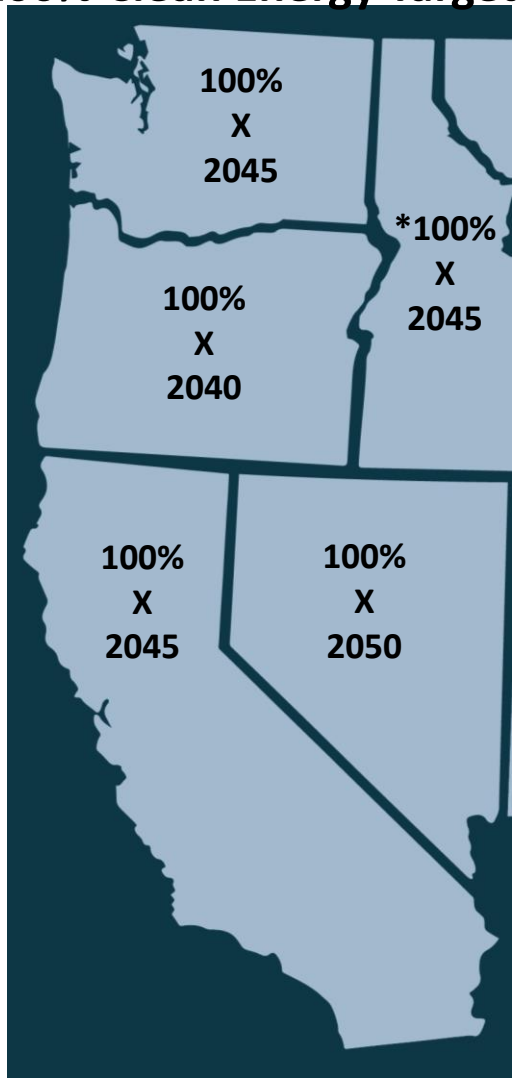
FOSW Benefits: Highest-Level Key Findings

Primary Grid Benefits

- Scale of FOSW can help achieve mid-century clean energy targets.
  - Scalable Resource: Dozens of GWs could be deployed if potential effects can be avoided and mitigated.



Regional States w/ 100% Clean Energy Targets



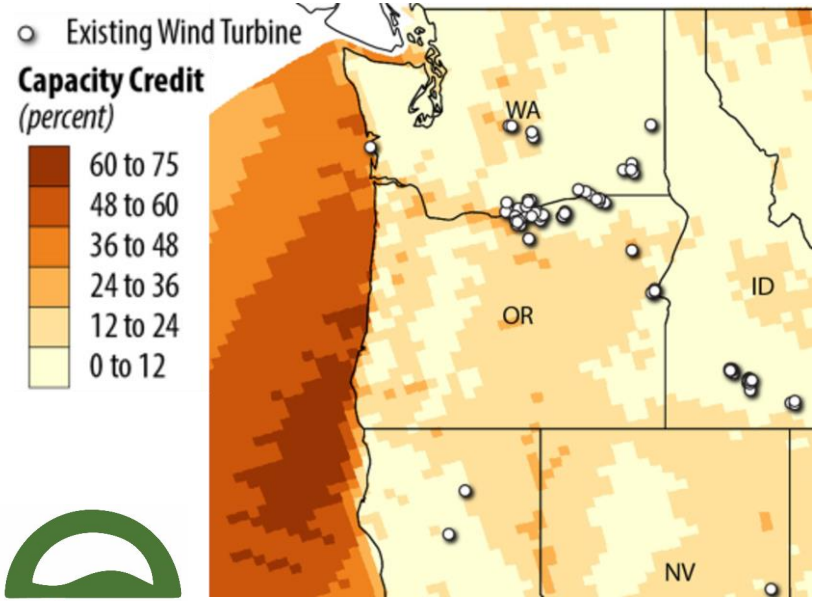
*Idaho Power & Avista Targets

FOSW Benefits: Highest-Level Key Findings

Primary Grid Benefits

- FOSW can provide critical reliability contributions to a 100% clean power grid.
  - Complementary Output: FOSW output complements loads and output of onshore clean energy across days, nights, and seasons.

Avg. Wind Credit to Grid Needs



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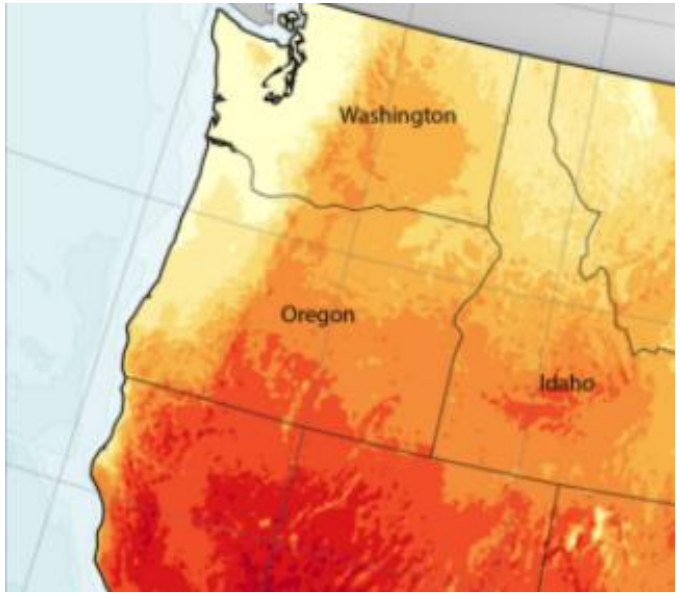
Avg. Solar Irradiance



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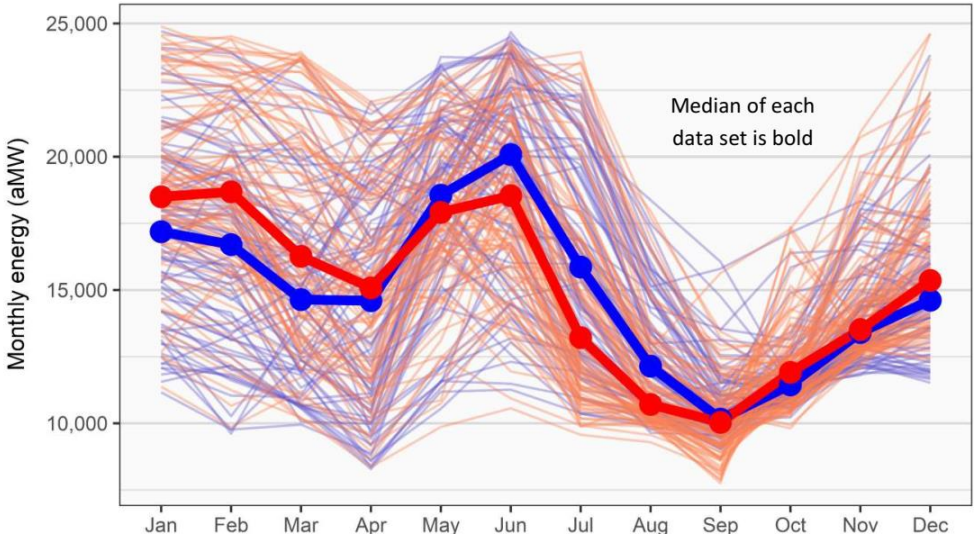
Median Monthly Hydro Output



Historical

Forecast w/ Climate Change

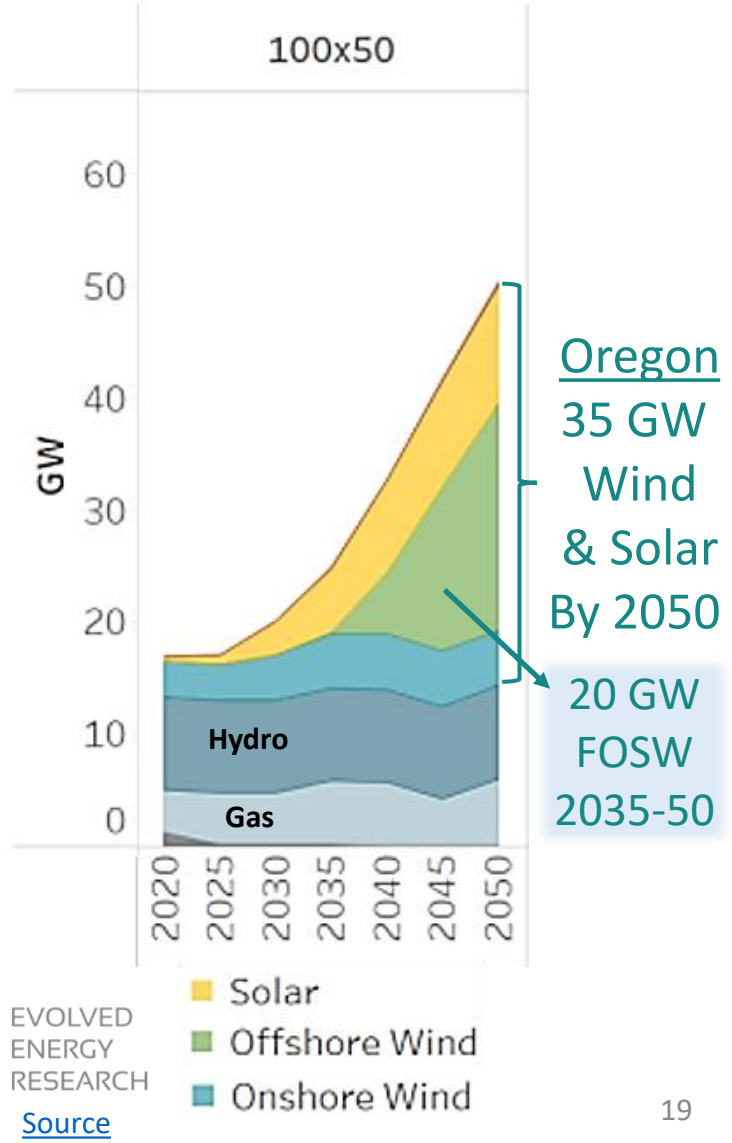
Source

FOSW Benefits: Highest-Level Key Findings

Primary Grid Benefits (cont.)

- Unique ocean location offers a diversity option to help manage costs & risks of achieving mid-century clean energy goals.
  - Optimize Onshore Costs: Developing FOSW could help optimize the scale of investment in onshore renewables & transmission.
  - Hedge Onshore Risks: Developing FOSW could help reduce the risks of relying on onshore development alone to meet the pace and scale of renewable build-out necessary.

Oregon Clean Pathways Study (2021)



EVOLVED ENERGY RESEARCH

Source

FOSW Benefits: Highest-Level Key Findings

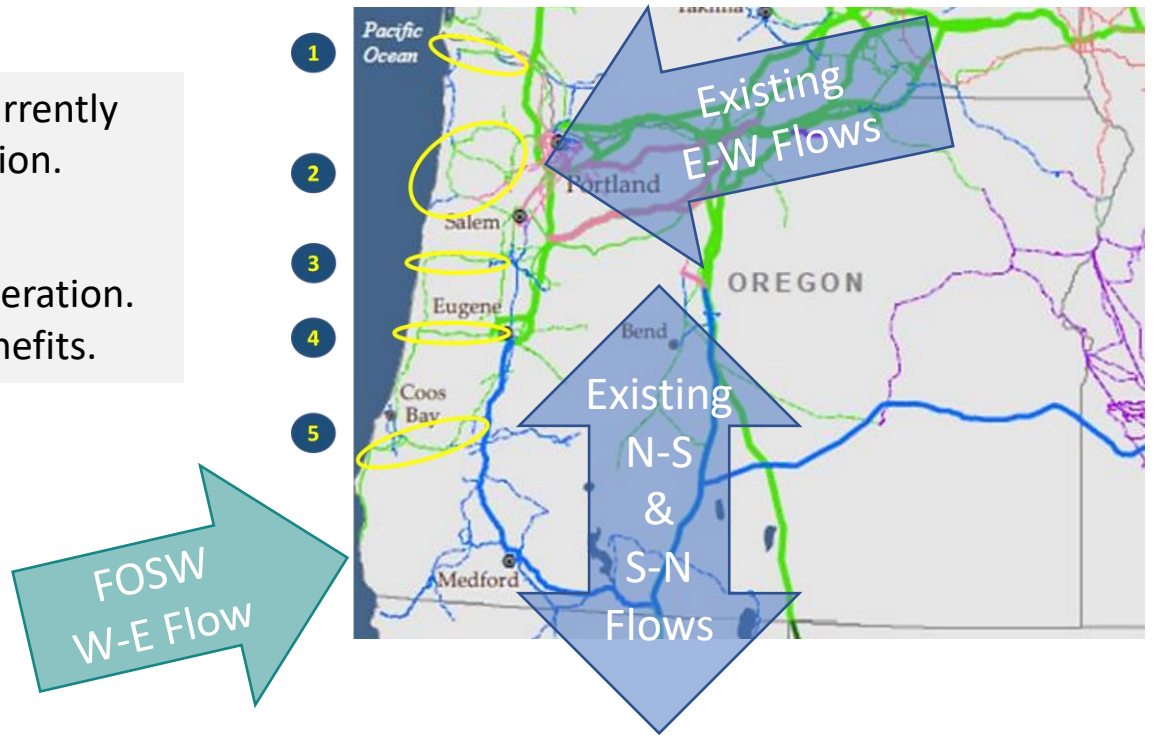
Primary Grid Benefits (cont.)

- Unique location could bolster grid reliability & resilience.
  - FOSW at the grid's western edge can bolster the reliability & resilience of both the coastal and regional power grid.

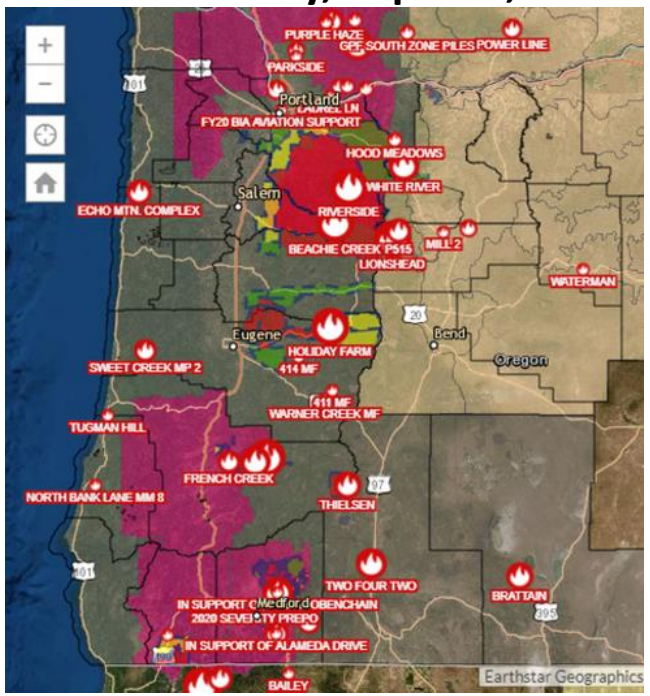
Coastal power systems currently served by distant generation.

FOSW could provide:
- Coastal large-scale generation.
- Transmission R & R benefits.

Oregon's predominant power flows



Wildfire Snapshot from Oregon RAPTOR at 7 a.m. Friday, Sept. 11, 2020



FOSW Benefits: Highest-Level Key Findings

Primary Benefits Beyond the Grid

- Economic Development: FOSW would bring direct, indirect, and induced economic development for coastal Oregon, other Oregon areas, and neighboring West Coast states.

ENERGY NEWS NETWORK DONATE

NORTHEAST

Massachusetts grants focus on equity in offshore wind workforce development

The Massachusetts Clean Energy Center has awarded $1.6 million in grants to eight offshore wind workforce training programs aimed at reducing specific obstacles for people of color and low-income people.

by **Sarah Shemkus**
August 3, 2021

Source

- Equity: New jobs in underemployed coastal communities; and reduced emissions that disproportionately impact disadvantaged communities.

FOSW Benefits: Highest-Level Key Findings

Primary Benefits Beyond the Grid

- **Land Use Optimization:** FOSW and supporting transmission development could mitigate the cumulative development of new renewables and transmission on land.

Solar - Central Oregon

Source

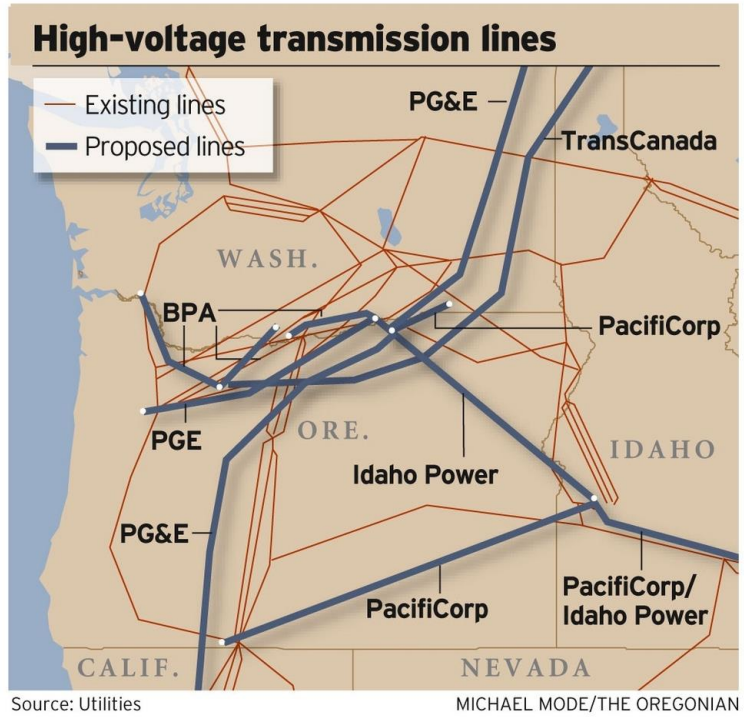
Solar - Willamette Valley

Source

Onshore Wind – Eastern Oregon

Source

Transmission Across Oregon (Ex. 2009*)



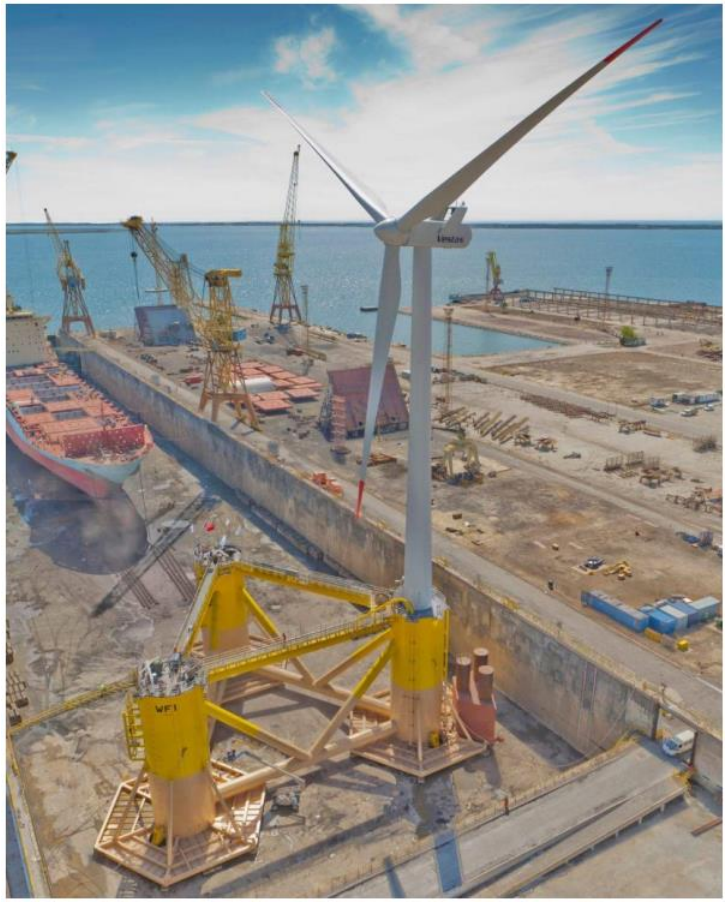
***Potential new lines proposed in 2009, none were built.**

Source

FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- **FOSW has tremendous upfront capital costs and is in a nascent stage of global development.**
  - Floating Platforms: Need for novel floating platforms, and new facilities to fabricate them, add significant capital costs.
  - Port Upgrades: Need for costly upgrades to Oregon ports.
  - Transmission Expansion: Need for costly new offshore transmission and expanded onshore transmission.



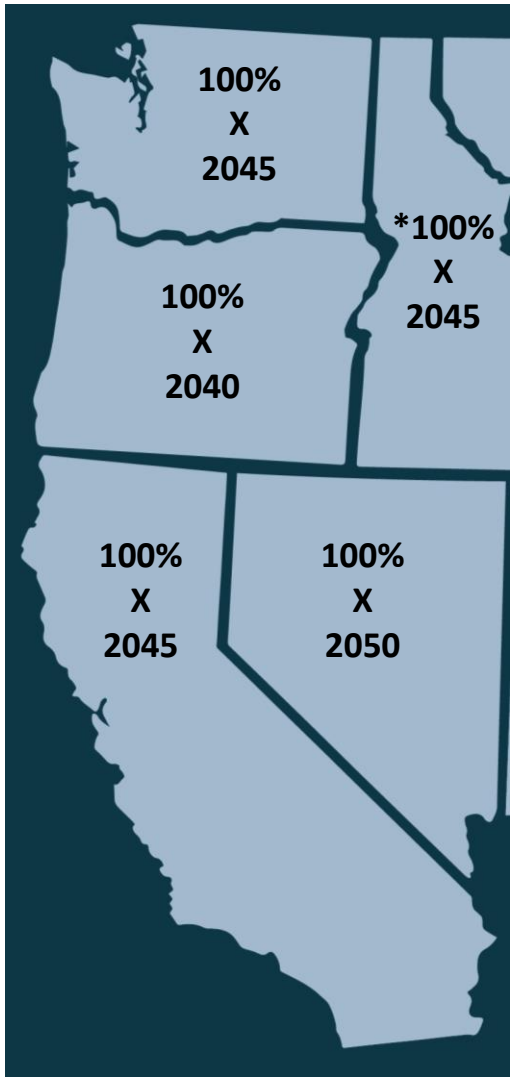
Source: BOEM Port Study, 2016

FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- GW-scales likely necessary to attract investment are too large for near-term demand from Oregon offtakers alone.
  - Uncertainty w/ Oregon's Current "Market-Based" Approach: Reliance on market competition may not translate to Oregon utilities entering near-term offtake commitments for FOSW.
  - Certainty From State Commitments to FOSW: A more prescriptive approach to FOSW development through a state commitment would mitigate sole reliance on market competitiveness.

West Coast Lacks Explicit State Commitments to FOSW



FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- **Oregon & PNW lack formalized, central planning to help coordinate multiple offtakers to help optimize scale, costs, and benefits of FOSW.**
  - Cooperation Not Formalized: Oregon lacks a collective, state-wide planning process and is not part of a Regional Transmission Organization (RTO).
  - Fragmented Planning: Bi-lateral markets make cooperative offtake challenging.
  - Voluntary Cooperation: Multiple offtakers in bi-lateral markets is possible if utilities are flexible & cooperative in planning and procurement activities.

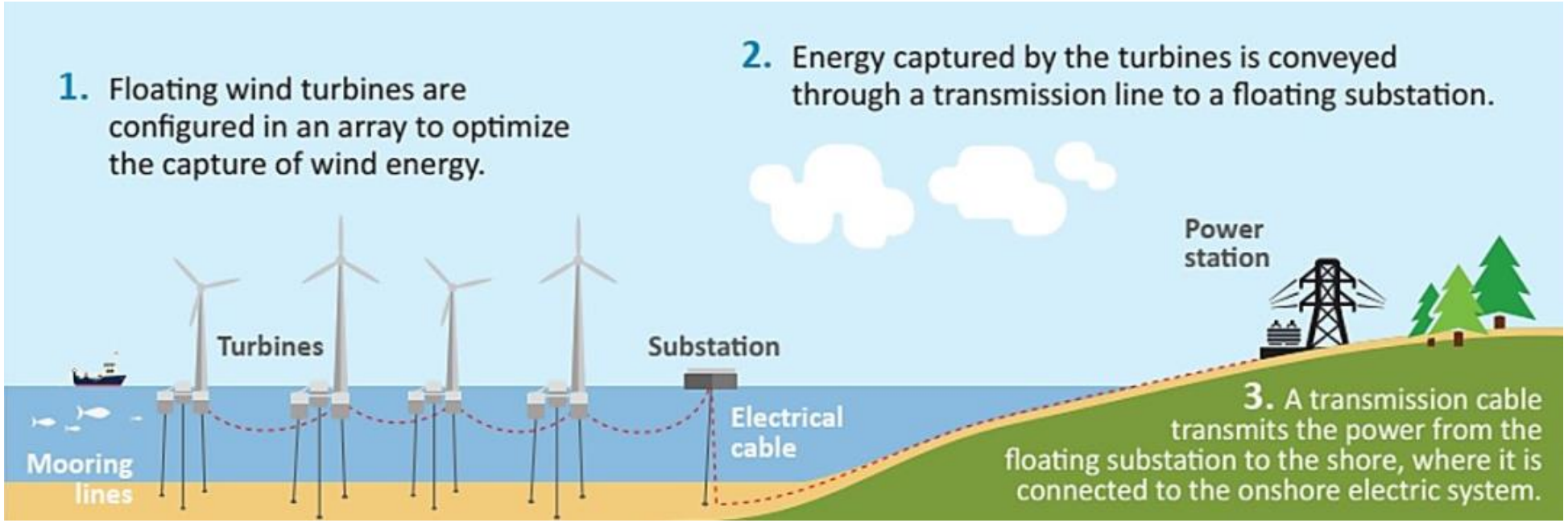
Source

FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- Complexities of Siting & Permitting Processes
  - Potential Impacts to Ocean & Land Users: Avoiding & mitigating potential effects from FOSW on the interests of ocean & land users could be a significant challenge.

Examples - potential impacts to: Fishing, Shipping, Military, Tribes, Coastal Citizens, Tourists, Others



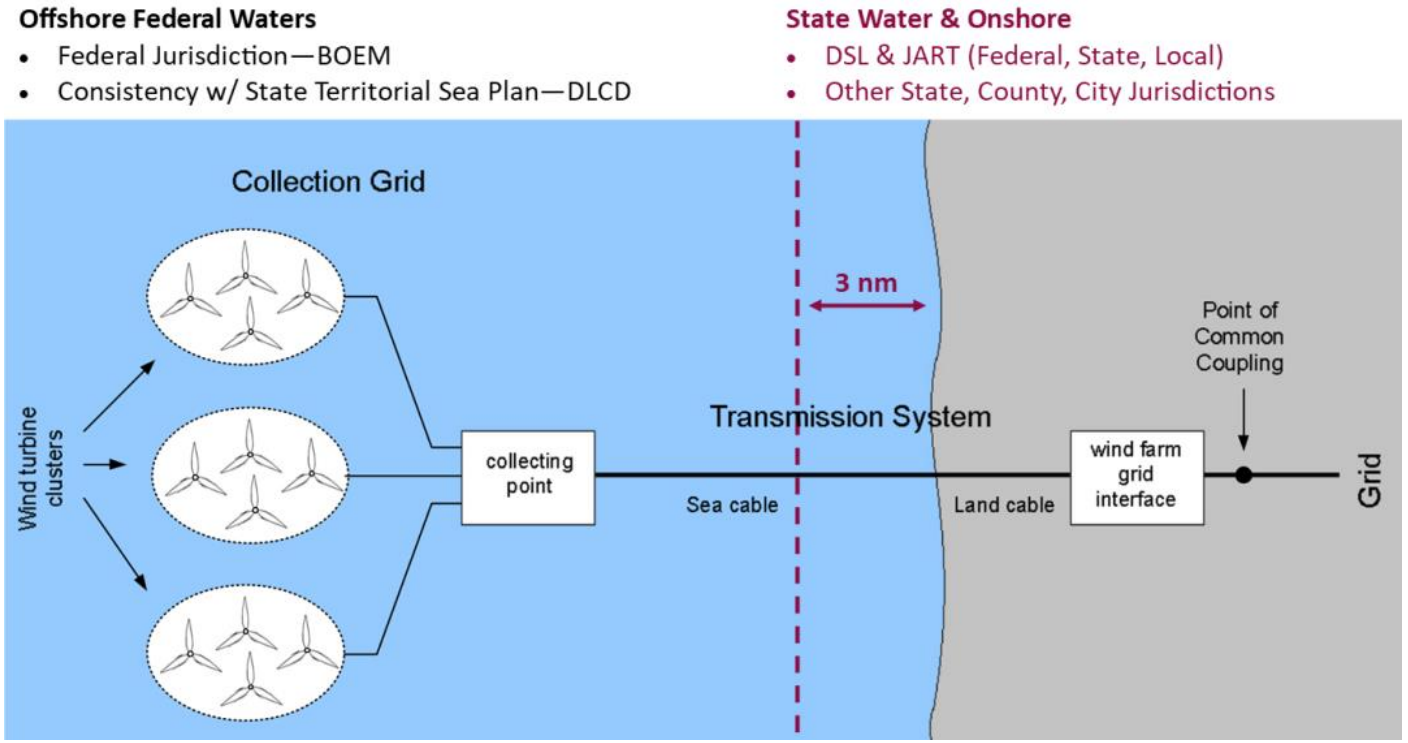
FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- Complexities of Siting & Permitting Processes (cont.)
  - Potential Environmental Impacts: Avoiding & mitigating potential effects on the environment could be a significant challenge.

Examples - potential impacts to:

- ❖ Local & migratory fish & wildlife
  - Marine & land-based species
  - Birds
  - Others
- ❖ Sensitive habitats
  - Marine
  - Seafloor
  - Estuary
  - Land-based
  - Others



FOSW Challenges: Highest-Level Key Findings

Primary Challenges

- **Complexities of Siting & Permitting Processes (cont.)**
  - **Potential Process Gaps:** Cumulative effects of FOSW across multiple call areas could be challenging for existing S&P processes to capture and assess.
    - Ex. Potential cumulative effects to fishing industry & marine habitat/species.
  - **Potential Data Gaps:** Imperfect data relating to key potential effects.
    - Ex. Fisheries, migratory species, sensitive habitats and subsea geology, socioeconomic, and FOSW viability at depths greater than 1,300m.
  - **Effects of Concern:** Calls for comprehensive analysis of many particular potential effects.
    - Ex. Potential economic losses from excluded ocean areas; ecosystem effects; and potential aviation impacts from height of FOSW & new onshore transmission.

Piecing it All Together

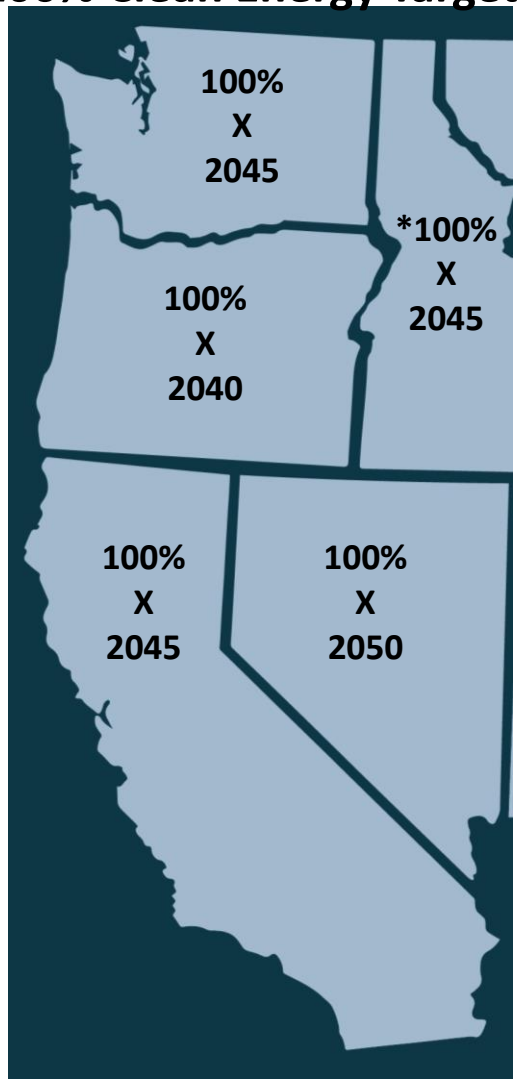
Proactive Interregional and State & Local Collaboration

- Increased collaboration at all levels of government would help overcome two of the primary challenges facing FOSW:

1) Optimal Scale for Multiple Offtakers:

- Increased collaboration would provide significant benefits towards identifying the optimal GW-scales of FOSW & transmission solutions.
- GW-scales of FOSW & transmission are likely to have a multitude of cumulative potential effects to the environment and local ocean & land users.

Regional States w/ 100% Clean Energy Targets



*Idaho Power & Avista Targets

Piecing it All Together

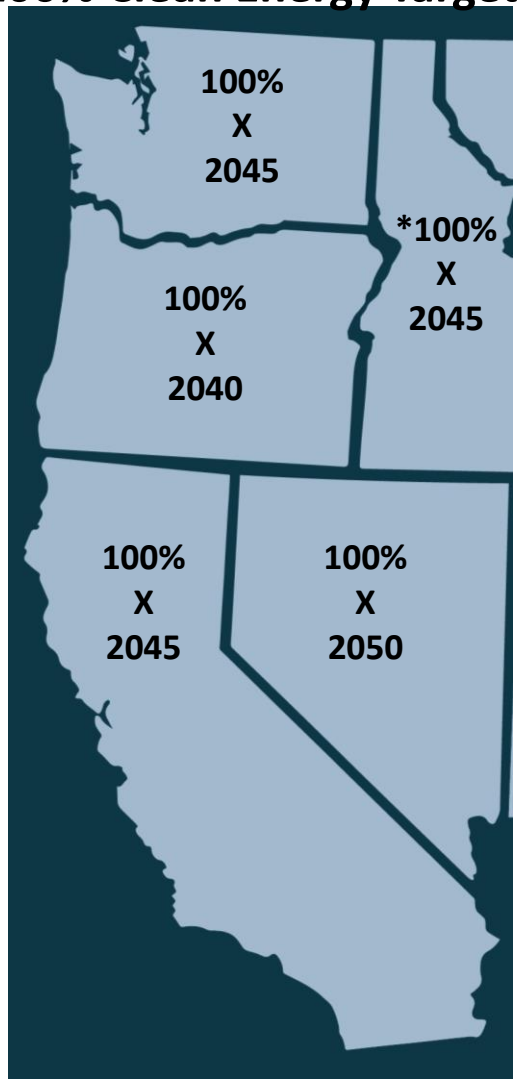
Proactive Interregional and State & Local Collaboration

2) Optimal Siting for Avoiding & Mitigating Potential Effects:

- Increased collaboration would provide significant benefits towards evaluating and identifying ocean and land sites for GW-scales of FOSW & transmission solutions.

Scale & Siting Optimization Can Be Maximized by Increasing Interregional and State & Local Collaboration As Soon As Possible.

Regional States w/ 100% Clean Energy Targets



*Idaho Power & Avista Targets

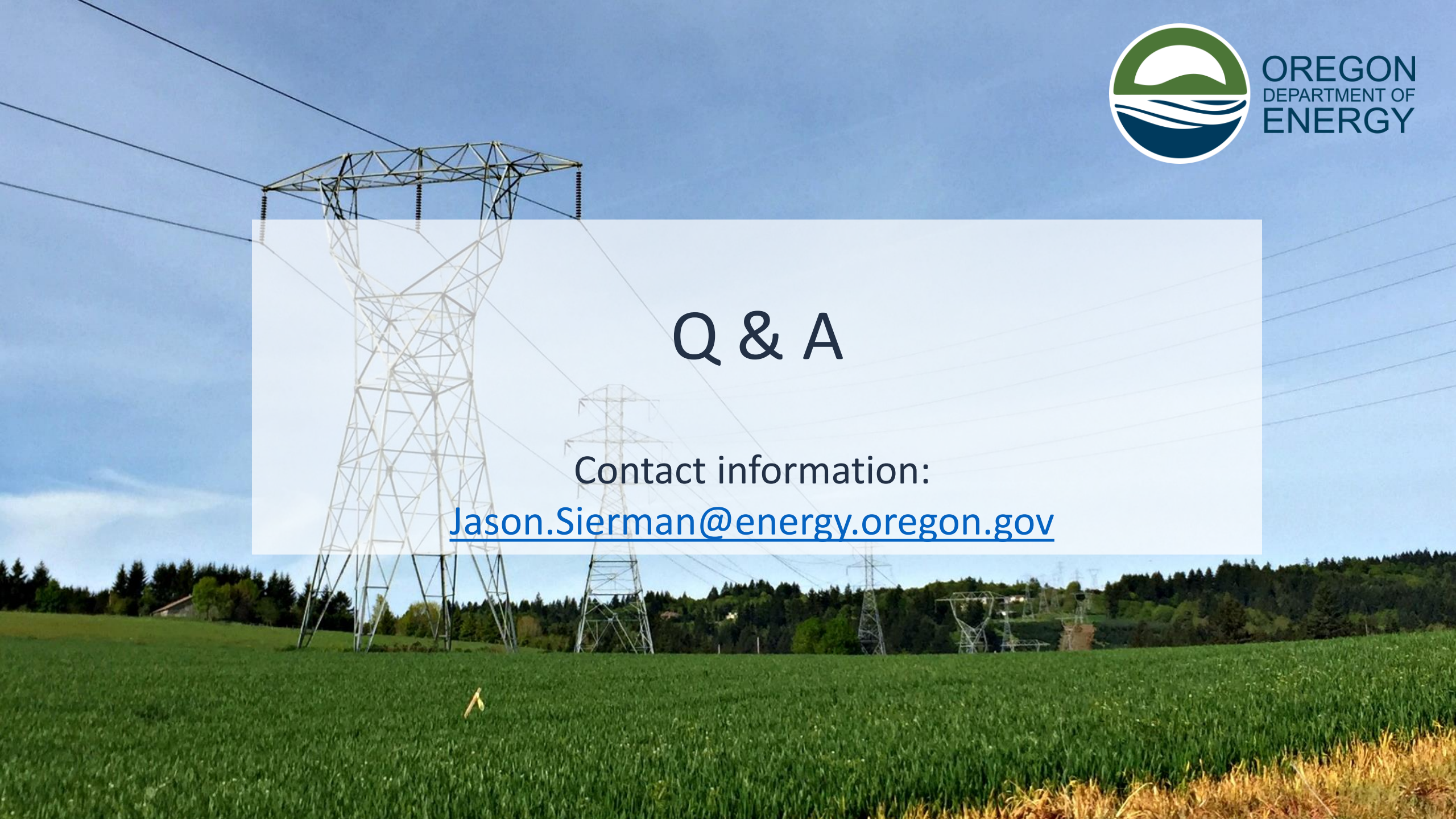
Piecing it All Together

Multiple actions/steps need to occur before a FOSW project could be built.

- Key actions/steps, often with overlapping process timelines:

- **Site Control**
  - Federal (BOEM) - Executed lease(s) of ocean area(s).
- **Permits & Approvals**
  - Federal, tribal, state & local siting and permitting approvals (offshore and onshore).
- **Port Upgrades**
  - Upgrade port(s) to support FOSW construction & deployment.
- **Transmission Expansion**
  - Upgrade onshore transmission network to accommodate GW-scale output of FOSW.

- **Interconnection and Transmission Service Agreements**
  - Two independent processes between a developer and a transmission provider.
- **Offtake Agreement**
  - Offtake agreement between a developer and a purchaser (i.e., power purchase agreement).
- **Construction**
  - Construction of FOSW project – generation and transmission (offshore and onshore).



OREGON DEPARTMENT OF ENERGY

Q & A

Contact information:

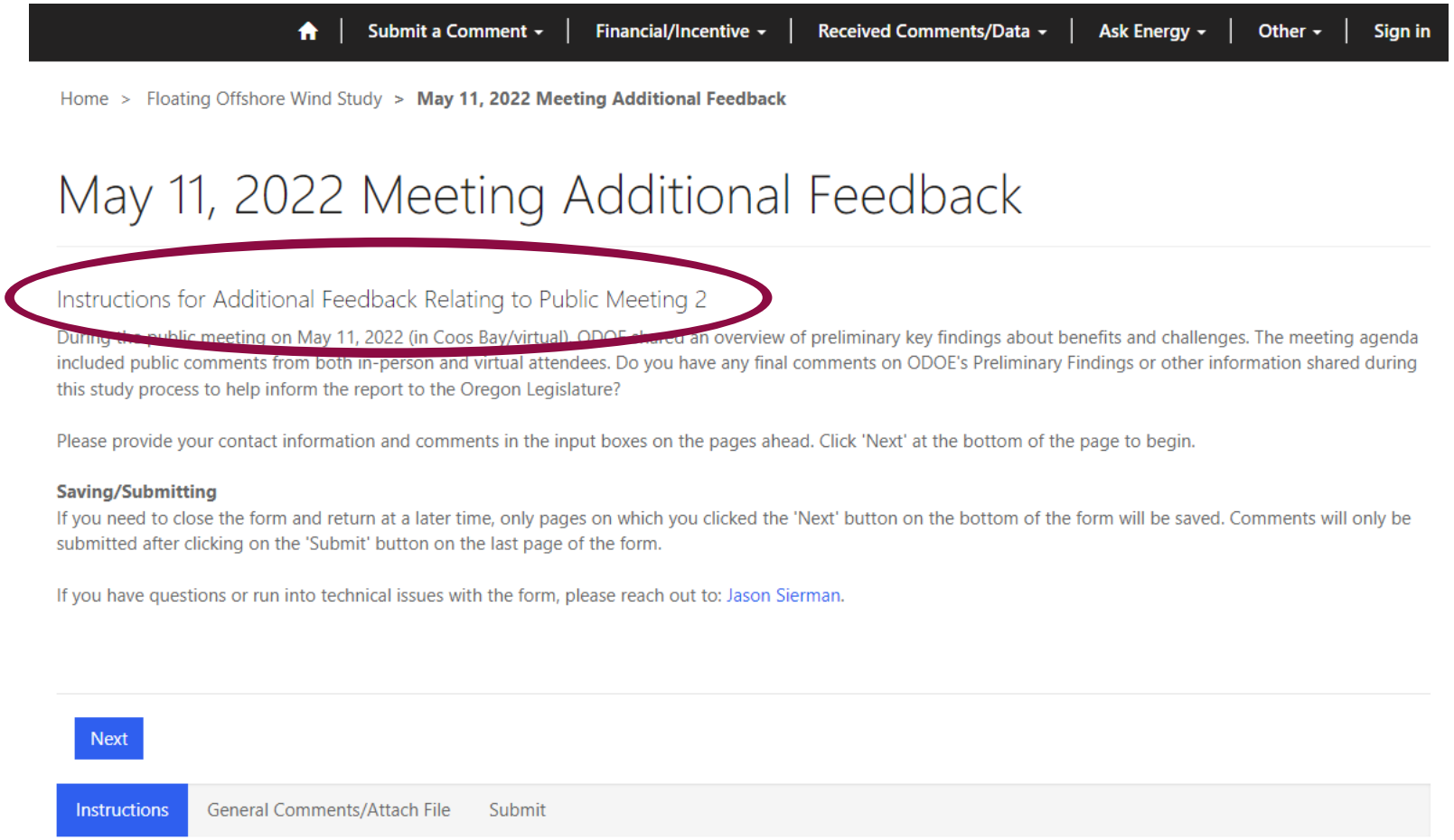
Jason.Sierman@energy.oregon.gov

Next Steps &
Last Call for Feedback

WEB PORTAL FOR SUBMITTING FEEDBACK

https://odoe.powerappsportals.us/en-US/fosw

Please Read



Note that * denotes Required Fields.

Contact Information

First Name *

Last Name *

Organization Name

Organization Type

Email Address *

Phone Number

Provide a telephone number

Street 1

Street 2

City

State

OR

Zip/Postal Code *

Previous Next

Required Fields

Next

Will **save** where you are, but it doesn't **submit.**

Floating Offshore Wind Study

You have completed the comment process.

You may review or modify your comments by using the '**Previous**' button to return to prior pages.

Once you are satisfied with your comments, plase click on the '**Submit**' button at the bottom of this page.

If you have questions or run into technical issues with the form, please reach out to: Jason Sierman.

Previou | Submit

To complete your feedback, you must click **Submit** on Final Screen

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- **5/27:** Additional Feedback Due
- Share Draft Findings
- **9/15:** Submit Report to Legislature

May | Jun | Jul | Aug | Sep

- Begin Drafting Report

BOEM Bureau of Ocean Energy Management

Oregon Department of Energy (ODOE) Floating Offshore Wind Study Public Meeting 3

May 11, 2022

Whitney Hauer, Ph.D., Renewable Energy Specialist
BOEM Pacific Regional Office

Bureau of Ocean Energy Management (BOEM)

- **Mission: Manage the development of U.S. Outer Continental Shelf (OCS) energy and mineral resources in an environmentally and economically responsible way**

- **Jurisdiction on the U.S. West Coast**
  - Federal waters from 3 to 200 nautical miles (i.e., the OCS)
  - Offshore California, Oregon, and Washington
  - Excludes National Marine Sanctuaries

BOEM Wind Energy Authorization Process

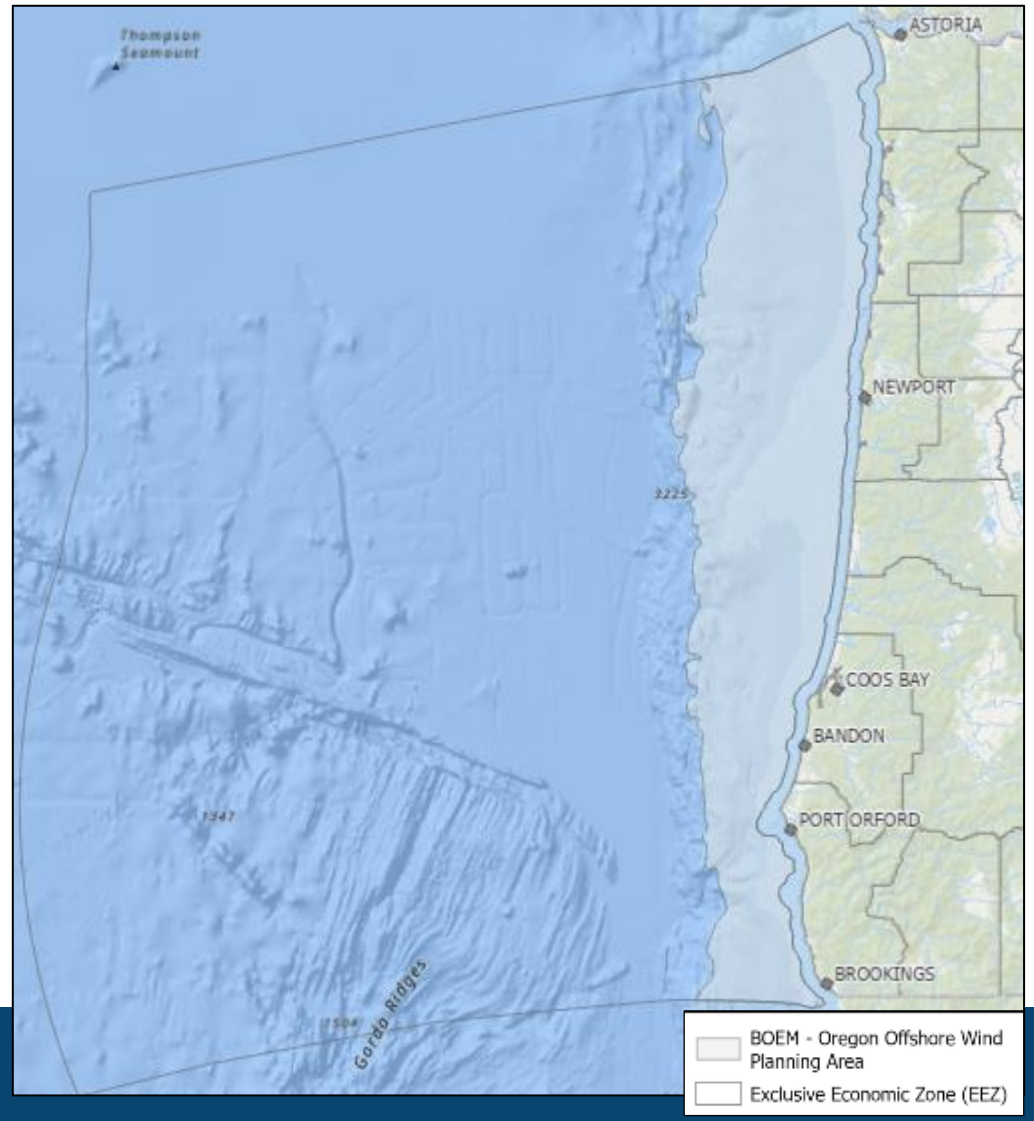
Planning & Analysis	Leasing	Site Assessment	Construction & Operations
~ 2 YEARS	~ 1-2 YEARS	UP TO 5 YEARS	~ 3 YEARS (+25)
• Intergovernmental Task Force	• Publish Leasing Notices	• Site Characterization	• Construction & Operations Plan
• Request for Information or Call for Information and Nominations	• Conduct Auction or Negotiate Lease Terms	• Site Assessment Plan	• Facility Design Report and Fabrication & Installation Report
• Area Identification	• Issue Lease(s)		• Decommissioning
• Environmental Reviews			• Environmental and Technical Reviews

April 29, 2022

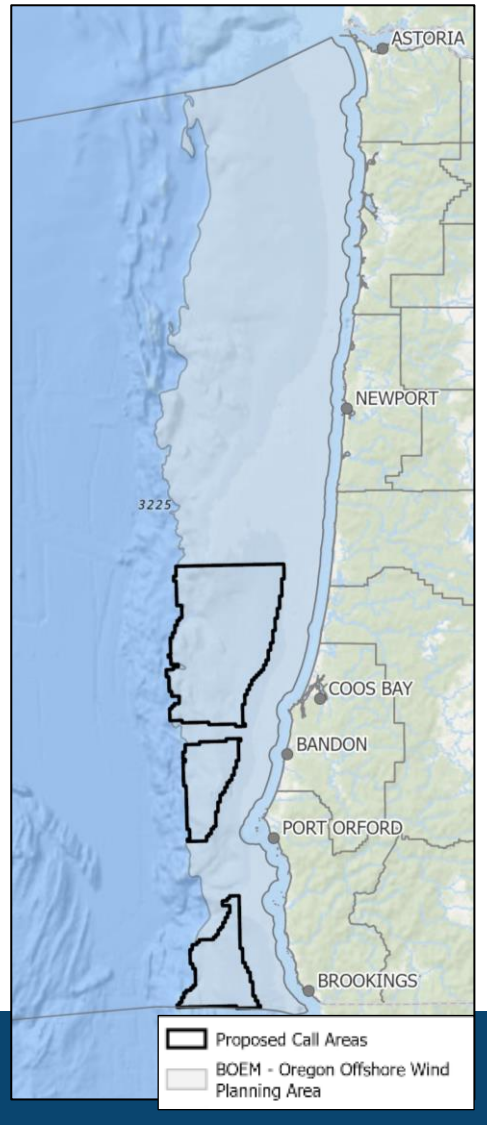
- **BOEM coordinates and consults with affected Tribal, State, and local governments and other federal agencies**
- **Multiple opportunities for public input**

Oregon Offshore Wind Energy Planning

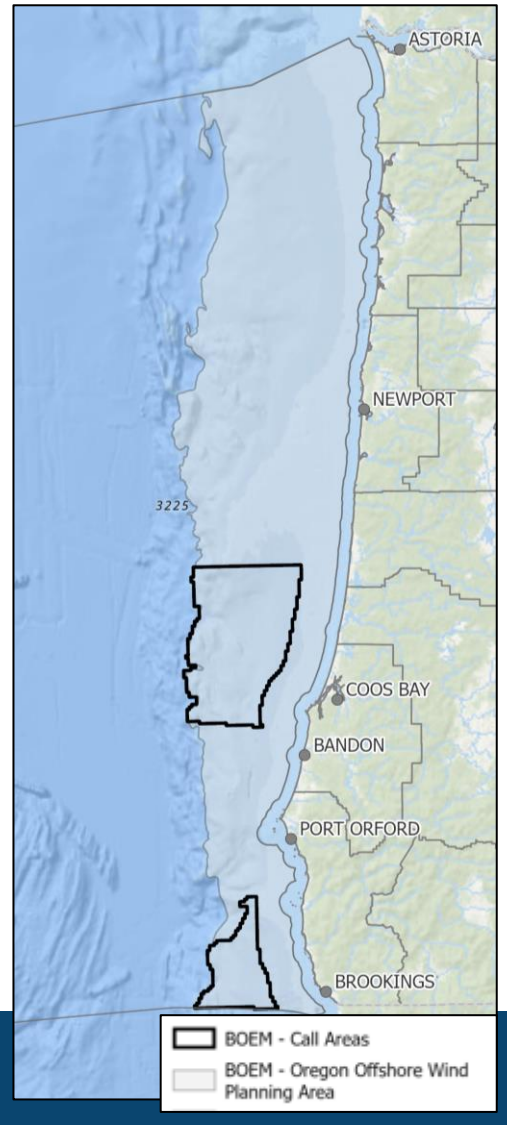
BOEM Oregon Offshore Wind Planning Area
Data Gathering, June 2020-January 2022



Proposed Call Areas
Task Force Meeting, February 2022



Call Areas
Federal Notice, April 2022



Call for Information and Nominations (Call)

- **Invites public comment on and assesses interest in possible commercial wind energy leasing**
- **Call Areas are of a sufficient size to allow for winnowing**
- **Considering 3 gigawatts for near-team commercial development for the first leasing activities offshore Oregon**
  - Less than one-fourth of the Call Areas
- **Call notice available at www.boem.gov/Oregon**

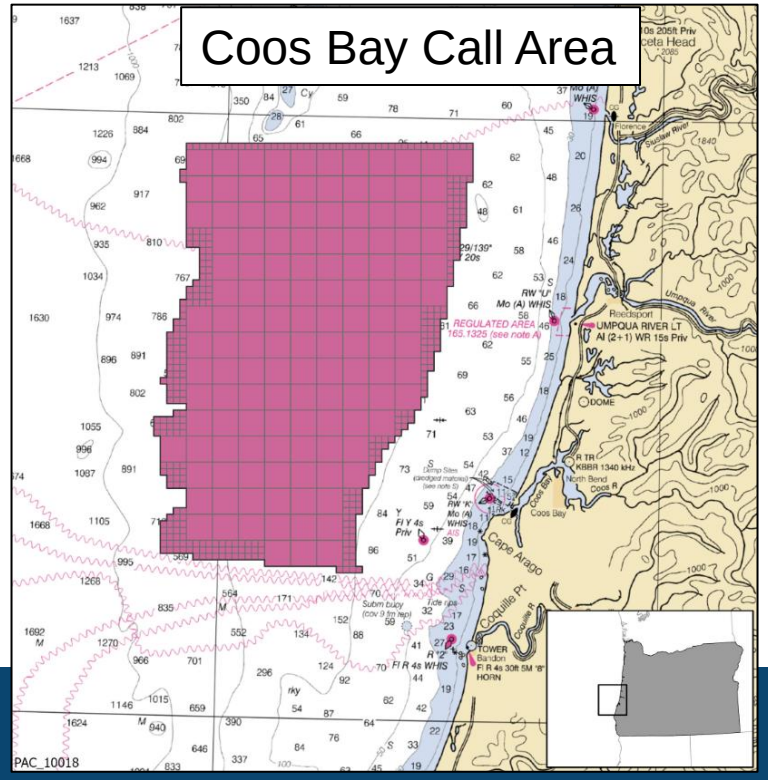
Call Area	Approx. Offshore Wind Energy Capacity	Oregon Call Areas		
	Gigawatts	Acres	Square miles	Square kilometers
Coos Bay	10.6	872,854	1,364	3,532
Brookings	3.5	286,444	448	1,159
Total	14.1	1,159,298	1,811	4,692

Parameters for the Development of Call Areas

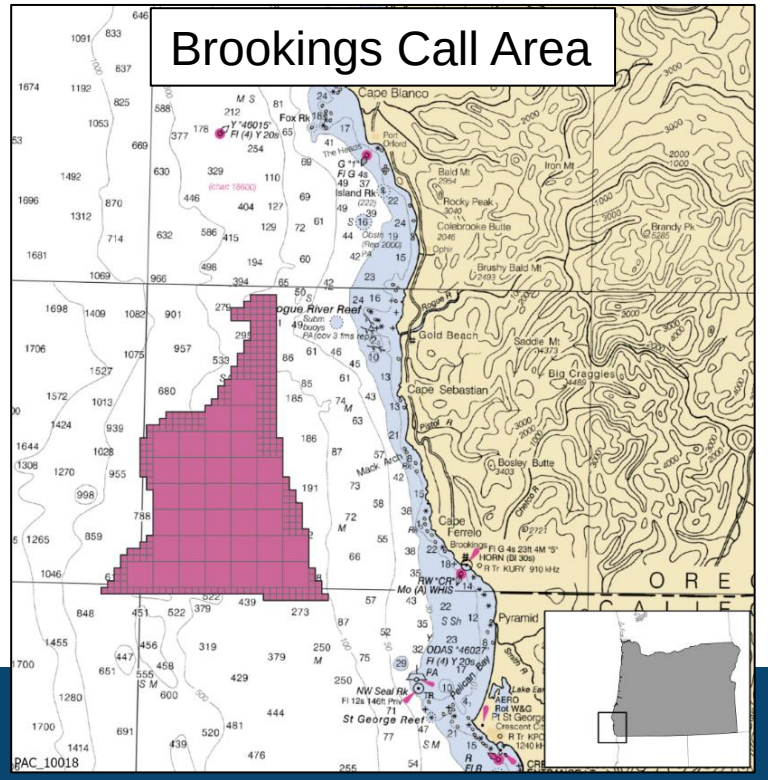
- **Demand for renewable energy**
- **Suitability for offshore wind:**
  - Wind resource and cost of energy
  - Depth and slope
  - Transmission availability
- **Maritime navigation**
- **Existing submarine cables**
- **Commercial fishing**
- **Wildlife and habitat:**
  - Marine mammals
  - Sea turtles
  - Marine birds
  - Marine habitat
- **Submerged landforms**
- **Tribal considerations**
- **Department of Defense considerations**

Call Area Details

- 13.8 Miles offshore to approx. 65 miles offshore
- Western boundary water depth is 4,265 feet (1,300 meters)
- Eastern boundary water depth ranges from approx. 394 to 722 feet (120 to 220 meters)
- Approx. 67 miles in length from north to south
- Approx. 41 miles in width from east to west



- 13.8 Miles offshore to approx. 46 miles offshore
- Western boundary water depth is 4,265 feet (1,300 meters)
- Eastern boundary water depth ranges from approx. 410 to 1,115 feet (125 to 340 meters)
- Approx. 46 miles in length from north to south
- Approx. 22 miles in width from east to west



Requested Information from Interested or Affected Parties

- **Feedback on the Call Areas is essential to help BOEM identify areas suitable for potential leasing**
- **Specific and detailed comments on features, activities, or concerns in or around the Call Areas**
  - Socioeconomic, cultural, biological, environmental, geological, and geophysical information
  - Known archaeological and/or cultural resources
  - Historic properties
  - Other uses: vessel navigations, recreational and commercial fishing
  - Visual resources
  - Environmental justice
  - Offshore wind energy industry feedback
  - Coastal or onshore activities needed to support offshore wind development
  - Other relevant information

How to Comment

- **Public comment period ends at 8:59 pm PT on Tuesday, June 28, 2022**
- **Supplement your comment narrative with a map (optional)**
- **Submit public comment:**

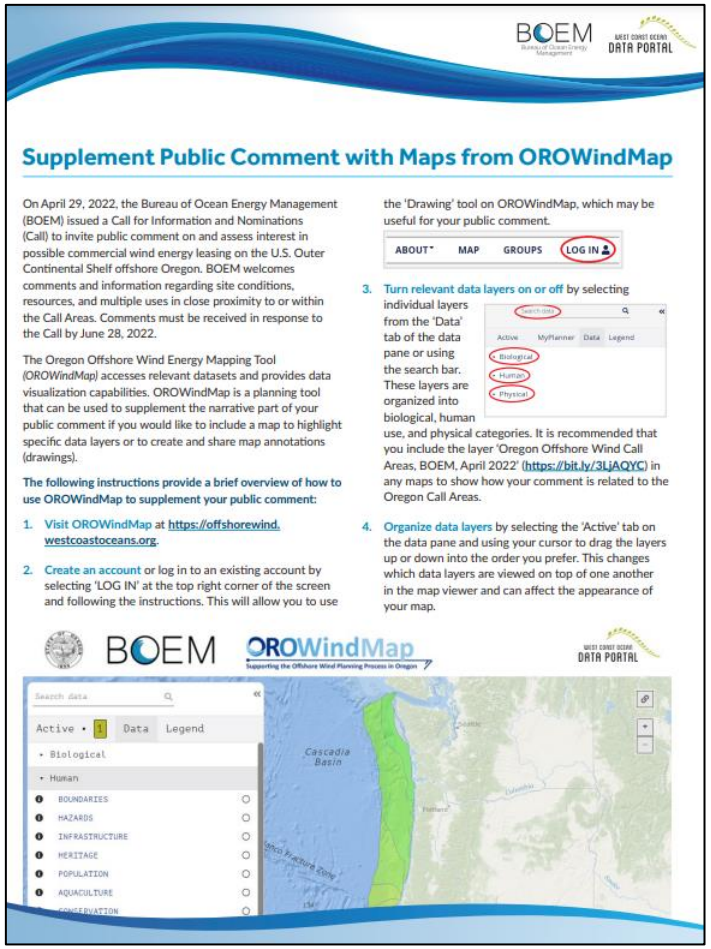
1. **Federal eRulemaking Portal:**

   http://www.regulations.gov

   Search docket number BOEM-2022-0009

2. **Mail:**

   Dr. Whitney Hauer
   Bureau of Ocean Energy Management
   Office of Strategic Resources
   760 Paseo Camarillo, Suite 102
   Camarillo, CA 93010



Supplement Public Comment with Maps from OROWindMap

On April 29, 2022, the Bureau of Ocean Energy Management (BOEM) issued a Call for Information and Nominations (Call) to invite public comment on and assess interest in possible commercial wind energy leasing on the U.S. Outer Continental Shelf offshore Oregon. BOEM welcomes comments and information regarding site conditions, resources, and multiple uses in close proximity to or within the Call Areas. Comments must be received in response to the Call by June 28, 2022.

The Oregon Offshore Wind Energy Mapping Tool (*OROWindMap*) accesses relevant datasets and provides data visualization capabilities. OROWindMap is a planning tool that can be used to supplement the narrative part of your public comment if you would like to include a map to highlight specific data layers or to create and share map annotations (drawings).

The following instructions provide a brief overview of how to use OROWindMap to supplement your public comment:

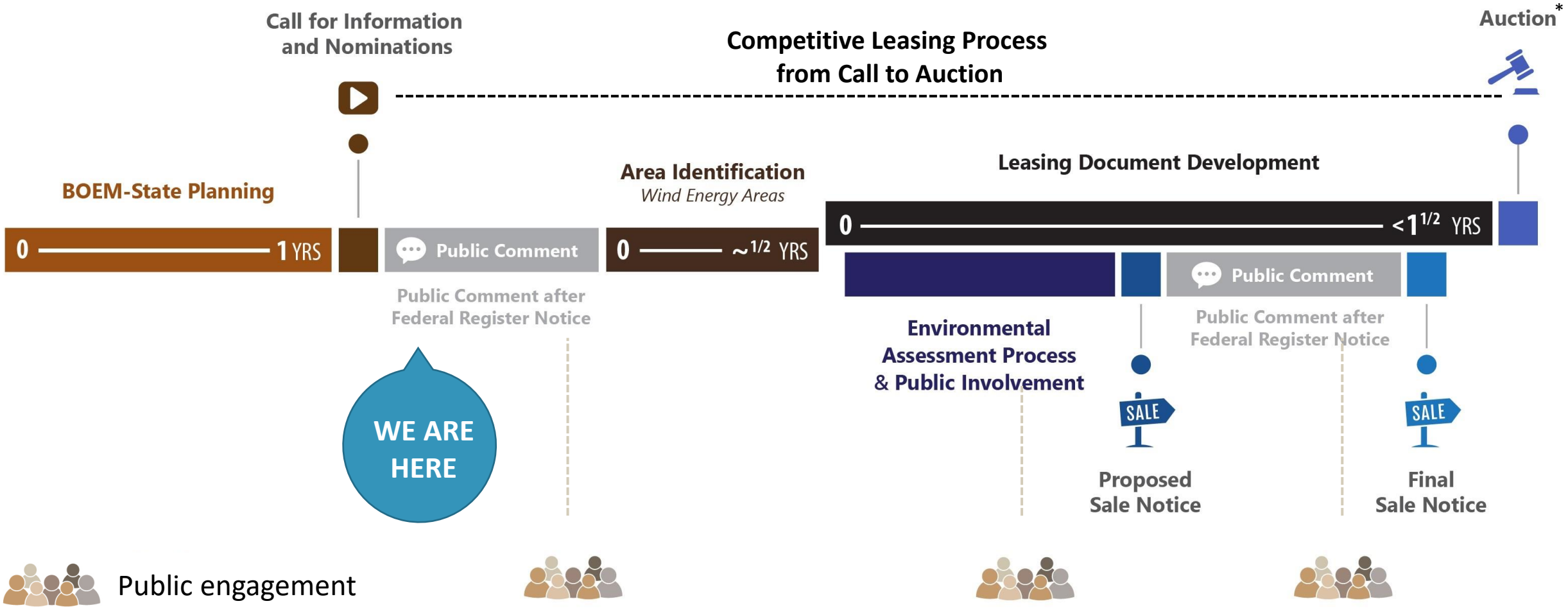
1. Visit OROWindMap at https://offshorewind.westcoastoceans.org.
2. Create an account or log in to an existing account by selecting 'LOG IN' at the top right corner of the screen and following the instructions. This will allow you to use the 'Drawing' tool on OROWindMap, which may be useful for your public comment.

3. Turn relevant data layers on or off by selecting individual layers from the 'Data' tab of the data pane or using the search bar. These layers are organized into biological, human use, and physical categories. It is recommended that you include the layer 'Oregon Offshore Wind Call Areas, BOEM, April 2022' (https://bit.ly/3LjAQYC) in any maps to show how your comment is related to the Oregon Call Areas.

4. Organize data layers by selecting the 'Active' tab on the data pane and using your cursor to drag the layers up or down into the order you prefer. This changes which data layers are viewed on top of one another in the map viewer and can affect the appearance of your map.

https://www.boem.gov/renewable-energy/state-activities/orowindmappubliccomments

Oregon Planning Prior to a Lease Auction



*A lease provides the lessee the right to submit a Site Assessment Plan (SAP) and a Construction and Operations Plan (COP) for technical and environmental review and approval. A lease does not, by itself, authorize any activity within the leased area.

BOEM

Bureau of Ocean Energy Management

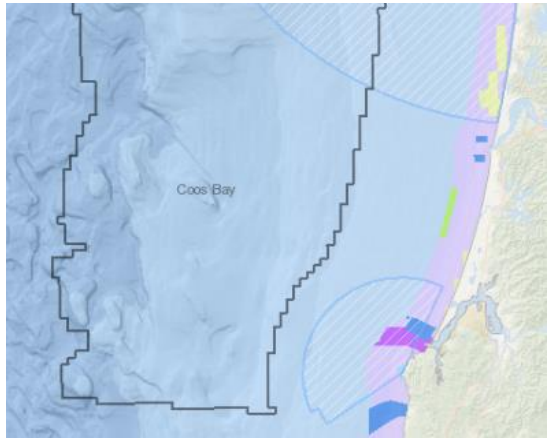
BOEM.gov

Whitney Hauer, Ph.D.| whitney.hauer@boem.gov | (805) 384-6263

www.boem.gov/Oregon

Floating Offshore Wind Energy Study: State Role & OROWindMap

OCMP



DLCD

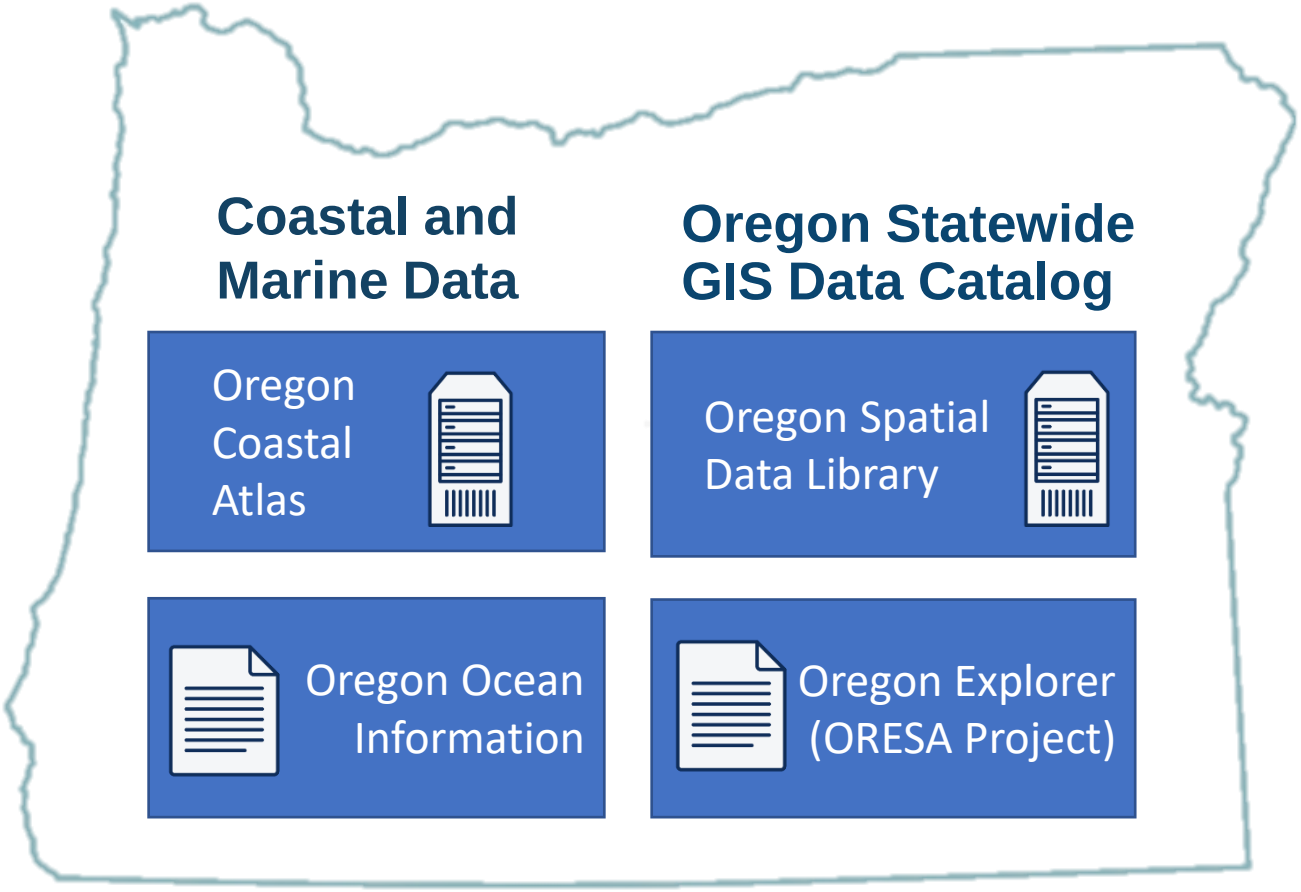
May 11, 2022
Andy Lanier, Marine Affairs Coordinator
Oregon Coastal Management Program

OROWindMap Tool:

https://offshorewind.westcoastoceans.org/

Offshore Wind Data Catalog Organizational Plan

Oregon Data Catalogs +



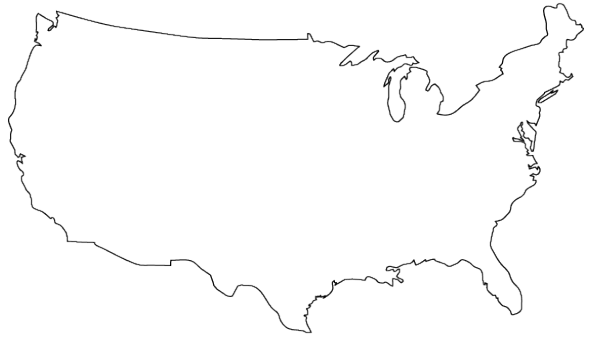
Coastal and Marine Data

- Oregon Coastal Atlas
- Oregon Ocean Information

Oregon Statewide GIS Data Catalog

- Oregon Spatial Data Library
- Oregon Explorer (ORESA Project)

Federal Data Catalogs



- **Marine Cadastre**
- **Ocean Reporting Tool**
- **Digital Coast**
- **NOAA Fisheries (FRAM)**
- **NREL Data Catalog**
- **Ocean Observing Initiative**
- **USGS**
- **…and many more**

Curated Offshore Wind Catalog

WEST COAST OCEAN DATA PORTAL

Offshore Wind Catalog (Combination of Records from Oregon and Federal Data Catalogs)

New OROWindMap System Features

New Features Available on OROWindMap

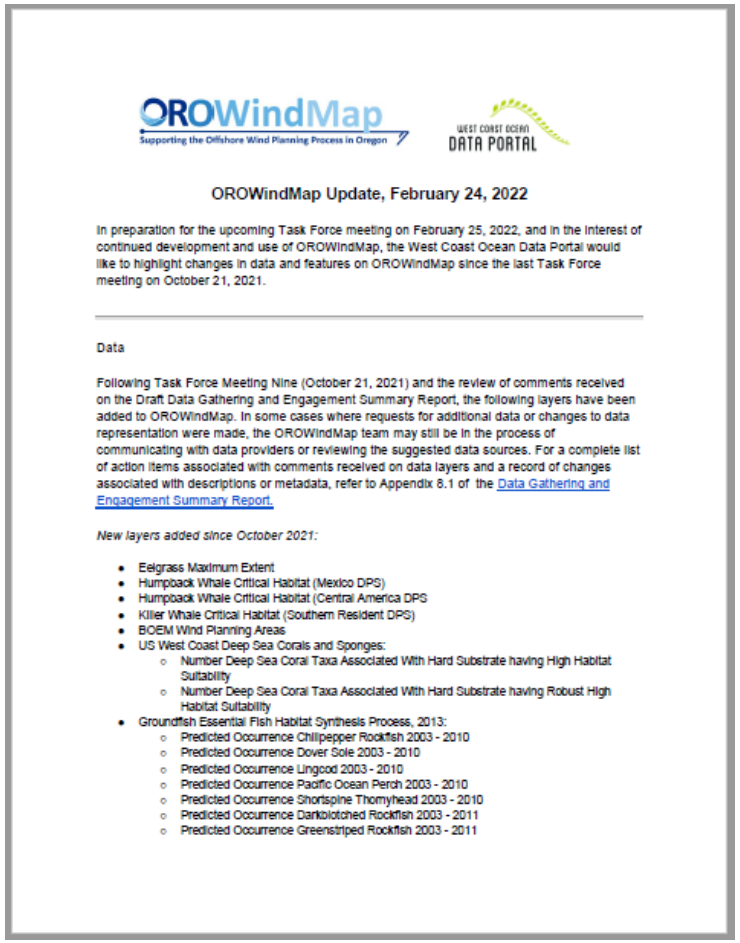
- Integrated Catalog & Information Pages
- User Accounts
- Bookmarks
- Drawings
- Groups

New Instructional Videos

- Introduction to OROWindMap
- Viewing Data Layers & Metadata
- Creating a Login & using MyPlanner
- Collaborating with Groups
- Using OROWindMap in the Public Comment Process

New Data Layers

- Added since October 2021



OROWindMap Supporting the Offshore Wind Planning Process in Oregon

WEST COAST OCEAN DATA PORTAL

OROWindMap Update, February 24, 2022

In preparation for the upcoming Task Force meeting on February 25, 2022, and in the interest of continued development and use of OROWindMap, the West Coast Ocean Data Portal would like to highlight changes in data and features on OROWindMap since the last Task Force meeting on October 21, 2021.

Data

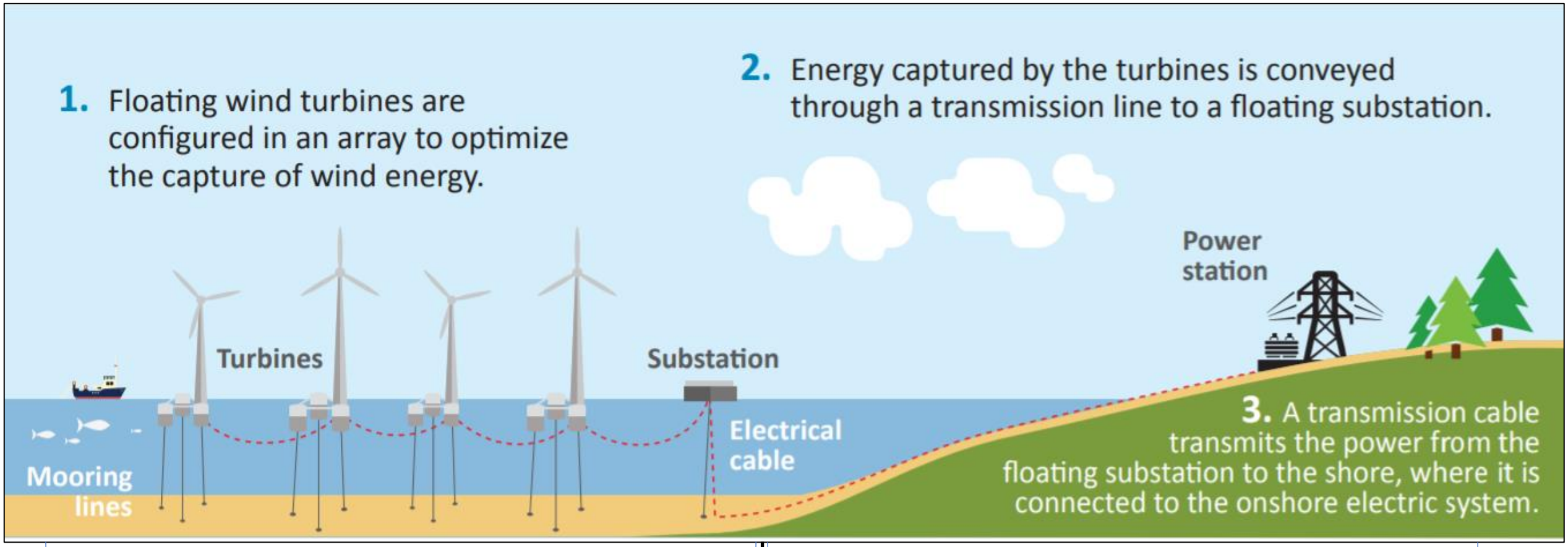
Following Task Force Meeting Nine (October 21, 2021) and the review of comments received on the Draft Data Gathering and Engagement Summary Report, the following layers have been added to OROWindMap. In some cases where requests for additional data or changes to data representation were made, the OROWindMap team may still be in the process of communicating with data providers or reviewing the suggested data sources. For a complete list of action items associated with comments received on data layers and a record of changes associated with descriptions or metadata, refer to Appendix 8.1 of the Data Gathering and Engagement Summary Report.

New layers added since October 2021:

- Eelgrass Maximum Extent
- Humpback Whale Critical Habitat (Mexico DPS)
- Humpback Whale Critical Habitat (Central America DPS
- Killer Whale Critical Habitat (Southern Resident DPS)
- BOEM Wind Planning Areas
- US West Coast Deep Sea Corals and Sponges:
  - Number Deep Sea Coral Taxa Associated With Hard Substrate having High Habitat Suitability
  - Number Deep Sea Coral Taxa Associated With Hard Substrate having Robust High Habitat Suitability
- Groundfish Essential Fish Habitat Synthesis Process, 2013:
  - Predicted Occurrence Chilipepper Rockfish 2003 - 2010
  - Predicted Occurrence Dover Sole 2003 - 2010
  - Predicted Occurrence Lingcod 2003 - 2010
  - Predicted Occurrence Pacific Ocean Perch 2003 - 2010
  - Predicted Occurrence Shortspine Thornyhead 2003 - 2010
  - Predicted Occurrence Darkblotched Rockfish 2003 - 2011
  - Predicted Occurrence Greenstriped Rockfish 2003 - 2011

https://offshorewind.westcoastoceans.org/how-to-use-orowindmap/using-orowindmap/

Generalized Floating Offshore Wind Energy Jurisdictions



BOEM Jurisdiction

Territorial Sea Boundary (3NM)

State & Local Government Jurisdiction

What is the Oregon Coastal Management Program?

Policies & Plans

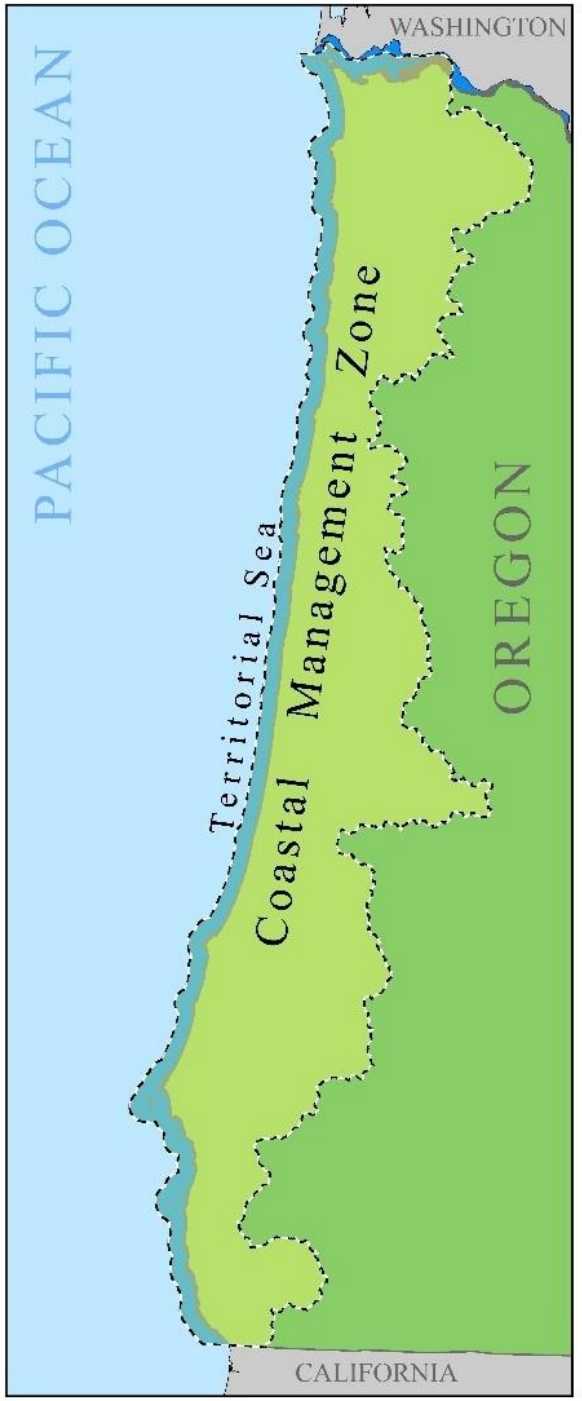
- Coastal Goals,
- Territorial Sea Plan
- Estuary Planning
- Hazard Planning

Federal Consistency Authority

- Allows application of state policies to federal activities.

Networked Program

- A network of state and local partners that help implement the Program.



Federal Consistency

Authority granted to states under the provisions of the Coastal Zone Management Act (CZMA) allowing the application of state policies to federal activities.

Conducted by: Oregon Coastal Management Program (OCMP)

Lead Agency: Department of Land Conservation & Development

- Designed to
  - Promote state-federal cooperation and early coordination on federal activities.
  - Give states the authority to review federal activities for consistency with state policies.
- Oregon's policies sourced from –
  - State Agency Statutes & Rules
  - Local Comprehensive Plans & Ordinances
  - Territorial Sea Plan
  - Statewide Land Use Planning Goals
- Federal agency cannot issue the permit if inconsistent with state policy.

Permitting Overview: Subsea Cables

LOCAL

- Determined based on local policies. May include:
  - Conditional Use Permit
  - Floodplain Development Permit
  - Development Permit

STATE

- Federal Consistency Review (DLCD-OCMP)
- Section 401 Water Quality Certification (DEQ)
- Proprietary Easement/Lease (DSL)
- Removal-Fill Authorization (DSL)
- Ocean Shore Alteration Permit (OPRD)
- Potential Fish and Wildlife Authorization(s) (ODFW)

FEDERAL

- Nationwide Permit or Standard Individual 404 Permit (USACE)
- Other project-based authorizations may involve -
  - Bureau of Ocean Energy Management (BOEM)
  - Federal Energy Regulatory Commission (FERC)
  - U.S. Coast Guard

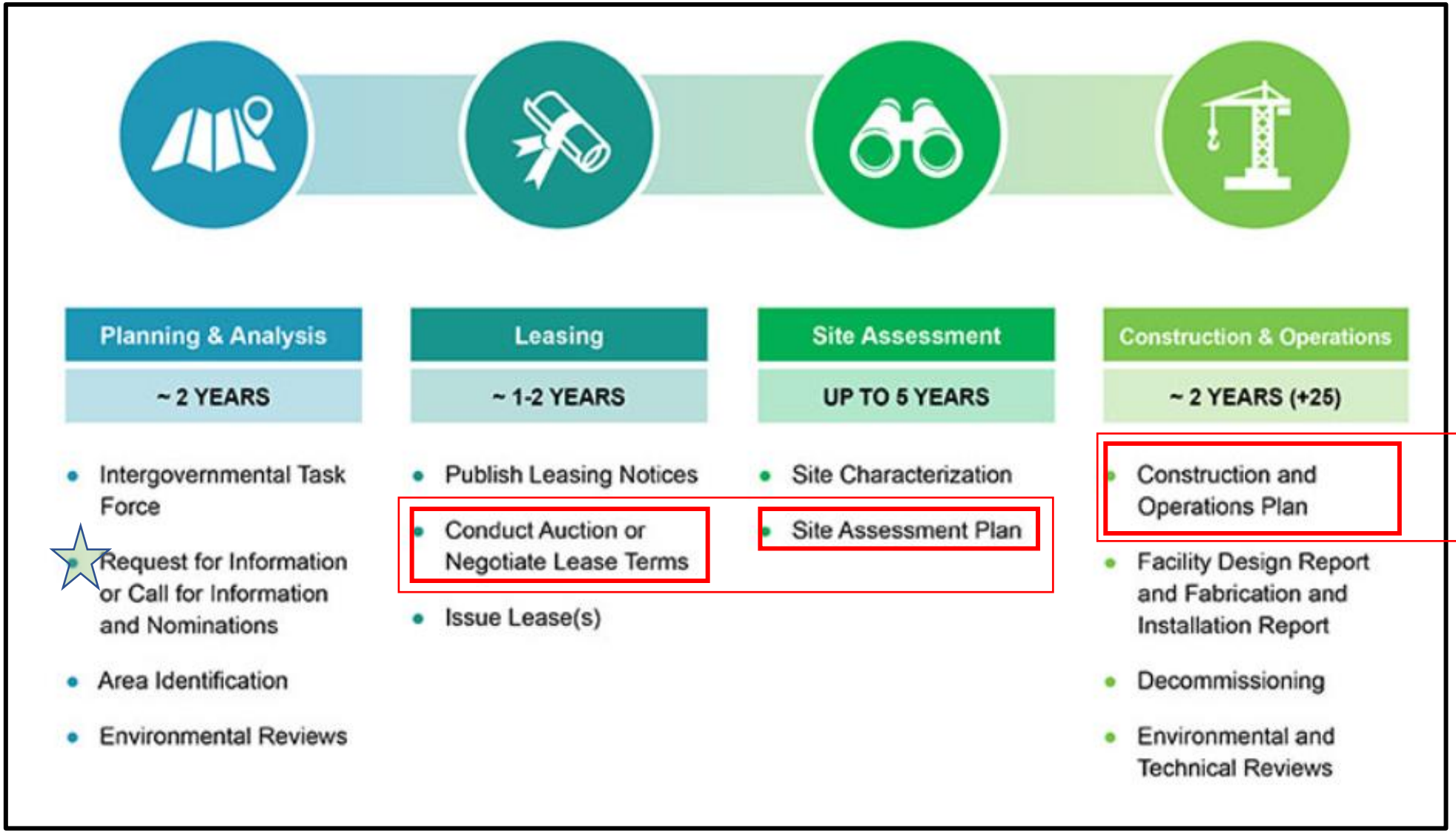
Involved State Agencies

DLCD

DLCD DEQ STATE OF OREGON OREGON DEPARTMENT OF STATE LANDS OREGON STATE PARKS OREGON Fish & Wildlife

DLCD DEQ

Offshore Wind Energy Siting & Federal Consistency Review



Key Review Considerations

- Fish and Wildlife concerns & policies
- Viewshed Impacts
- City/County policies
  - Cable landing & facilities
- Territorial Sea Plan
  - Part 4 – Subsea Cables
  - Part 5 – Marine Renewable Energy
- Tribal Feedback & Consultation
  - Federal consultation initiated early in the taskforce process – DLCD is a signatory.

Public Comment

- Comments on FOSW Study only.
  - ❖ Comments on preliminary findings?
  - ❖ Other helpful information?
- Alternating between In-Person & Online sign-up lists.

Link for Providing BOEM Call Area Comments:
https://www.boem.gov/renewable-energy/state-activities/Oregon