

# Impact Assessment for Megaprojects: It Must Start with Effective Stakeholder Engagement



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**Case Study:** How an intensive stakeholder engagement process centered on mega-scale offshore wind development in coastal California initiated 8 years before project inception facilitates impact assessment.



# Background

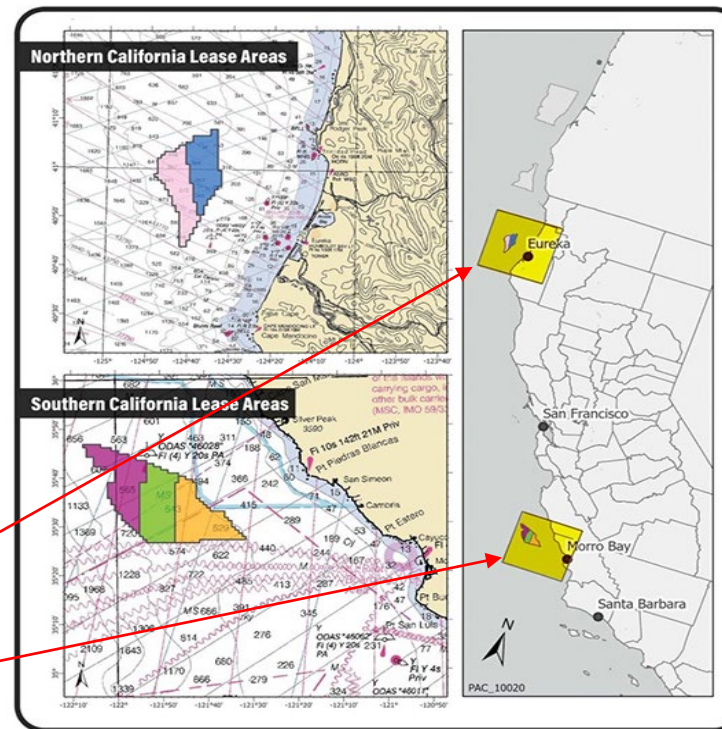
# State of California's Goal: Achieve 100% clean electricity by 2045


- One of the most aggressive greenhouse gas emission reduction agendas in the world.
- **25 GW** of offshore wind energy **by 2045**, requiring **1,600-1,700** wind turbines to be built at a rate of **92 floating turbines per year**.

- **First-ever California offshore wind lease sale** held in 2022

- **Leased 1,501 km<sup>2</sup> (583 mi<sup>2</sup>) total “wind energy areas” (WEAs) to 5 companies:**

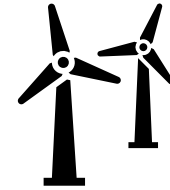
- 2 WEAs – Humboldt Bay (536 km<sup>2</sup>)
- 3 WEAs – Morro Bay (974 km<sup>2</sup>)



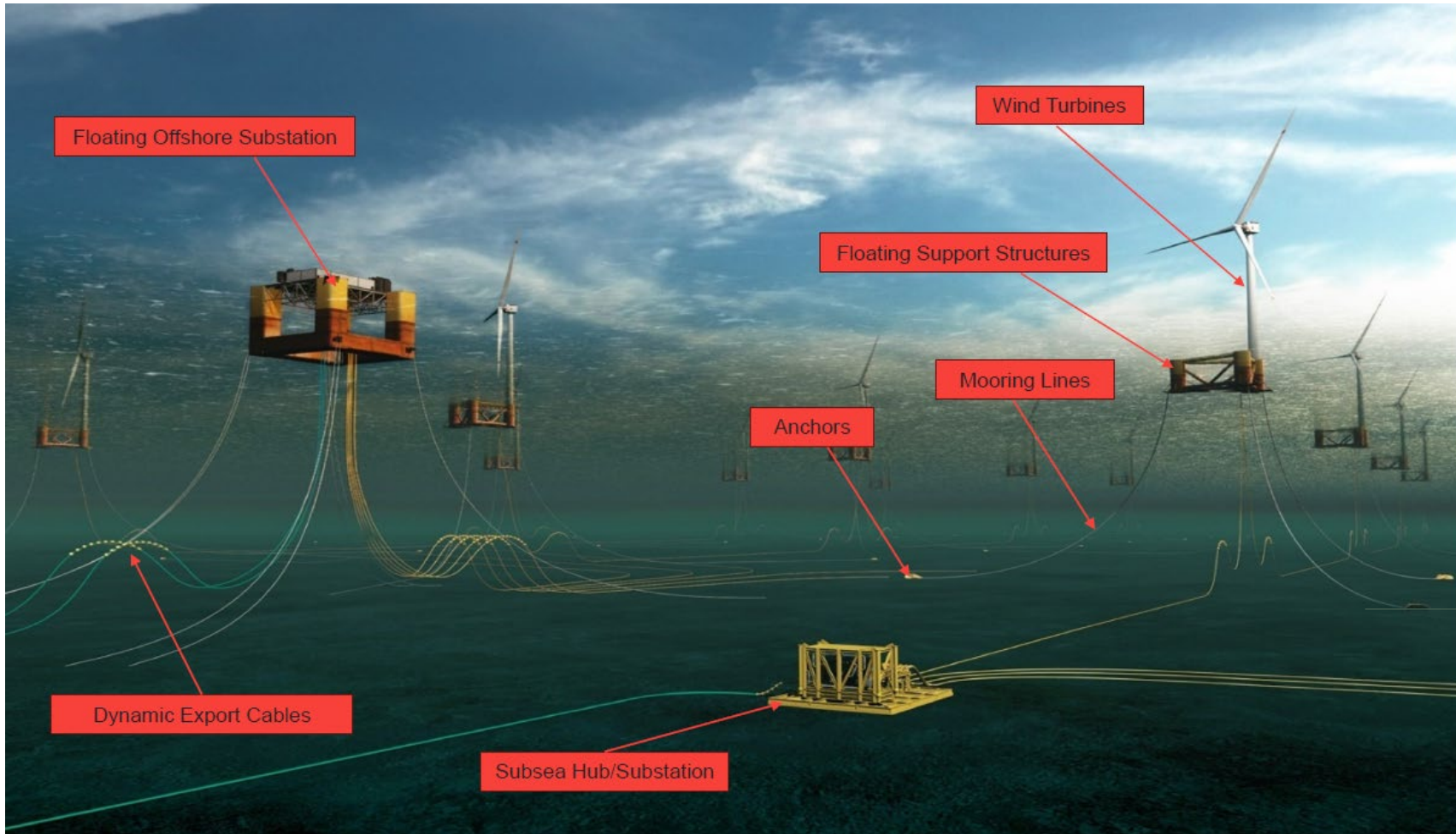
 <b>Provisional Winners of the California Lease Areas, \$757,100,000 in High Bids</b>		
OCS-P0561	RWE Offshore Wind Holding, LLC	\$157,700,000
OCS-P0562	California North Floating LLC	\$173,800,000
OCS-P0563	Equinor Wind US LLC	\$130,000,000
OCS-P0564	Central California Offshore Wind LLC	\$150,300,000
OCS-P0565	Invenergy California Offshore LLC	\$145,300,000

BOEM Bureau of Ocean Energy Management

# New Technology, New Issues



- **Strongest winds, deepest waters:**
  - Massive turbines required to be on floating platforms tethered to seafloor
  - Undersea transmission lines to shore
- **Supply chain creation** for parts and materials not yet available in the western US
- **Unprecedented industrialization of the California coast**
  - **New and expanded ports**
    - Project ex: Pier Wind (Port of Long Beach, California)
- **Construction of specialized vessels** to tow and install platforms at sea
- **Doubling state's existing transmission infrastructure (\$700 billion)**
  - New/upgraded onshore substations, towers, transformers
  - Electrical distribution networks



# Floating Wind Turbines and Technology

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# Stakeholder engagement, years in advance

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Key drivers:

- Lessons learned from attempts/development of offshore wind on the U.S. east coast and in Europe
- Highly sensitive regulatory setting (California)



**Bureau of Ocean Energy Management  
(BOEM) California Intergovernmental  
Renewable Energy Task Force (2016)**

# BOEM California Intergovernmental Renewable Energy Task Force

## October 2016: First Task Force Meeting

- Stakeholder Outreach Plan, list of stakeholders:
- Commercial fishing community, elected officials, mariners, academic and environmental groups, renewable energy developers, the public, etc.

## Interim: Task Force Members Identified Needs

- State Tribal Ocean Renewable Energy Working Group
- California Offshore Wind Energy Gateway (spatial datasets, resource mapping)

## February 2017 – September 2018

- BOEM and State of California held 12 meetings with Native American Tribes and 67 meetings with other stakeholders.



# BOEM California Intergovernmental Renewable Energy Task Force

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## September 2018: Task Force Meeting #2

- Four potential areas identified for offshore wind leasing (WEAs)
- Updates on state initiatives (e.g., Ocean Protection Council, outreach efforts, data gathering)

## March 2020: Task Force Meeting #3

- Ocean Protection Council provided newly adopted 2020-2025 Strategic Plan

## July 2021: Task Force Meeting #4 (on Zoom – 400 participants)

- BOEM, California Natural Resources Agency, California Energy Commission, US Department of Defense remarks
- Began focus on Humboldt and Morro Bay WEAs

# Identification of Stakeholder Concerns

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Conflicts with existing ocean uses (fishing, shipping, natural resources, etc.)

Cost – who pays?

How floating offshore wind facilities operate

How BOEM's offshore wind leasing and approval process works

Decision-making and regulatory oversight of new facilities

Short- and long-term impacts to commercial fishing industry, activities, livelihood

Impacts to cultural landscapes, areas of spiritual significance

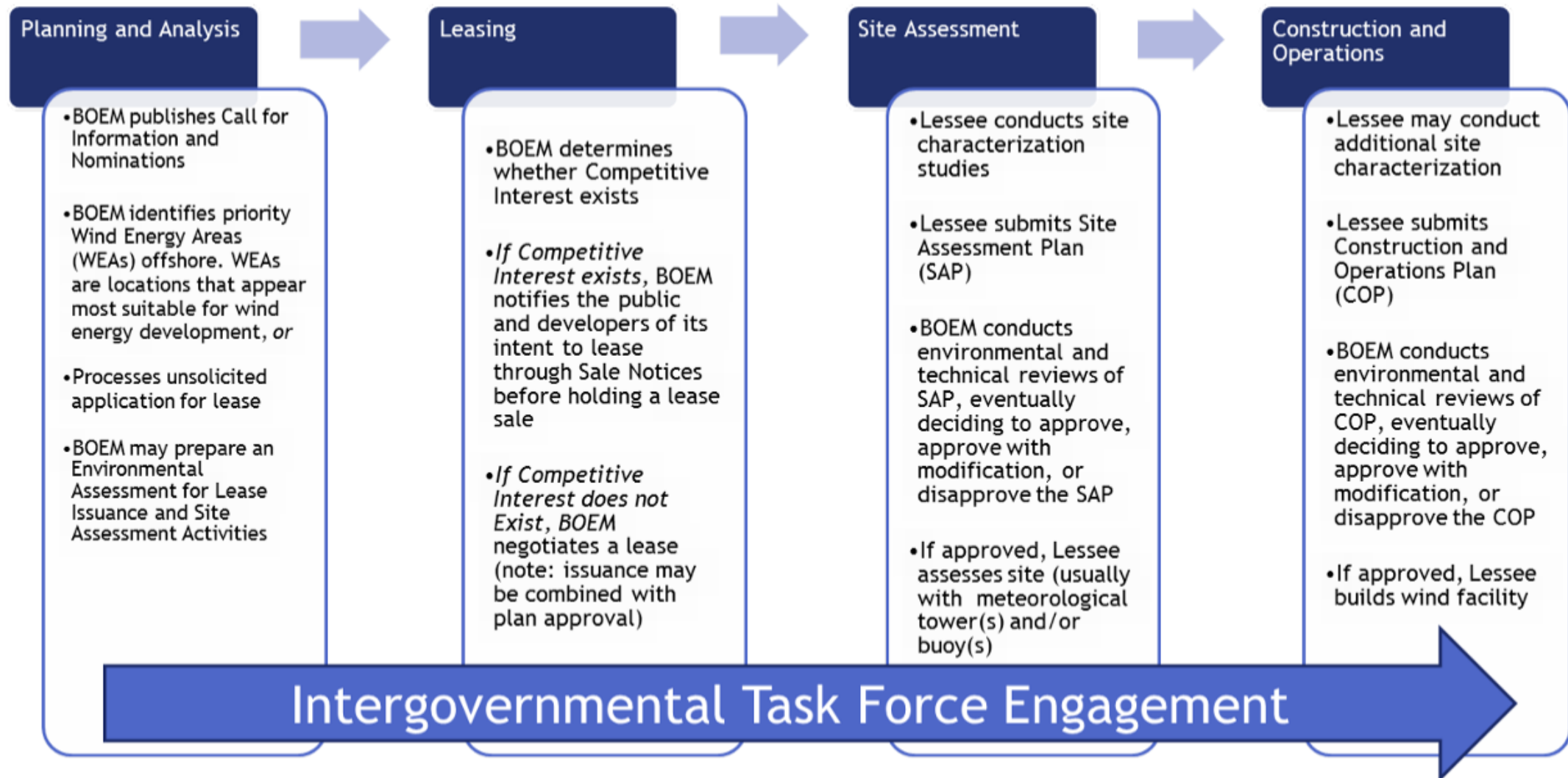
Construction/operation impacts on species, breeding grounds, habitats

Economic impacts (jobs, tourism, redevelopment of local assets)

Impacts to views from beaches, hills along coastline

Unknown and potential noise impacts on shore and on species

# Example: BOEM's Process for Authorizing Wind Energy Leases



# Identification of Stakeholder Concerns

Impacts to existing maritime activities and routes

Durability of offshore facilities during ocean storms

Need for workforce training

Distrust: outsiders dangling promises of \$\$ and jobs in return for natural resources

Conflicts with military training, testing, and operations

Interactions with nearby Marine Protected Areas

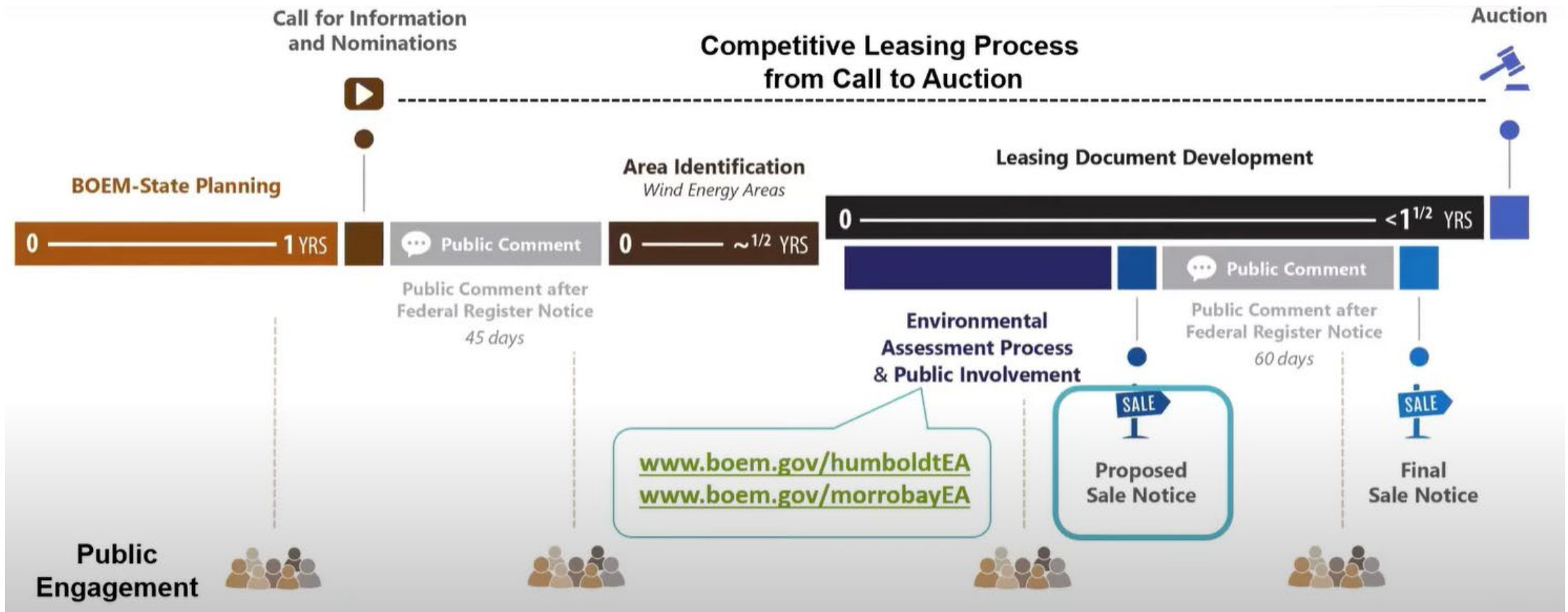
Impacts to bird migration

Support from administration

Prohibition of vessel entry through wind facility areas

Physical stability of floating turbine structures

Compensation for lost fishing grounds



From BOEM Proposed Sale Notice – presented during Meeting 5

JUNE 3, 2022

# Post-Auction Conditions (2022-now)

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Under lease stipulations, lessees must:

- ∅ Engage with **Native American Tribes, ocean users, and local communities.**
- ∅ Allow for **early and active information sharing, discussion of potential issues, and collaborative identification of solutions.**
- ∅ **Routinely report communication and engagement activities to BOEM.**
- ∅ Establish **community development funds and employment training programs** — potentially millions of dollars.



October 7, 2023

Senate Bill No. 286, Ch. 386 – California State Law

Offshore Wind Energy Projects

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Names **California State Lands Commission** as **lead agency** for the **state-level environmental review** per the California Environmental Quality Act (CEQA)



Requires **California Coastal Commission** to process a **consolidated coastal development permit** for new offshore wind projects and associated transmission facilities in the coastal zone.



Requires California Coastal Commission & State Lands Commission to coordinate with relevant agencies on **preparation of joint environmental documents**



**Streamlines environmental approval process** by consolidating analyses by multiple state agencies and jurisdictions.



# Relationship to Impact Assessment

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Two impact assessment laws with which offshore wind development projects must comply:

- National Environmental Policy Act (NEPA)
- California Environmental Quality Act (CEQA)

Further complicates review and approval processes.





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# Conclusion

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As a result of years of intensive, methodical, and transparent stakeholder engagement:

- ∅ Lease areas were altered due to early and detailed resource mapping and stakeholder input.
- ∅ Development is getting buy-in from major stakeholders.
- ∅ Environmental and cultural issues have been identified by involved stakeholders.
- ∅ **Targeted regulations passed to facilitate successful implementation of construction and operations.**

# Follow-on question:

## Can early and intensive stakeholder engagement ever be “enough”?

"We could jump off the bridge just like everybody else, join the bandwagon... We're not willing to sell our resources for money. We've already done that and we've seen the result of it."

— PHILLIP WILLIAMS, YUROK TRIBAL COUNCIL

**‘Another attempt to industrialize the coast’:  
California’s Central Coast residents work to stop —  
or at least slow down — offshore wind**

Massive ocean wind farms off Morro Bay and Santa Barbara County — which could transform these quiet coastal towns and affect marine life — face a turbulent path.



by Julie Cart

# Let's continue the conversation!

Post questions and comments in the IAIA24 app.



## #iaia24

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