



BOEM Bureau of
Ocean Energy Management

Gulf of Mexico Offshore Wind

GOM Fisheries Council Meeting
January 31, 2024

BOEM GOM Regional Office

Bureau of Ocean Energy Management (BOEM)

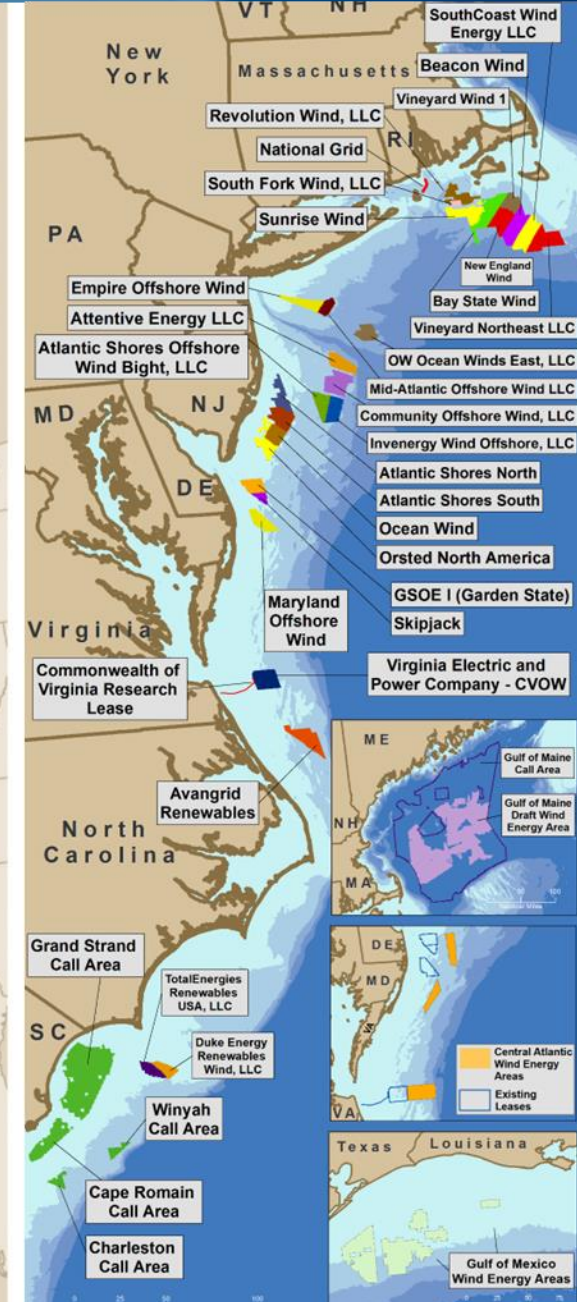


Mission: Manage the development of U.S. Outer Continental Shelf (OCS) energy and mineral resources in an environmentally and economically responsible way

Jurisdiction on the U.S. Gulf of Mexico Coast

- OCS extends from 3 to 200 nautical miles off the coast of Louisiana, Mississippi, Alabama, and Florida's seaward boundary in the Atlantic.
- OCS extends from 9 to 200 nautical miles off the coast of Texas and Florida's seaward boundary in the Gulf of Mexico.

Renewable Energy Program by the Numbers



Gulf of Mexico Outer Continental Shelf Renewable Energy

Agenda

Background

Renewable Leasing Process

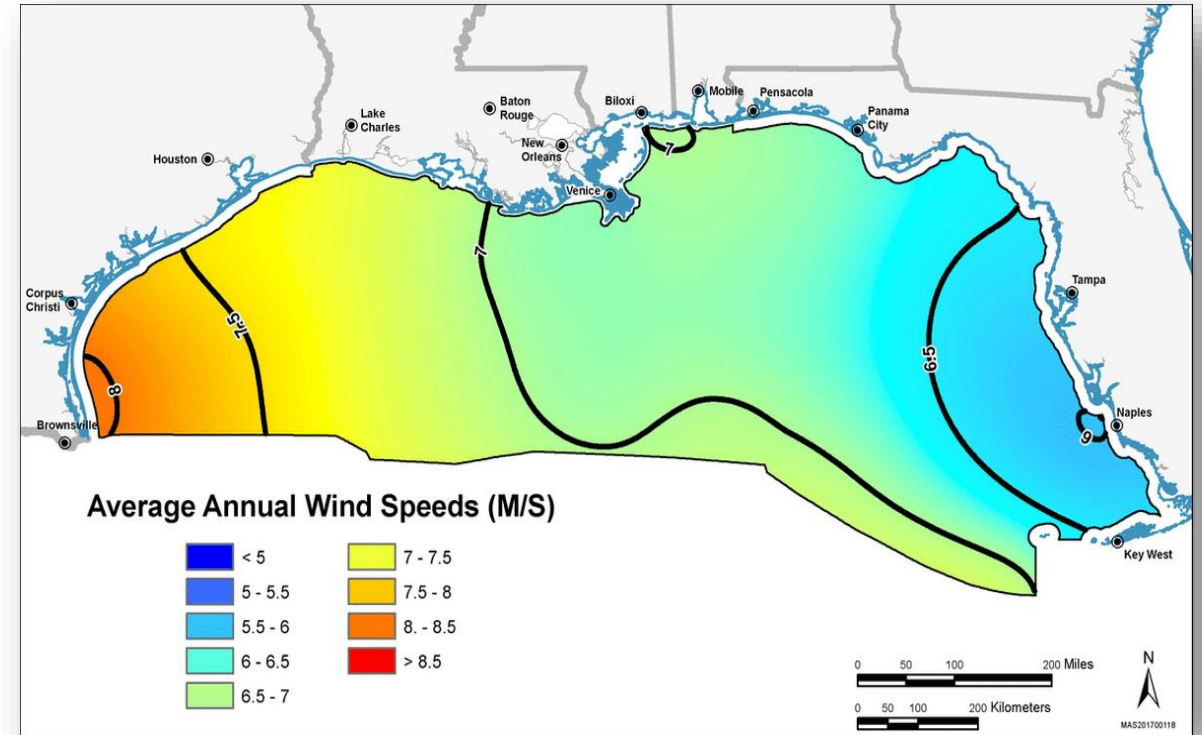
Where We're At: Final Wind Energy Areas

Future Potential

Next Steps

Gulf of Mexico Renewable Energy

- Louisiana Governor Edwards requested a Task Force on October 26, 2020.
- December 2020, Gulf of Mexico Region responded to the LA Task Force Request Letter with a region-based Task Force approach. The inaugural GOM Regional Task Force Meeting was held on June 15, 2021.
- Conducting outreach and engagement to collect data and information.
- Advantages: Proximity to oil and gas supply chain – leverage existing capabilities
- Challenges: Hurricanes – major hurricanes could increase turbine and substructure costs



BOEM Renewable Energy Process: Overview



Planning & Analysis

~ 2 YEARS

- Intergovernmental Task Force
- Request for Information or Call for Information and Nominations
- Area Identification
- Environmental Reviews



Leasing

~ 1-2 YEARS

- Publish Leasing Notices
- Conduct Auction or Negotiate Lease Terms
- Issue Lease(s)



Site Assessment

UP TO 5 YEARS

- Site Characterization
- Site Assessment Plan

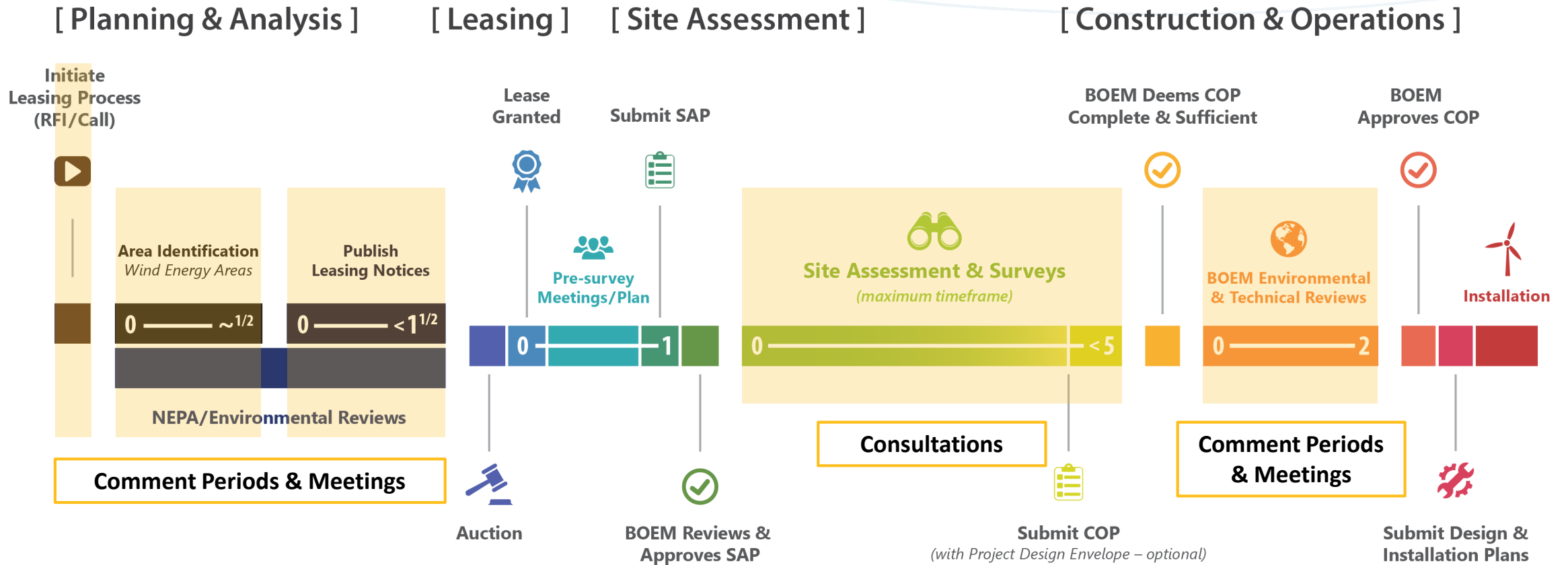


Construction & Operations

~ 2 YEARS (+25)

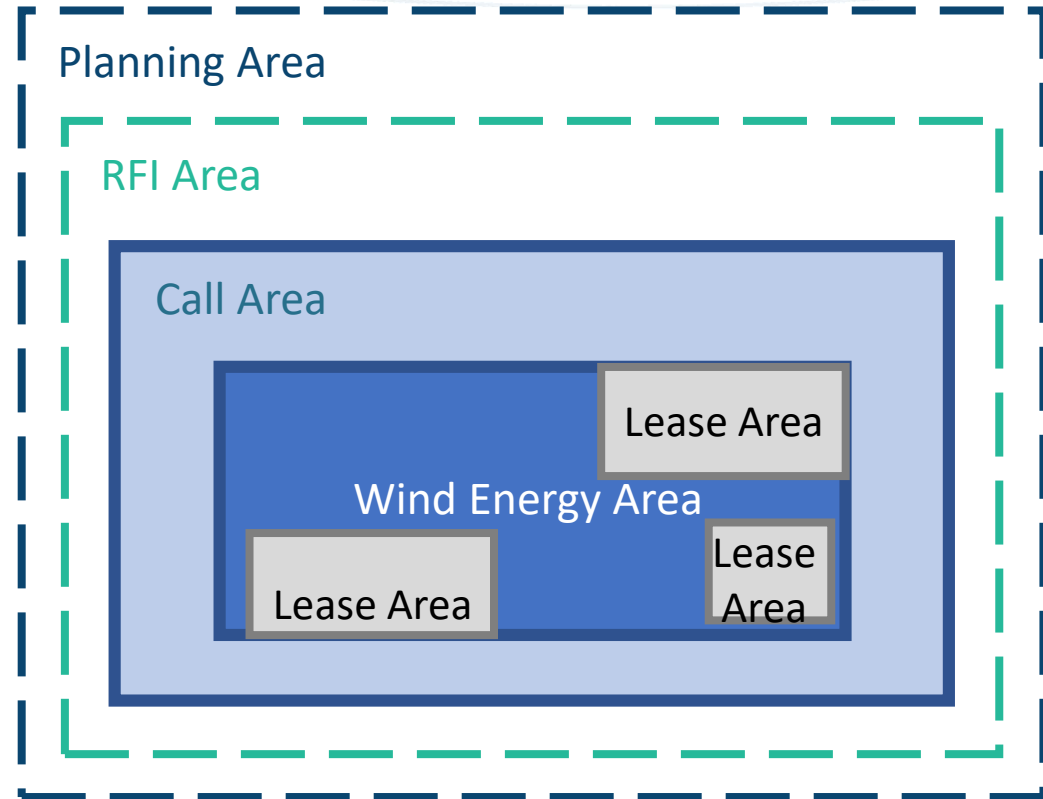
- Construction & Operations Plan
- Facility Design Report and Fabrication & Installation Report
- Decommissioning
- Environmental and Technical Reviews

How is Input Collected?



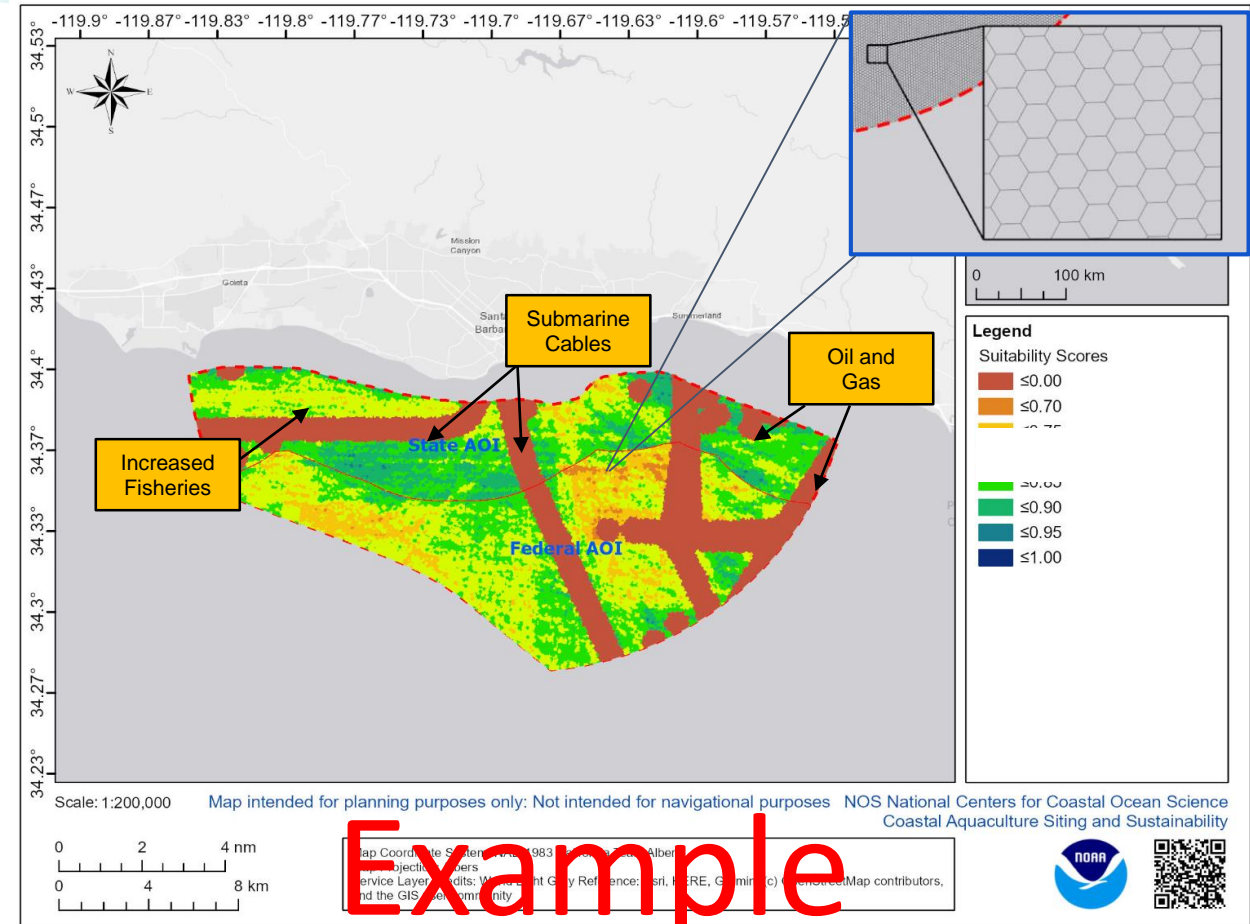
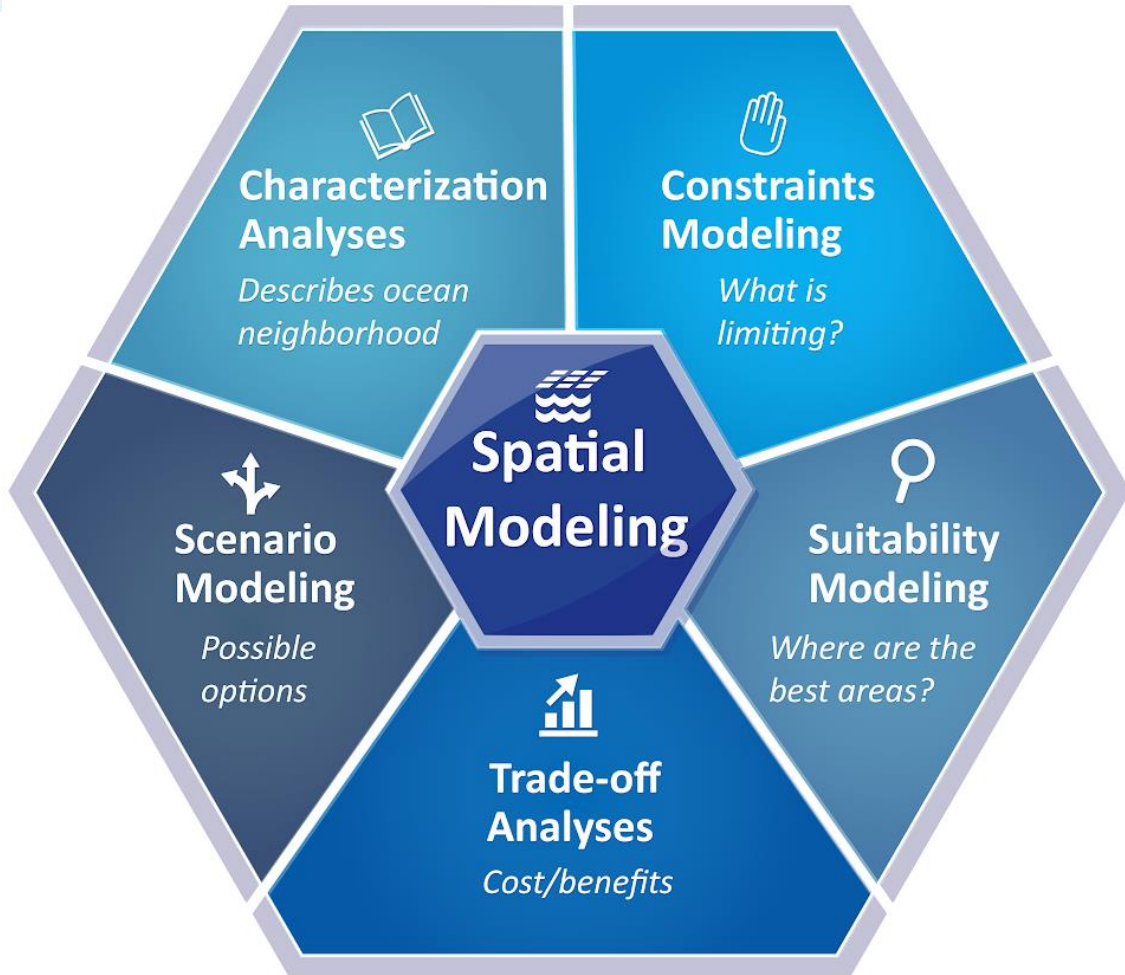
Lease Areas

- Wind Energy Areas have the potential for further division into Lease Areas



Spatial Modeling

A spatial suitability model weights locations relative to each other based on a given criteria.

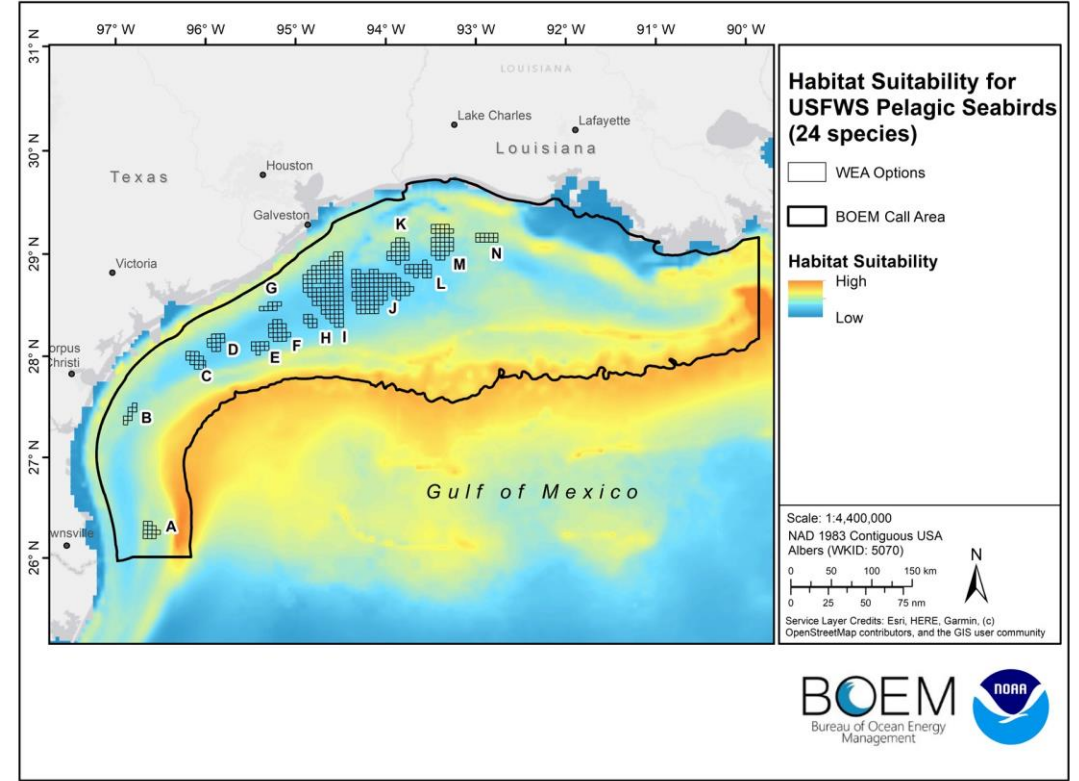
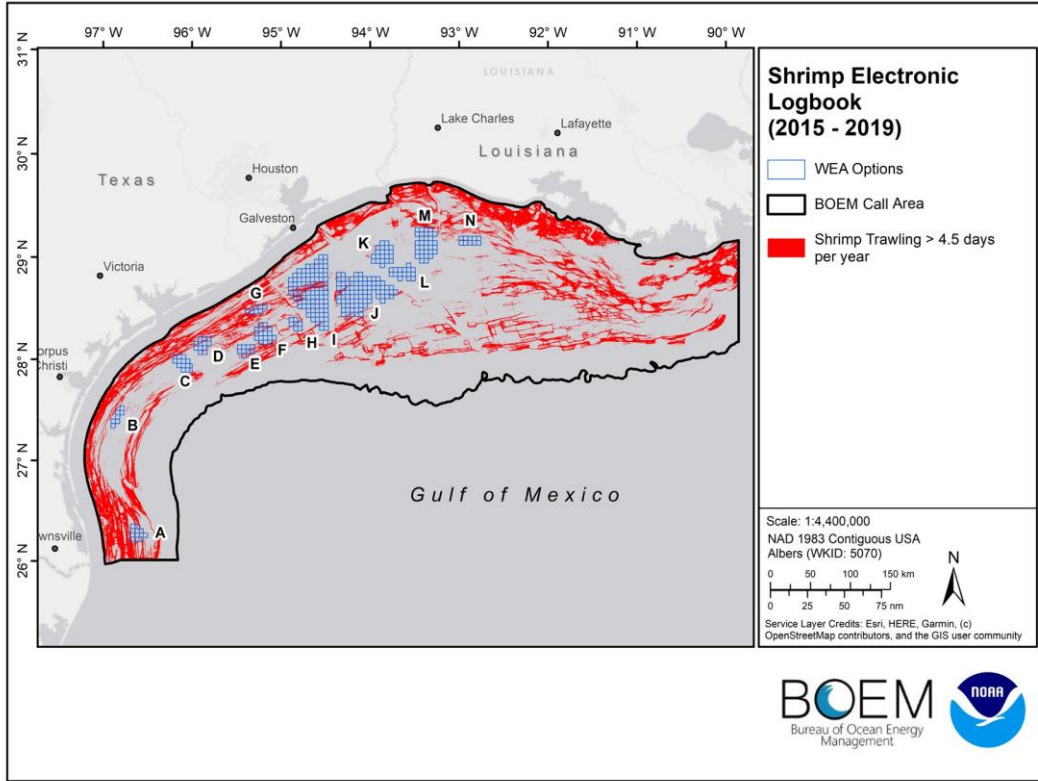


Ocean Planning - Deconflicting Model structure



Equally weighted submodels

Model Layer Examples



Shrimp Electronic Logbook (2015 - 2019)

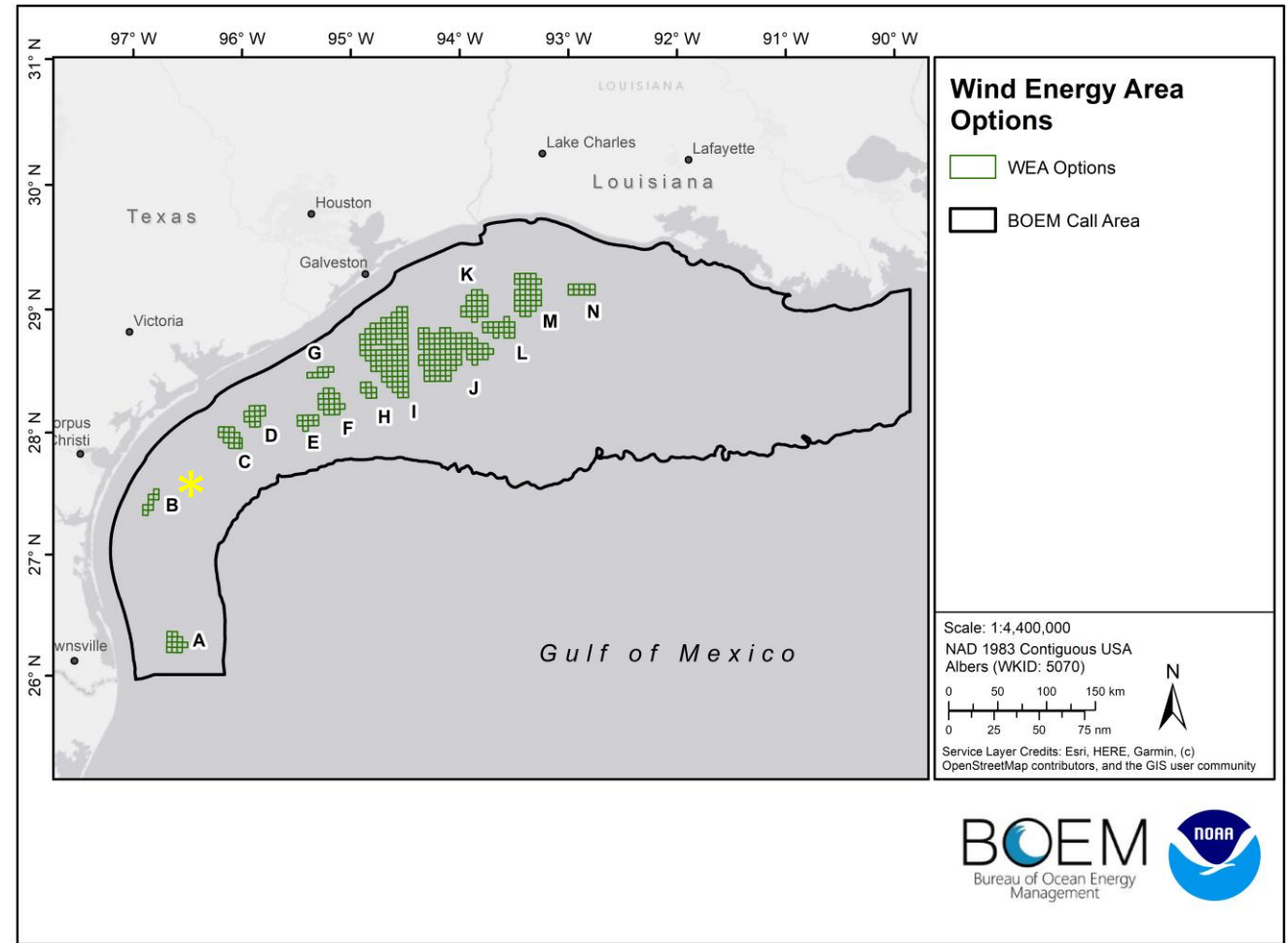
USFWS Pelagic Bird Considerations (24 species)



Deconflicting Process

- 13 deconflicted areas ranging from: 39,840 to 546,645 acres
- 2 million acres total
- Top scoring clusters at the $p=.05$ significance level (approx. top 5%)

*Area B is no longer an option due a later DoD assessment requesting removal.



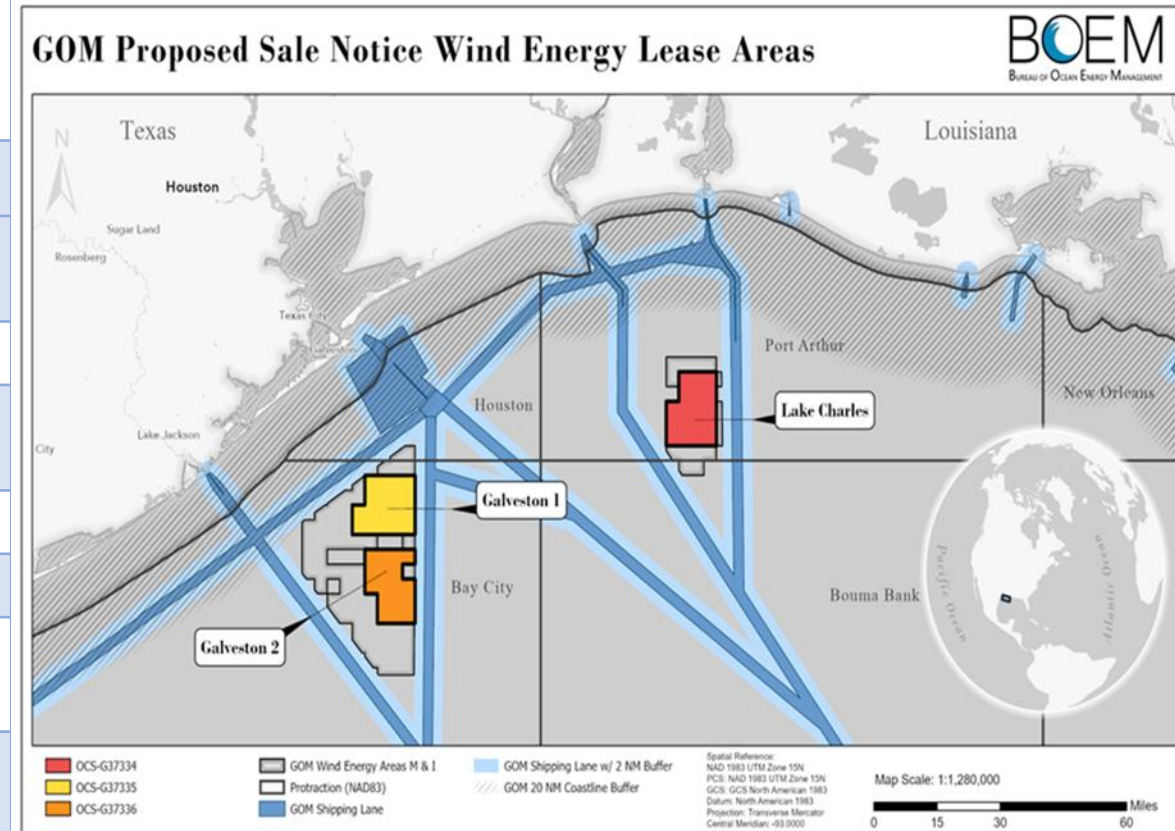
First Gulf of Mexico Lease Sale

	OCS-G 37335 (Galveston I)	OCS-G 37336 (Galveston II)	OCS-G 37334 (Lake Charles)	Total
Acres	102,480	96,786	102,480	301,746
Installation Capacity (MW) ^[1]	1,244	1,175	1,244	3,663
Homes powered ^[2]	435,400	411,250	435,400	1,282,050
Power Production (MWh/yr) ^[3]	4,358,976	4,117,200	4,358,976	12,835,152
Max Depth (meters[m])	36	36	25	--
Min Depth (m)	16	16	10	--
Closest distance to TX (nautical mile [nmi])	28	39	79	--
Closest distance to LA(nmi)	--	--	38	--

[1] Megawatts (MW) based upon 3MW/sqkm

[2] Based upon 350 homes per MW

[3] Formula = Capacity (MW) * 8760 (hrs/yr) * 0.4 (capacity factor)

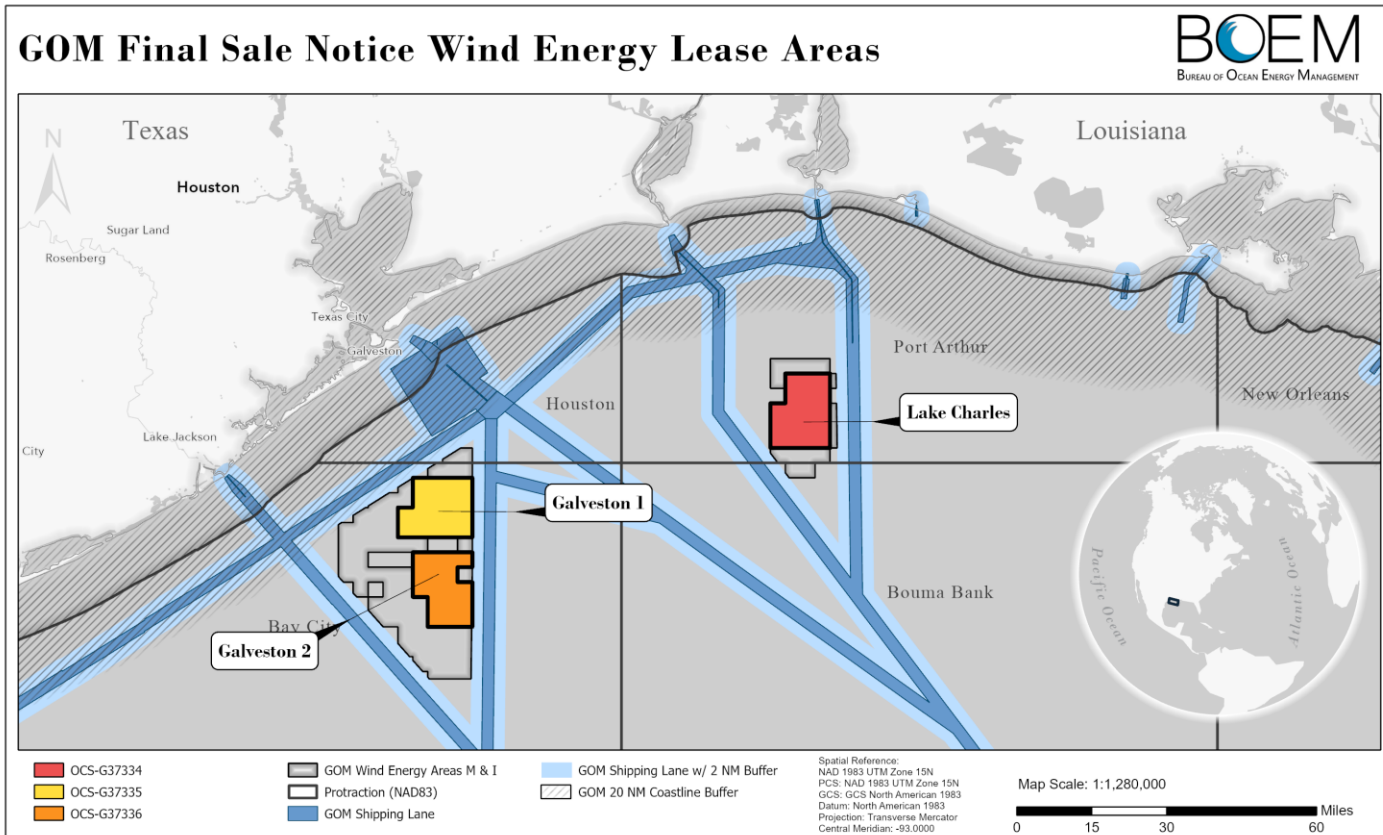


Bidding Credits for First Gulf of Mexico Lease Sale

Multi-factor auction format: ascending bidding with a combined cash and bidding credit as the bid variable

- 20 percent non-monetary bid credit for a Contribution to workforce training and supply chain development (same provisions as California without floating wind emphasis).
- 10 percent non-monetary bid credit for a Contribution to a GOM Fisheries Mitigation Fund.
 - Fund is proposed to be regional in scope and BOEM expects funds will be available to compensate fishing mitigations in future lease areas where greater fishing conflicts are expected.
 - Promote participation of fishers and fishing communities in the project development process
 - Promote research into the coexistence of multiple ocean industries
 - Offset the cost of gear upgrades and transitions for operating within a wind farm

First Gulf of Mexico Lease Sale



- Options I and M were designated as Final Wind Energy Areas
- Two lease areas in WEA I and one lease area in WEA M were offered in GOMW-1
- 15 Companies qualified to participate in GOMW-1
- Two companies participated in the auction, and both bid on G-37334 – Lake Charles (WEA M)
- RWE Offshore US Gulf, LLC (\$5.6M) became the lease holder effective November 1, 2023.

First Gulf of Mexico Lease Sale Results



LEASE
AREA

Winner of the First Gulf of Mexico Offshore Wind Energy Lease Area

OCS-G 37334

RWE Offshore US Gulf, LLC

\$5,600,000



DEVELOPABLE
ACRES

102,480



INSTALLATION
CAPACITY
(MW)^[1]

1,244



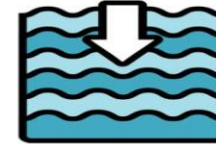
POWER
PRODUCTION
(MWh/yr)^[2]

4,358,976



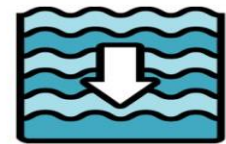
HOMES
POWERED^[3]

435,400



MINIMUM
DEPTH

10 Meters



MAXIMUM
DEPTH

25 Meters

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Notes:

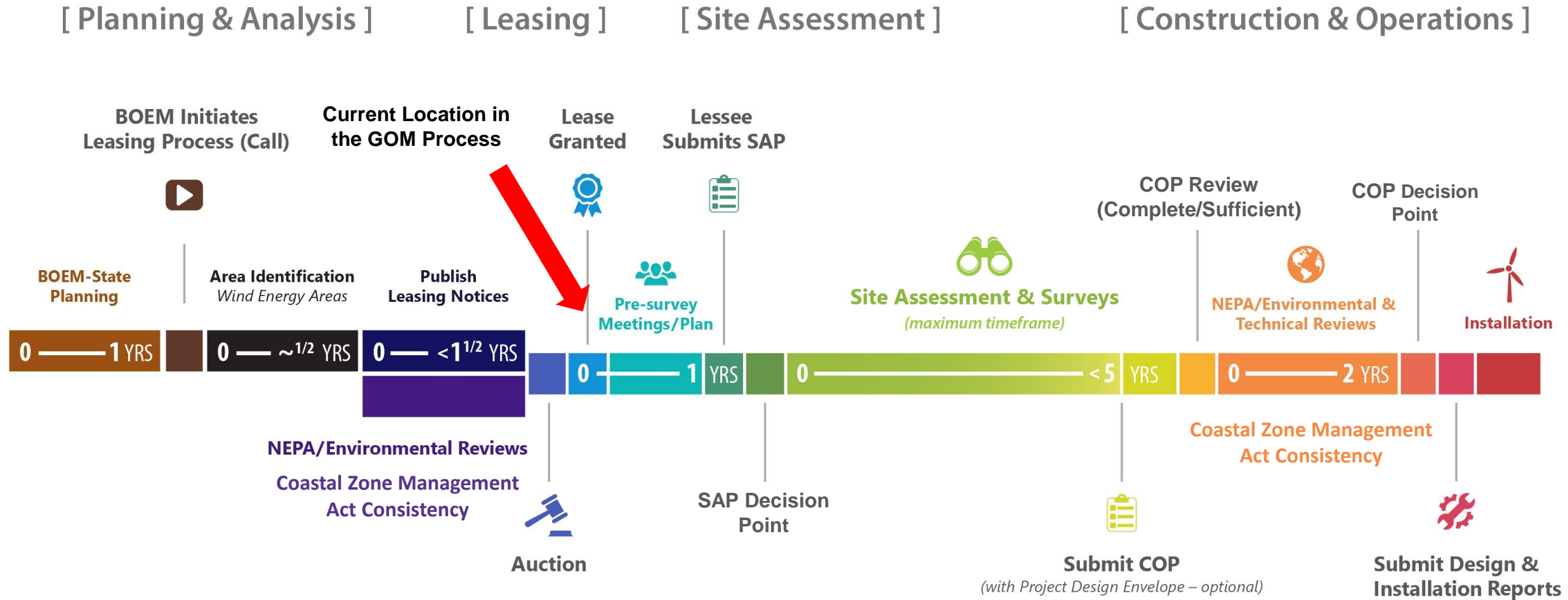
^[1]Megawatts (MW) based on 3MW/sqkm

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^[3]Based upon 350 homes per MW



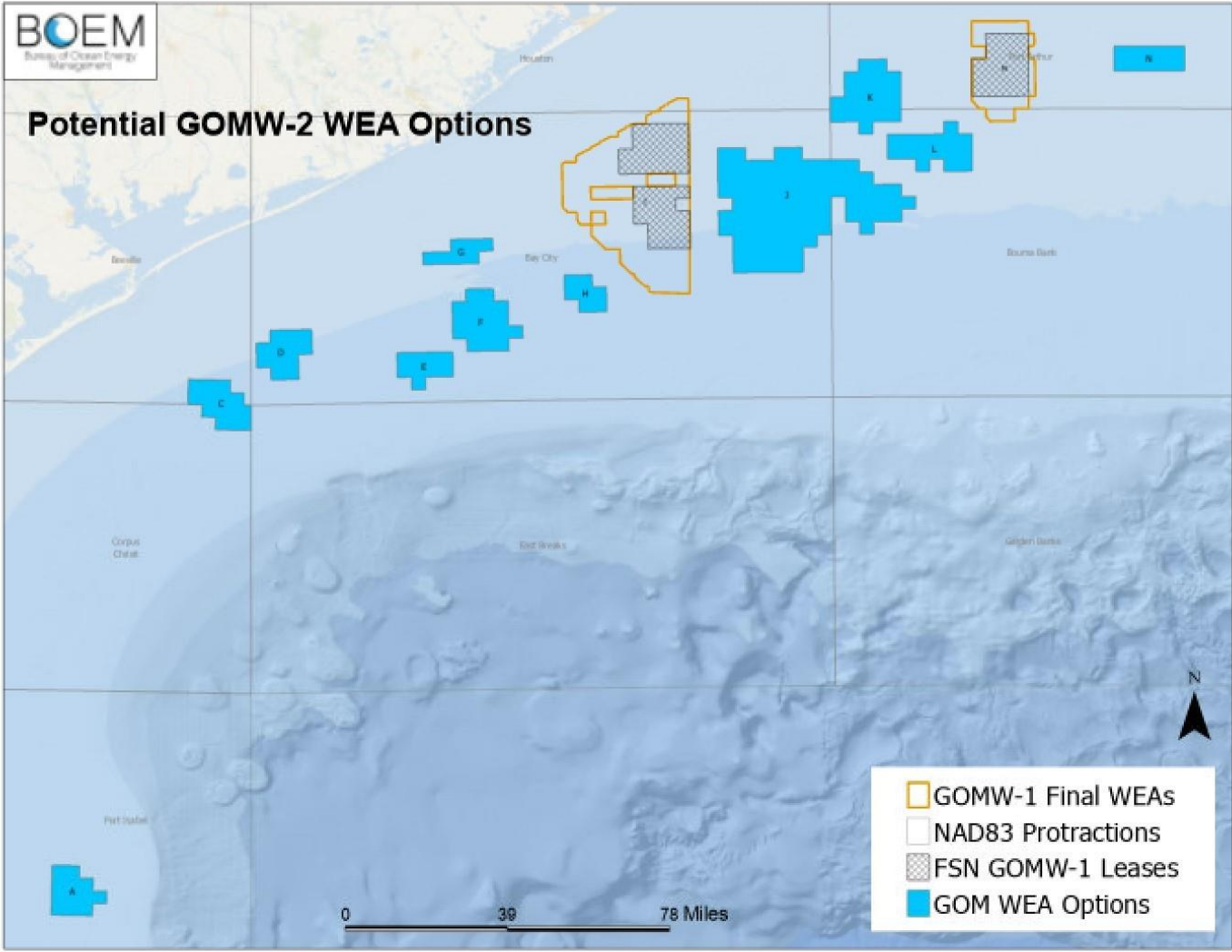
BOEM Commercial Offshore Wind Authorization Process: GOM Example



BOEM welcomes Tribal Consultation throughout the process.

GOM Wind Future Potential

GOMW-2 Area Identification Process – Considered the 11 Remaining WEA Options



Office of Leasing and Plans - Mapping and Automation Section | MAP2022-315 | 26 July 2023



BOEM Sought Input to determine Final WEAs – June to October 2023

- New data/information to consider
- Space use conflicts to minimize
- Engagement will continue. There is another time to comment during the PSN comment period as well.
- Not all Final WEAs have to become lease sale areas in the PSN.

Specific Questions Asked:

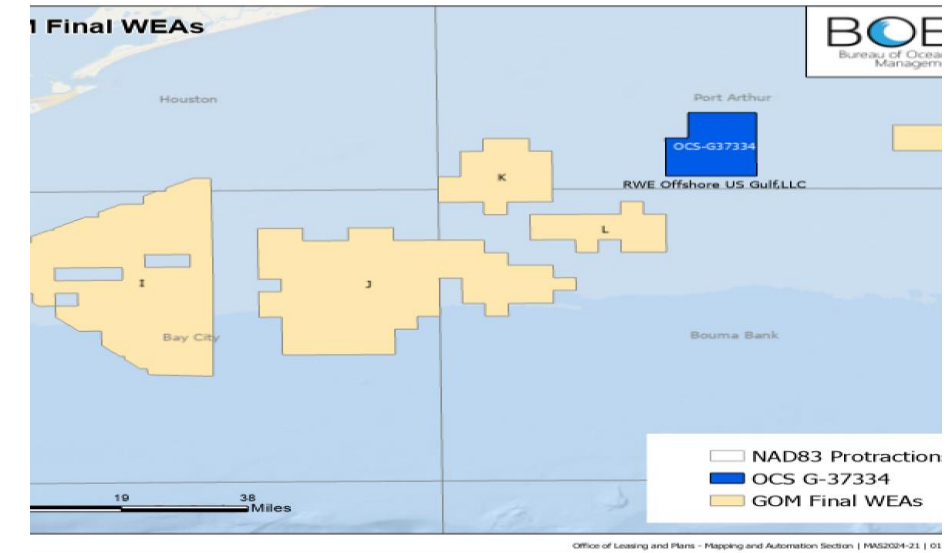
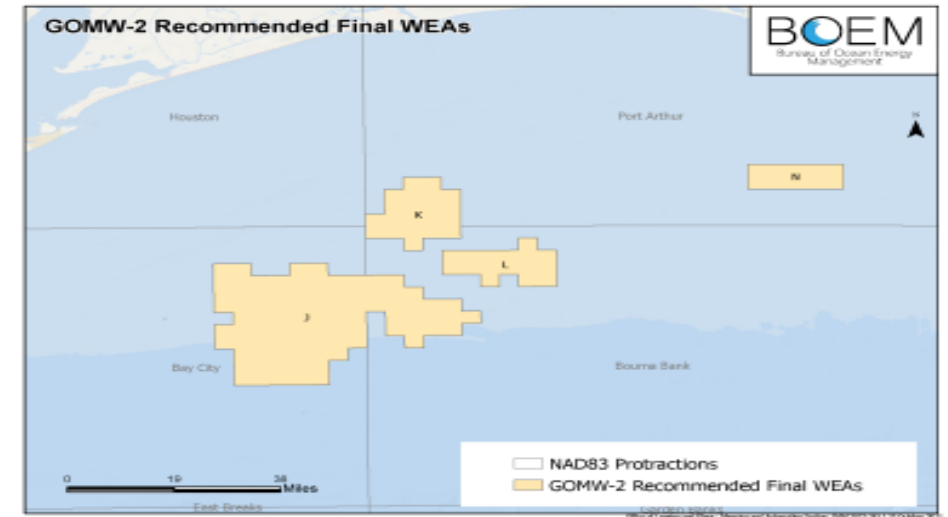
1. Are there space use/ocean planning/managed resource conflicts in the 11 remaining areas?
2. Which areas have interest and would be the most economically viable to include in a second GOM wind lease sale? Which of the 11 areas offer best access to transmission points and points of onshore access? Are there opportunities for synergies by including any of the remaining 11 areas in a second offshore wind lease sale?
3. What is the minimum acreage needed in a WEA to be economically viable? Does that acreage requirement change with adjacent acreage being offered? Would it be possible to use adjacent WEAs of smaller size next to the other lease sale areas (I and M)?



Final Wind Energy Areas Added

- On October 27, 2023, BOEM announced it has finalized four Wind Energy Areas (WEAs) in the Gulf of Mexico. (See figure 1)
- The first WEA (Option J) is located approximately 47.2 miles off the coast of Texas. The area totals 495,567 acres and has the potential to power 2.1 million homes.
- The second area (Option K) is located approximately 61.5 miles off the coast of Texas. The area totals 119,635 acres and has the potential to power 508,200 homes.
- The third WEA (Option L) is located approximately 52.9 miles off the coast of Texas. The area totals 91,157 acres and has the potential to power 387,450 homes.
- The fourth WEA (Option N) is located approximately 82 miles off the coast of Louisiana and totals 56,978 acres. Option N has the potential to power approximately 242,000 homes.
- Previously designated WEA (Option I) is located approximately 24 miles off the coast of Texas. The area totals 508,265 acres and has the potential to power 2.1 million homes. (See figure 2)

There are a total of five Final WEAs in the GOM.



Next Steps - Potential Proposed Sale Notice

- **Identify potential lease sale areas within the Final WEAs**
 - Use the NCCOS model to site most suitable lease areas
- **Minimize potential lease site impacts**
 - Use current comments and input received thus far
 - Continue stakeholder outreach and engagement
 - conduct smaller working meetings
 - Intergovernmental Task Force meetings



GOMW-2 Next Steps

- Publish Proposed Sale Notice
- Auction Seminar + 1 month from PSN
- GOM Task Force meeting + 1 month from PSN
- PSN public comment period closes +60 days from PSN
- Publish Final Sale Notice
- Lease Auction + 30 days after FSN
- Lease signing
 - By December 20, 2024
 - 1 year from 2025 oil and gas sale as scheduled in the National Program



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Idrissa Boubé | Idrissa.Boubé@boem.gov or Bridgette Duplantis | bridgette.duplantis@boem.gov