



Outer Continental Shelf Wind Energy Leasing in California

Pacific Fishery Management Council Marine Planning Committee Meeting
September 1, 2021

September 1, 2021

Jean Thurston-Keller, CA Intergovernmental Renewable Energy Task Force Coordinator | Humboldt Wind Energy Area



Overview

- BOEM's Responsibilities
- Approach for Offshore Wind Energy Planning in California
- BOEM Offshore Wind Energy Authorization Process
- California Call Areas
- Types of Comments and Recommendations
- Next Steps



Offshore Wind Energy Planning Approach in California

- Established the BOEM California Intergovernmental Renewable Energy Task Force
- Created Offshore Wind Energy Gateway for data collection in publicly accessible website: www.caoffshorewind.databasin.org
- Conducted extensive outreach and engagement with stakeholders based on joint outreach plan with state
- Published Call for Information and Nominations in the Federal Register in October 2018: 118 comments, 14 nominations
- Coordination, outreach and engagement with Tribal Governments, State of California, Federal agencies, State agencies with over 80 meetings
- Employing scientific studies and analyses to support informed decision-making



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California Offshore Wind Energy Gateway

Web-Based Data Gateway

- Publish spatial datasets
- Create maps using geospatial data
- Converse in working groups with data and maps
- Available to the public

Assemble geospatial information on:

- Physical setting
- Energy resources
- Marine policy and management
- Ecological and natural resources
- Commercial and recreational uses

Use data and information to:

- Inform offshore wind energy leasing process

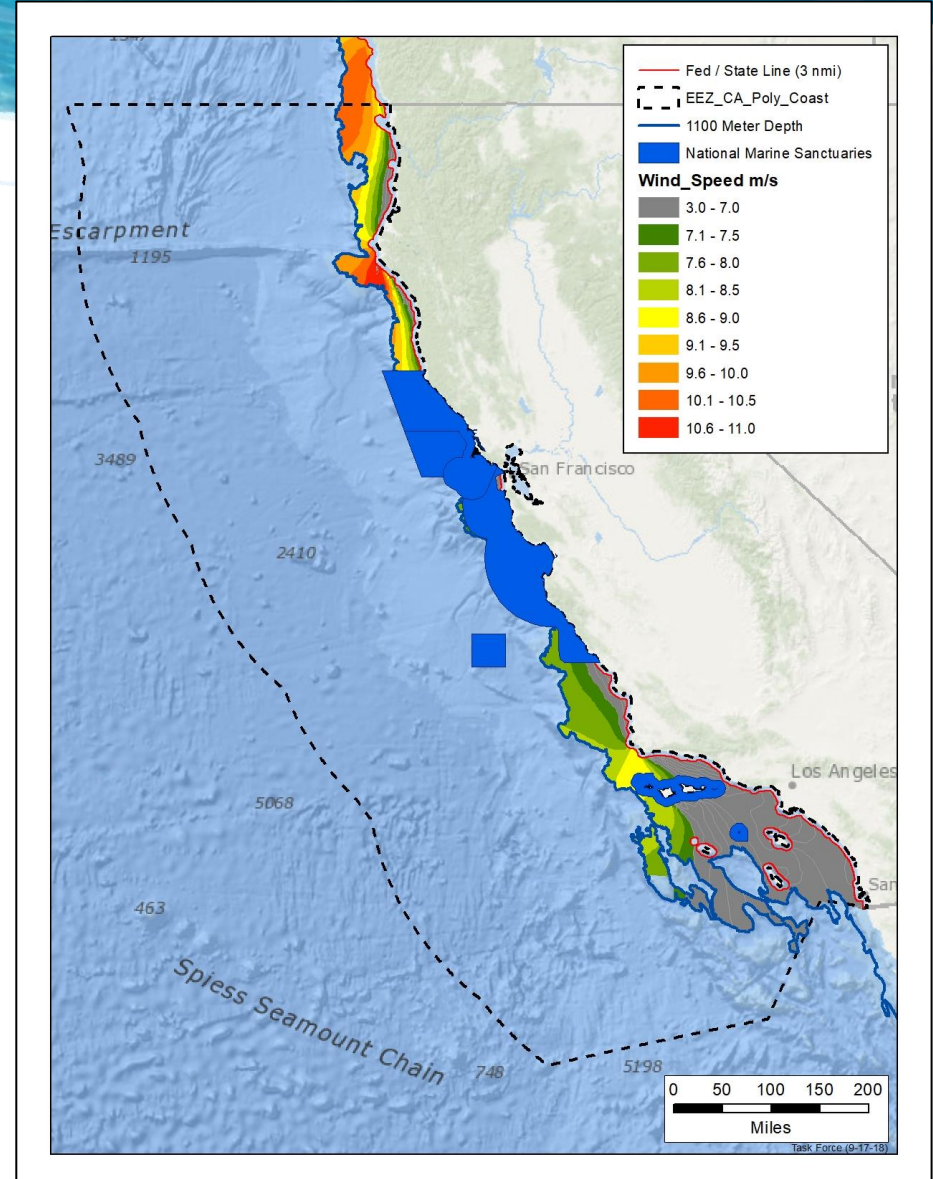
www.caoffshorewind.databasin.org

The screenshot shows the homepage of the California Offshore Wind Energy Gateway. At the top, there is a search bar and a navigation menu with tabs for 'Get Started', 'Explore', 'Create', 'Community', and 'My Workspace'. Below the navigation, there is a main content area with a large image of waves and a text box explaining the gateway's purpose: 'The Offshore Renewable Wind Energy Gateway assembles geospatial information on ocean wind resources, ecological and natural resources, ocean commercial and recreational uses and community values. This information will help identify areas off of California that are potentially suitable for wind energy generation.' There are also several smaller map thumbnails for 'California Marine & Coastal Energy', 'California Marine & Coastal Management', 'California Marine & Coastal Ecology and Natural Resources', and 'California Marine & Coastal Community Values and Traditional Uses'. A 'Featured Items' section displays five datasets: 'Essential Fish Habitat', 'Marine Protected Areas Inventory, March 2012', 'NOAA California Ocean Uses Atlas - Non-consumptive (dominant areas)', 'NOAA California Ocean Uses Atlas - Industrial (dominant areas)', and 'NOAA California Ocean Uses Atlas - Fishing (dominant areas)'. A larger map titled 'California Off-Shore Wind Resources' shows the coastline with highlighted areas. At the bottom, there are buttons for 'Download the Fact Sheet & Get Involved' and 'Follow Progress', along with logos for BOEM (Bureau of Ocean Energy Management) and the California Energy Commission.

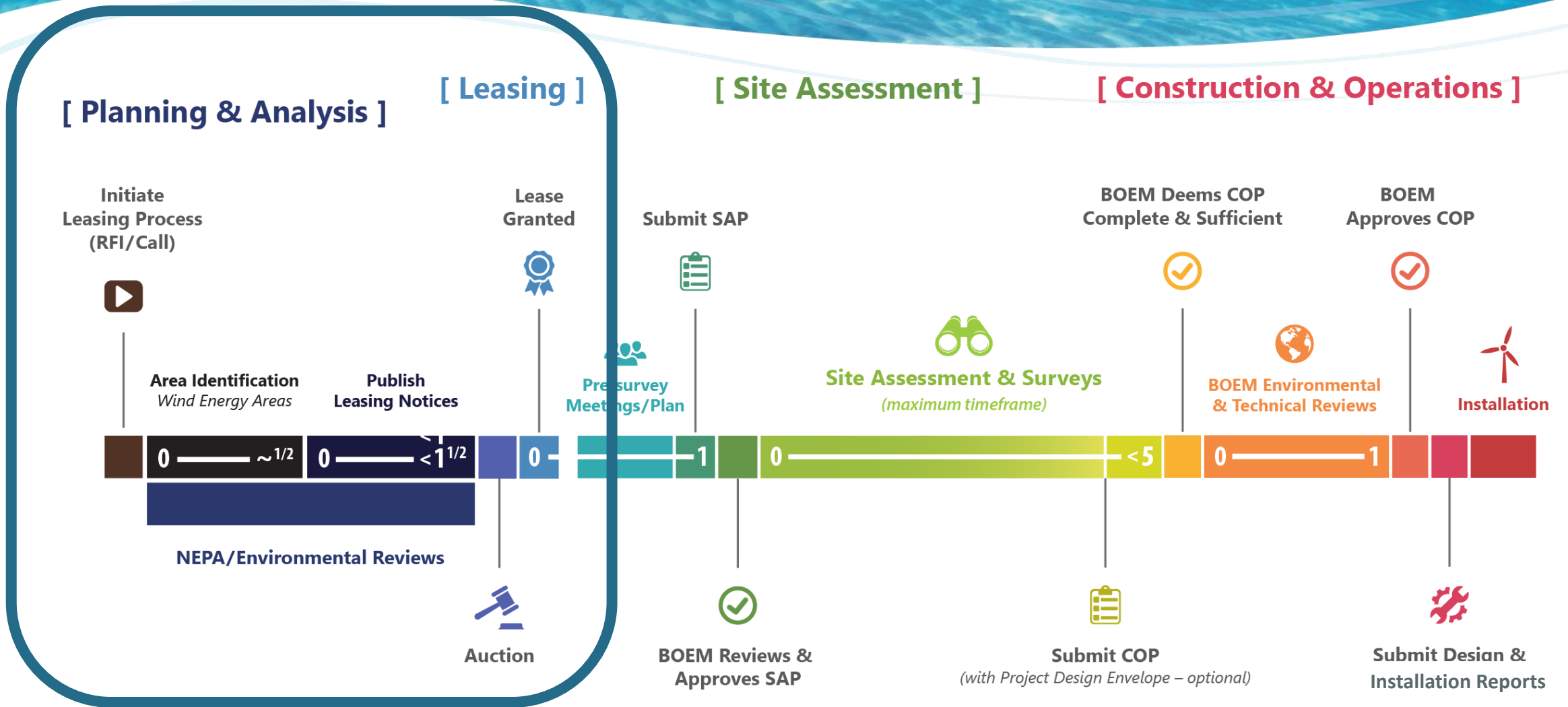


Approach for Offshore Wind Energy Planning in California

- Where is the wind resource?
- In what water depths can the turbines be installed with available technology?
- Does BOEM have authority?
- Where are interconnection locations to the electrical grid?



BOEM's Offshore Wind Energy Authorization Process



BOEM's Renewable Energy Authorization Process

Call for Information and Nominations

Morro Bay

Area Identification
Wind Energy Areas

Humboldt

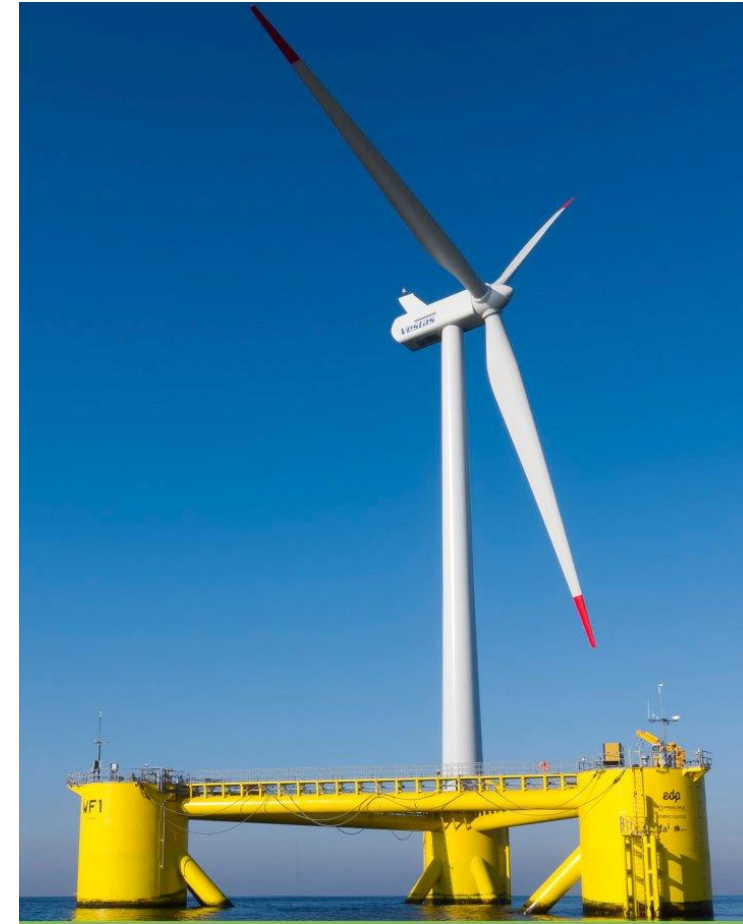
Leasing Document Development

Auction



Renewable Energy Process: Calls, Wind Energy Areas and Lease Areas

- **Call for Information and Nominations**
 - Calls for formal public comment about the area, uses and concerns
 - Requests nominations of interest for development
- **Wind Energy Area**
 - An area within a Call Area identified by BOEM for environmental review
 - Basis for a lease area(s)
- **Lease Area**
 - Areas BOEM would offer for lease during a Lease Sale

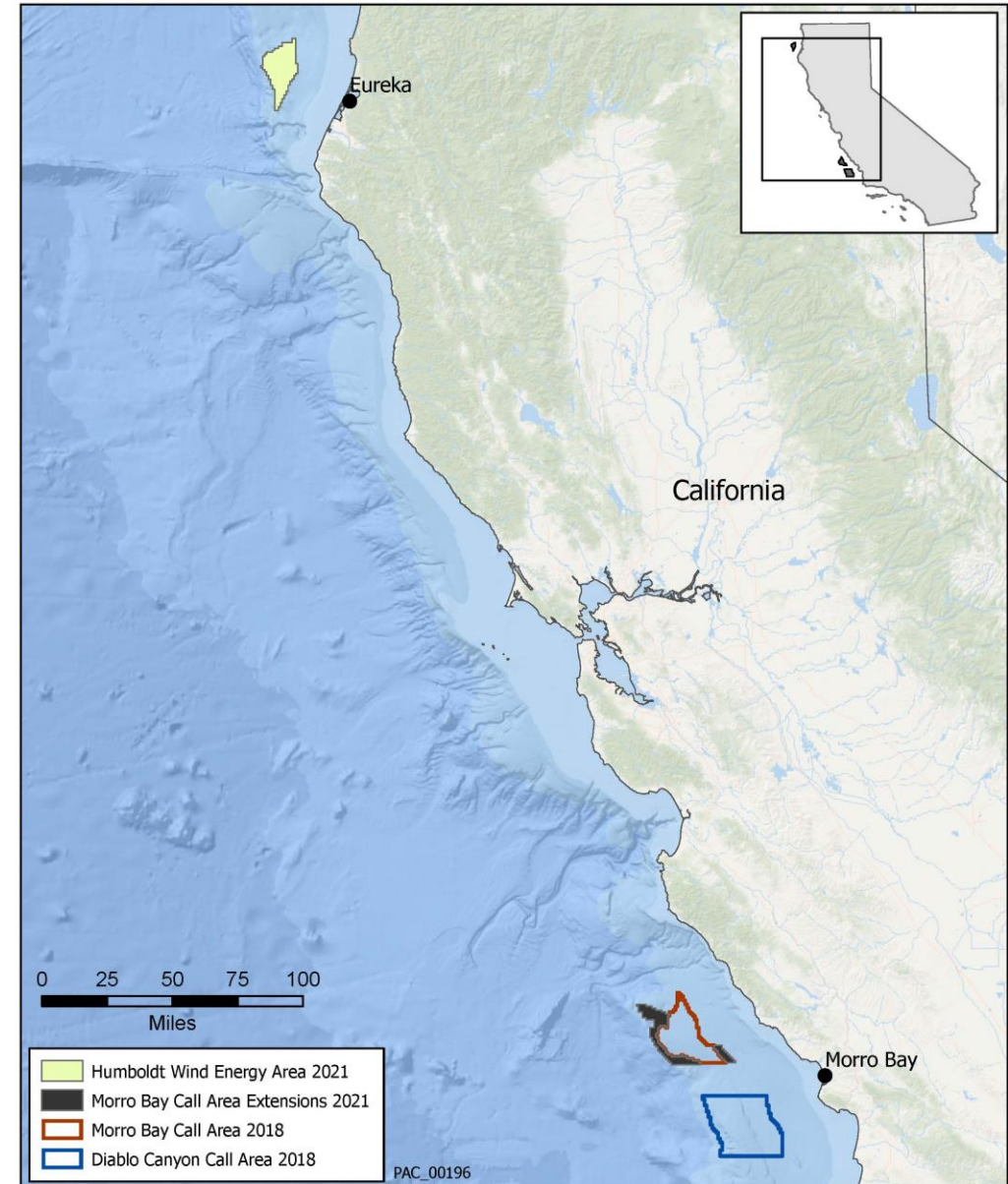


Aguçadoura WindFloat Prototype
October 2011 - 4KM Offshore of Aguçadoura, Portugal



California Offshore Wind Planning

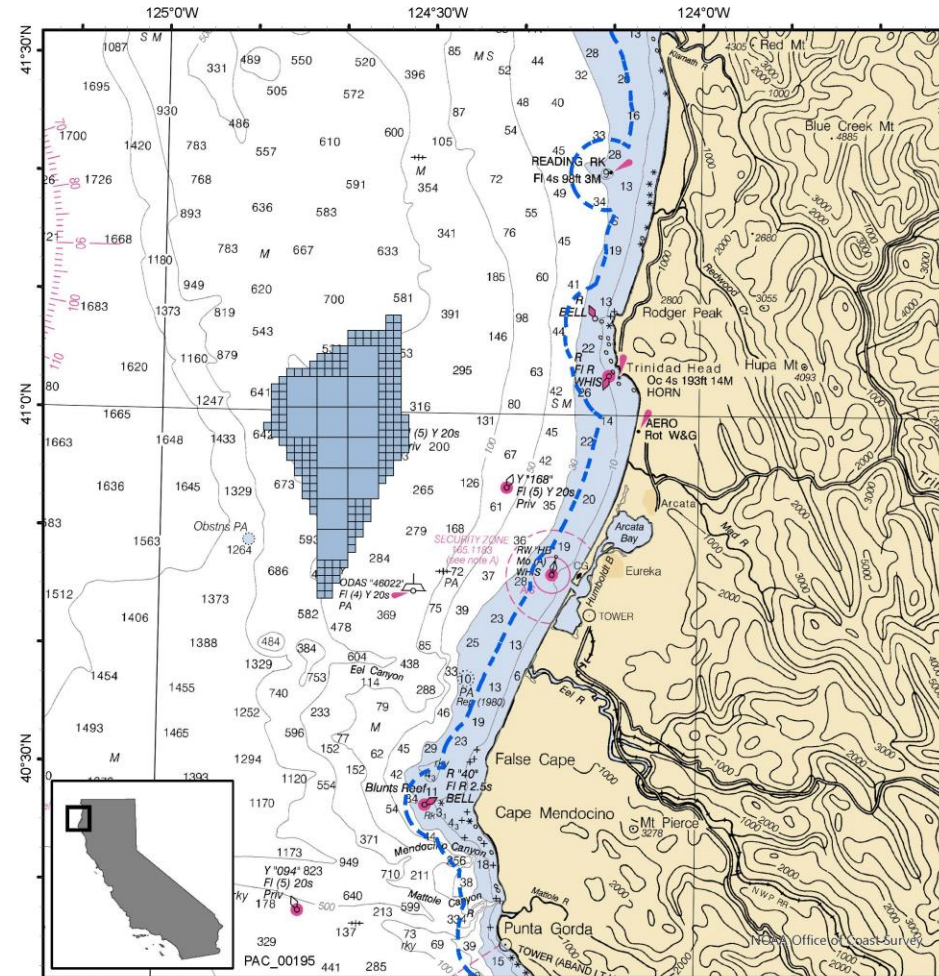
- North Coast
 - Humboldt Wind Energy Area
- Central Coast
 - Morro Bay Call Area and Extensions
 - Diablo Canyon Call Area



North Coast Wind Energy Area - Humboldt

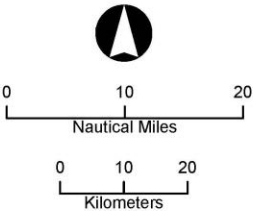
Humboldt Wind Energy Area

- Size: 132,369 acres (206 square miles)
- Distance to Shore: ~20 miles
- Identical to the Humboldt Call Area
- BOEM Area Identification Memo available at: www.boem.gov/HumboldtEA
- Will be focus of the environmental assessment



Humboldt Wind Energy Area

- Federal / State Boundary
- Humboldt Wind Energy Area



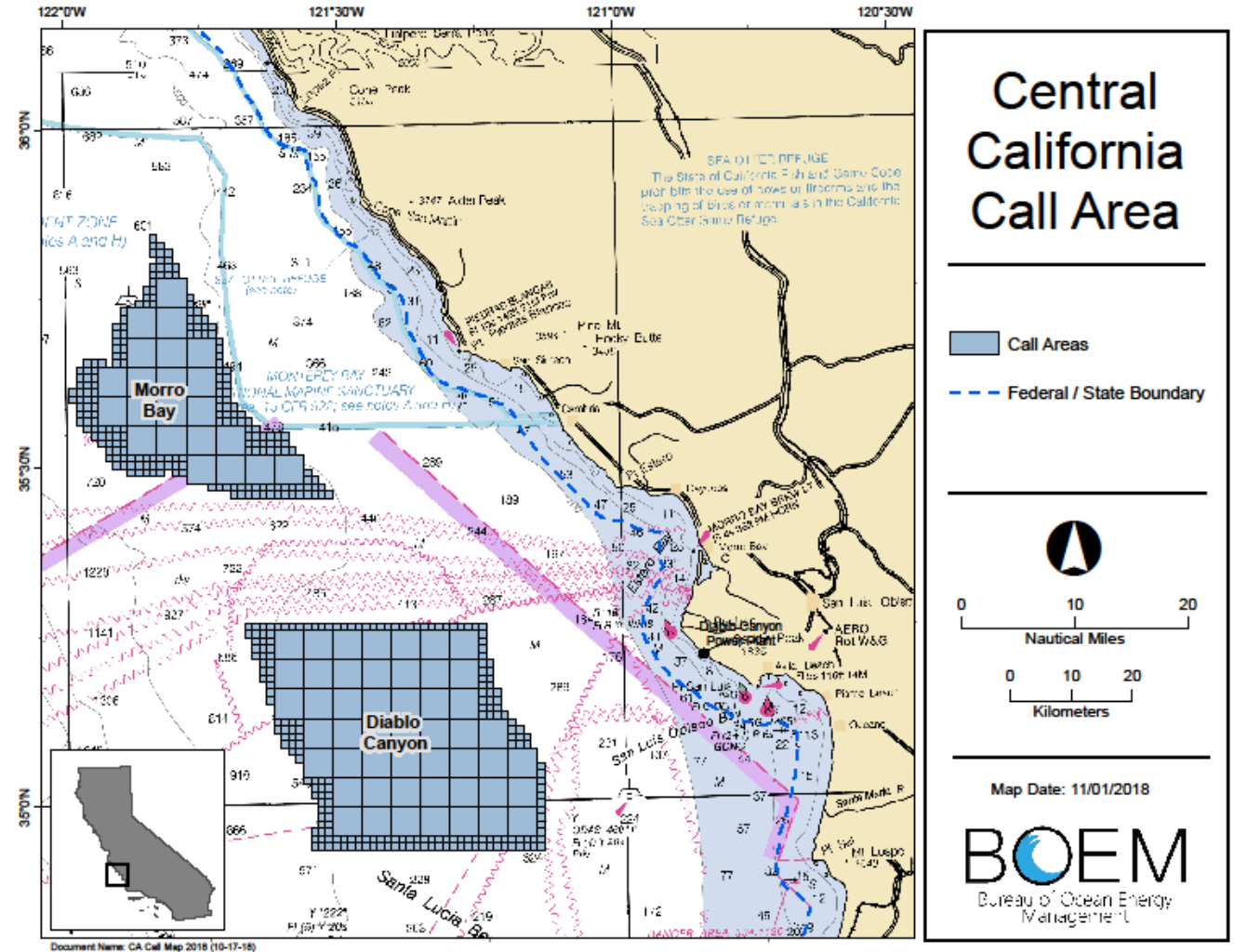
Map Date: 07/26/2021

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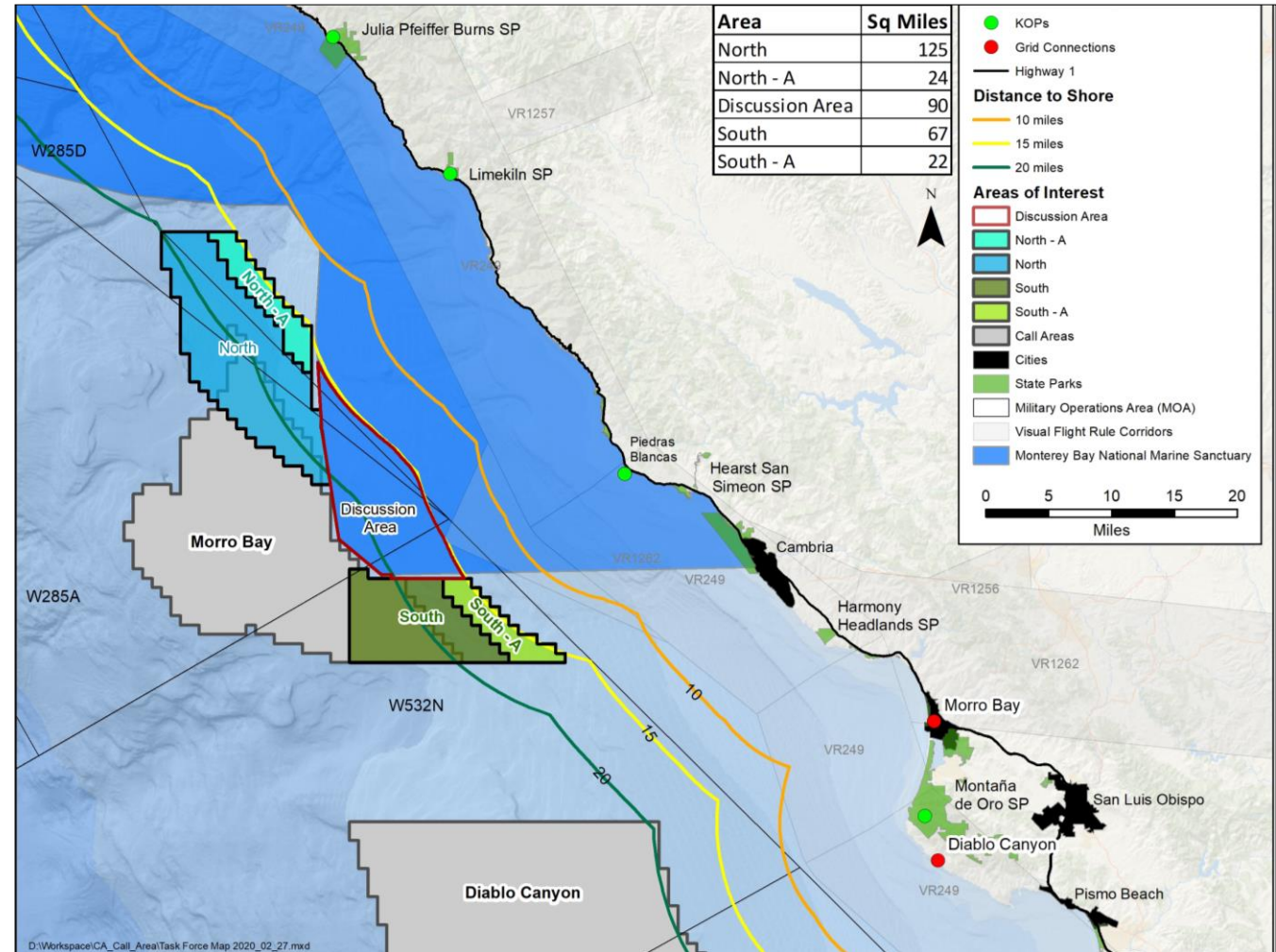
2018 Morro Bay and Diablo Canyon Call Areas

- **Morro Bay Call Area:**
 - 20 miles from shore
 - Approximately 311 square miles total area
- **Diablo Canyon Call Area:**
 - ~20 miles from shore
 - Approximately 556 square miles total area



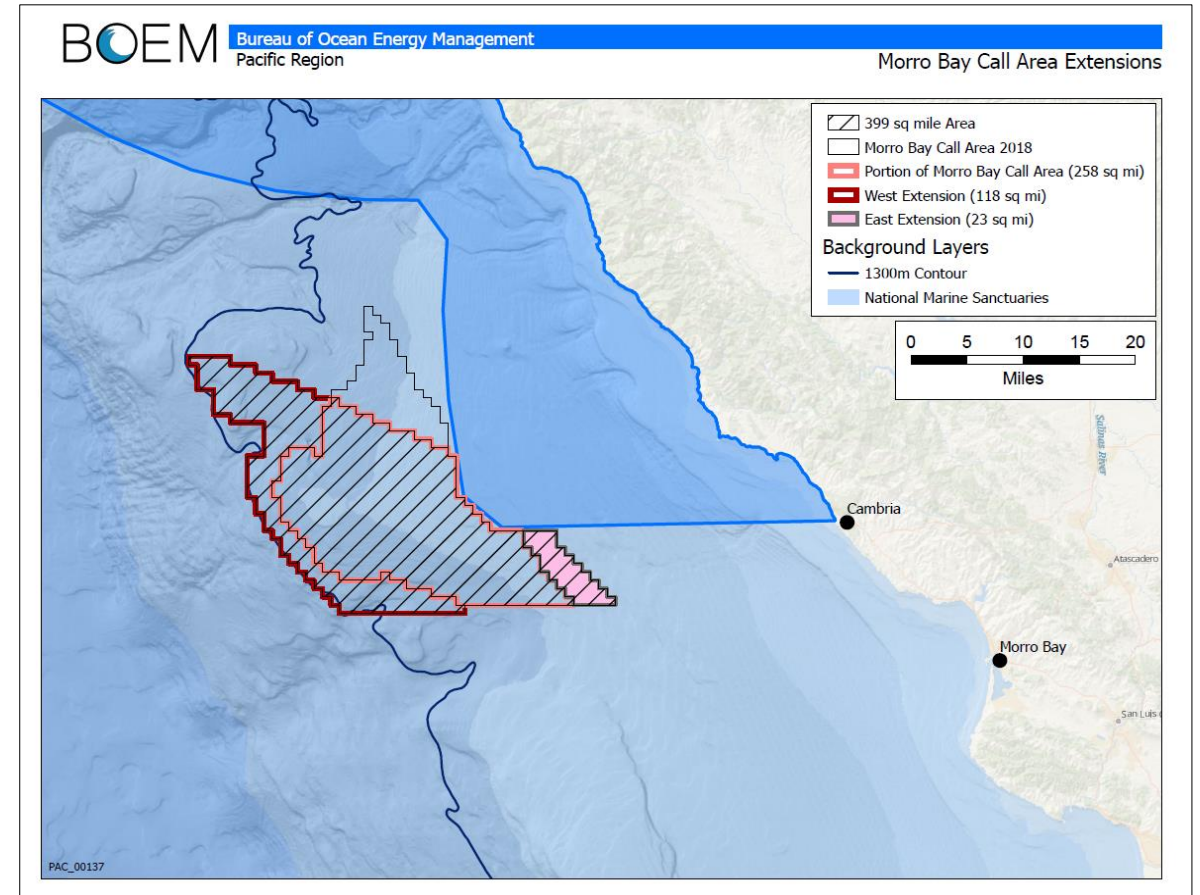
Additional Areas for Consideration

- Additional Areas for Consideration
 - Working Group led by Congressman Carbajal's Office



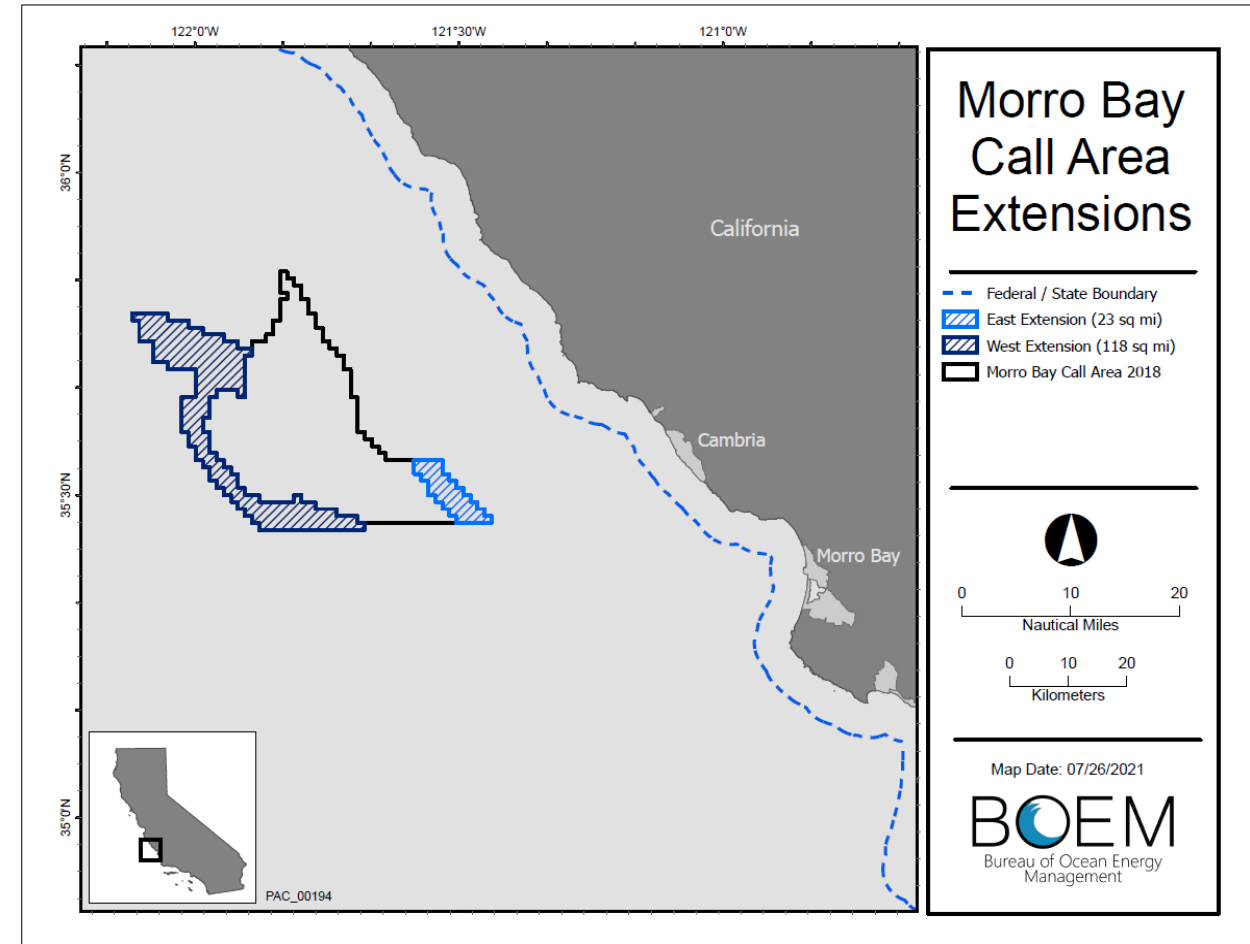
Morro Bay Call Area

- White House Announcement
 - May 25, 2021
 - Includes 399 square mile area
 - Nearest distance to shore: ~17 miles
 - Includes Call Area Extensions
 - East Extension: 14,589 acres (23 square miles)
 - West Extension: 75,436 acres (118 square miles)



Morro Bay East and West Extensions

- Call for Information and Nominations for Morro Bay Extension Areas
 - **East Extension:** 17 miles from shore
 - **West Extension:** 35 miles from shore
 - Published in Federal Register on July 29, 2021
 - Soliciting comment and industry nominations on the Extension Areas
 - Public comment period ends on September 13, 2021



Types of Comments to Submit

BOEM requests specific and detailed comments on features, activities and concerns in the Call Areas such as:

- Environmental, socioeconomic and biological information
- Commercial and recreational fishing
- Recreation
- Energy resources
- Visual resources and aesthetics
- Navigation and vessel uses
- Historic properties
- Geological and geophysical information
- Known archaeological and/or cultural resources



Effective Comment Tips

- Comment period closes at 11:59 p.m. eastern time on **September 13, 2021**
- Feel free to reach out to BOEM with questions
- Be concise and provide supporting data (if available)
- Base your justification on sound reasoning, scientific evidence, and/or how you will be impacted
- Use data and/or maps from the Data Basin website at www.caoffshorewind.databasin.org
- Address trade-offs and opposing views in your comment
- There is no minimum or maximum length
- The comment process is not a vote – one well supported comment is often more influential than a thousand form letters



What is the next step after close of the Call comment period?

- BOEM considers comments received during the Call and any nominations of interest
- BOEM may identify Wind Energy Area(s) (WEA) for environmental review: Area Identification (Area ID) Phase
- May include all or portions of the Call Areas (399 sq mi) as base for designating WEAs
- WEAs would be analyzed under NEPA in an environmental analysis document



Central California Road Ahead – Outlook and Next Steps

Conduct Environmental Assessment

Publish Proposed Sale Notice

- Humboldt and Morro Bay Areas will be combined into one Proposed Sale Notice for a single California lease auction that includes both areas together
- 60-day comment period
- Last opportunity for developers to provide interest

Publish Final Sale Notice

Lease Auction (Fall 2022)



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Commercial Wind Lease Issuance and Site Assessment Activities on the Pacific Outer Continental Shelf offshore Humboldt County

Pacific Fishery Management Council Marine Planning Committee Meeting
September 1, 2021

September 1, 2021



National Environmental Policy Act (NEPA)

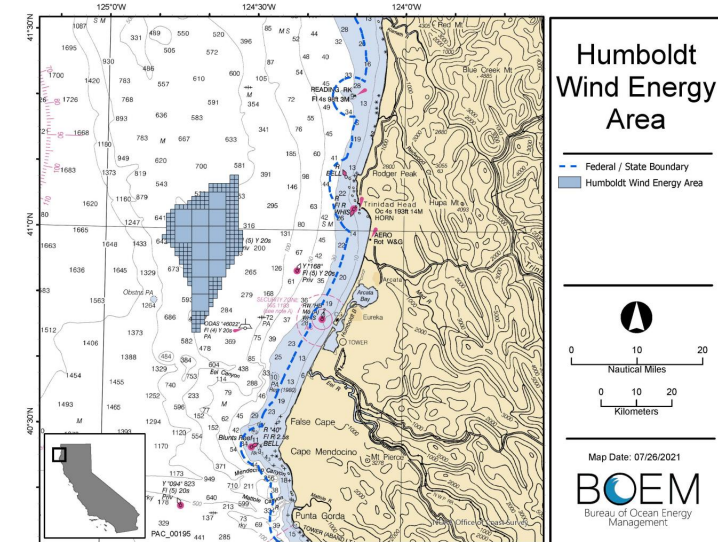
NEPA requires Federal agencies to assess the environmental effects of their proposed action prior to making a decision

Proposed Action/ Decision Point

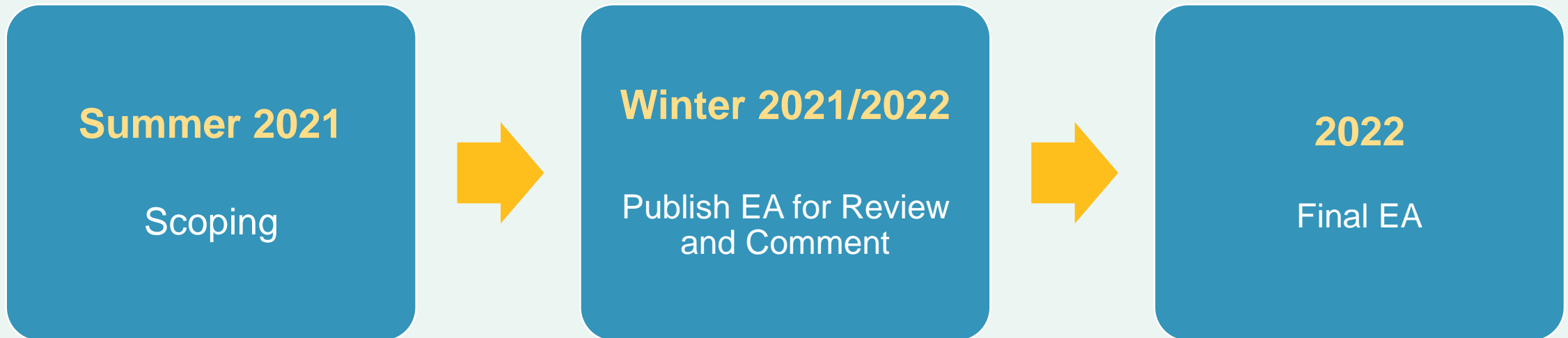
- Issuance of commercial wind energy lease(s), which includes areas within Federal waters that might be used for energy production, collection and transmission.
- Site Characterization Activities – biological, geotechnical, geophysical, and archaeological surveys
- Site Assessment Activities – deployment of one or more buoys to gather oceanographic and meteorological data

Construction and Operation of a project is not being considered.

These impacts are evaluated once a project plan is submitted.



Environmental Assessment Schedule for Humboldt WEA



Comments on the Scope of the Humboldt EA

Proposed Action – Issuance of a lease and further site evaluation

Alternatives - Reasonable options may reduce impacts.

BOEM will conduct a comprehensive review of impacts associated with lease issuance and site assessment/characterization



0 25 50 100 Miles

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Environmental Resources and Socio-cultural Considerations



Biological

- Marine Mammals and Sea Turtles
- Fish and Essential Fish Habitat
- Marine Habitats
- Avian and Bat Species
- Threatened and Endangered Species



Physical

- Air Quality
- Water Quality
- Geology/ Geohazards (New)




Socio-cultural Considerations

- Tribes
- Historic Properties
- Commercial and Recreational Fishing
- Environmental Justice
- Tourism and Recreation
- Demographics and Employment
- Military Use
- Navigation/Vessel Traffic

BOEM Consultations with Federal Agencies

- **National Historic Preservation Act (NHPA Section 106) – CA Office of Historic Preservation**
- **Coastal Zone Management Act (CZMA) – CA Coastal Commission**
- **Endangered Species Act (ESA Section 7) – NOAA, NMFS, Long Beach Office**
- **Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat [EFH]) – NOAA, NMFS**

Providing and Collecting Information



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**Selected BOEM-Funded Research
Informing Renewable Energy
Offshore California**
JUNE 2021

Biological Studies PAGE 1

Cultural & Archaeological Studies..... PAGE 6

Information Synthesis Studies PAGE 7

Physical Oceanography & Geology Studies PAGE 8

Resource, Technology & Infrastructure Studies..... PAGE 9

Socioeconomic Studies PAGE 10

<https://www.boem.gov/Selected-BOEM-Research-Renewable-CA/>
<https://www.boem.gov/west-coast-renewable-energy-science-exchange>



California Offshore Wind Energy Gateway
In support of the Intergovernmental Renewable Energy Task Force

Search by keyword or location

powered by DATA BASIN

Get Started
Explore
Create
Community
Workspace

What is the California Offshore Wind Energy Gateway?

What can I do?

How do I start exploring?

The Offshore Renewable Wind Energy Gateway assembles geospatial information on ocean wind resources, ecological and natural resources, ocean commercial and recreational uses and community values. This information will help identify areas off of California that are potentially suitable for wind energy generation.

read more



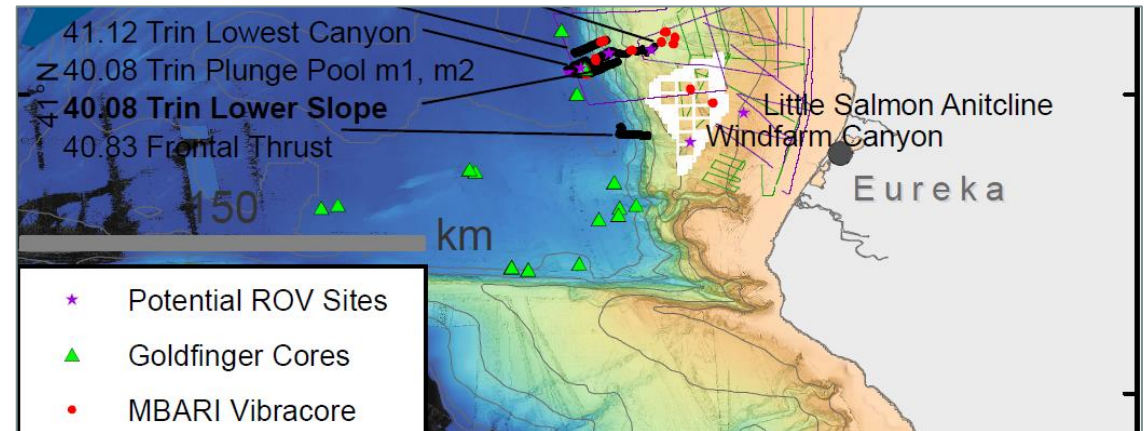
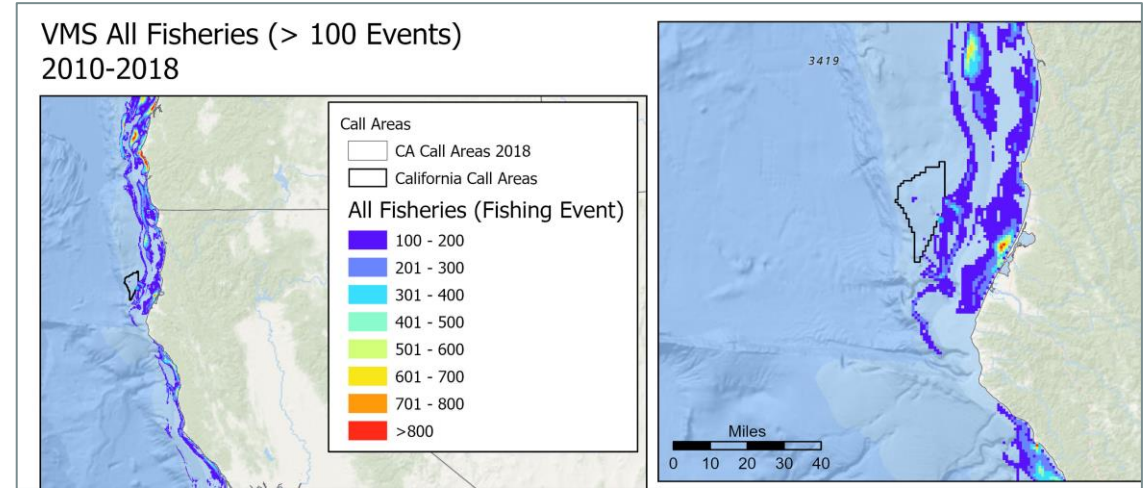
California Marine & Coastal Energy

California Marine & Coastal Management

California Marine & Coastal Ecology and Natural Resources

California Marine Fishing and Traditional Uses

<https://caoffshorewind.databasin.org/>



*New seafloor and vessel monitoring systems data sets are in progress.

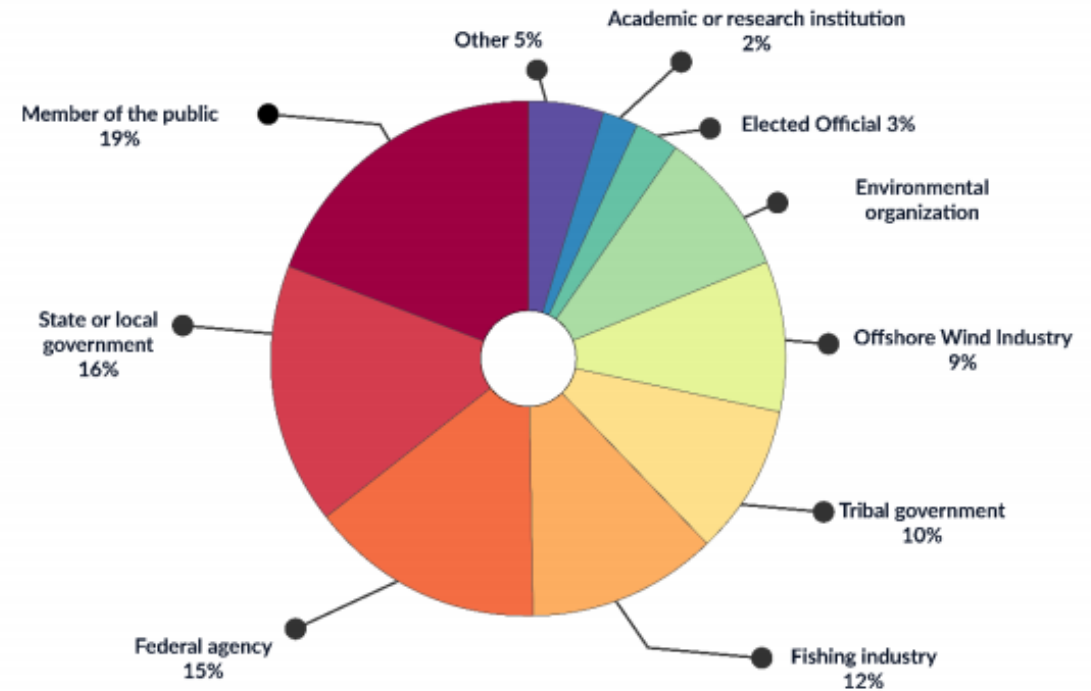


Collecting and Providing Information

Overview of key input from 2018-2020

- Fishermen are concerned about potential impacts to their current activities and long-term livelihood.
- Concern about environmental, visual, and noise impacts from OSW.
- Concerns with maritime vessel traffic patterns and OSW.
- Interest in potential economic impacts from Humboldt OSW development.

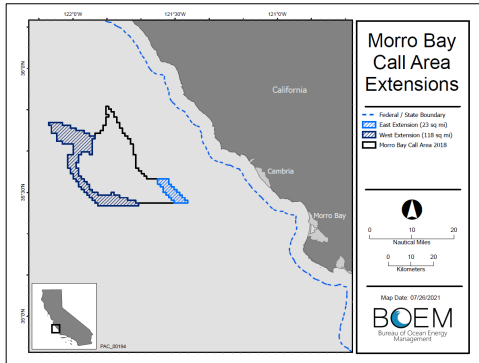
BOEM CA Offshore Wind Energy Planning Outreach
Participation: October 2018—December 2020



<https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Offshore-Wind-Outreach-Addendum.pdf>

Wrap Up - Sending BOEM Comments

More information: www.boem.gov/california



Morro Bay Call Area Extensions

Call for Information and Nominations

Purpose: Gather information and wind development interest in new areas.

Comment period ends
September 13, 2021

How to Comment:
Federal Register [BOEM-2021-0044](https://www.federalregister.gov/d/2021-0044)

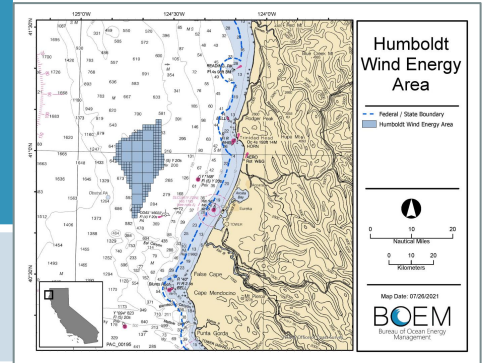
Humboldt Wind Energy Area

Environmental Assessment Scoping

Purpose: Leasing and site survey activities.

Comment period ends
September 13, 2021

How to Comment:
Humboldtoffshorewind@boem.gov



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For more information on the Environmental Assessment
offshore Humboldt County, visit: www.boem.gov/HumboldtEA