



Bureau of Ocean Energy
Management

GOM Renewable Energy Update

Michael Celata

Regional Director, Gulf of Mexico Regional Office

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Outer Continental Shelf Renewable Energy

Agenda

- Renewable Leasing Process
- Comments from the Call Area
- Environmental Assessment Process
- Next Steps



BOEM Renewable Energy Authorization Process



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



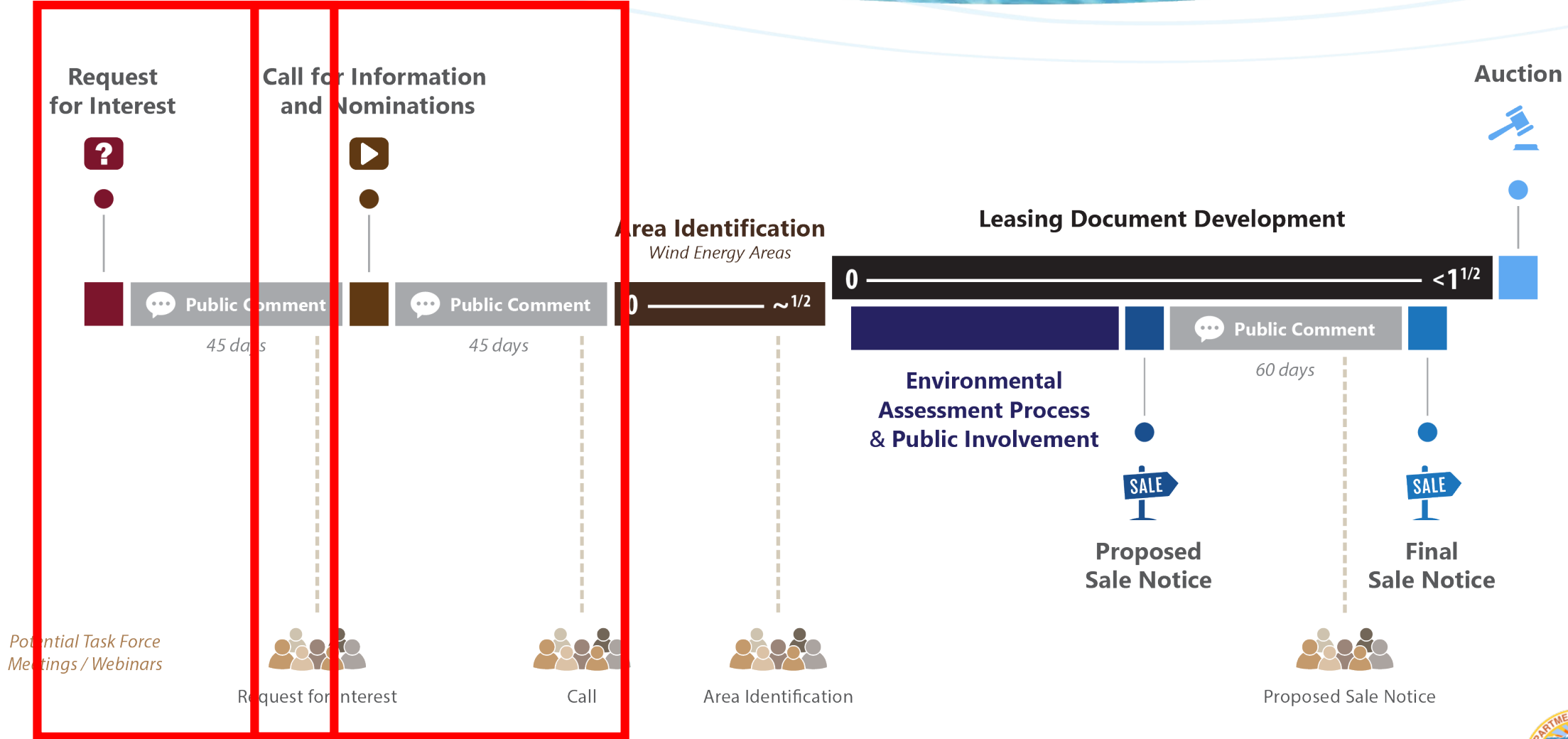
Construction & Operations

~ 2 YEARS (+25)

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

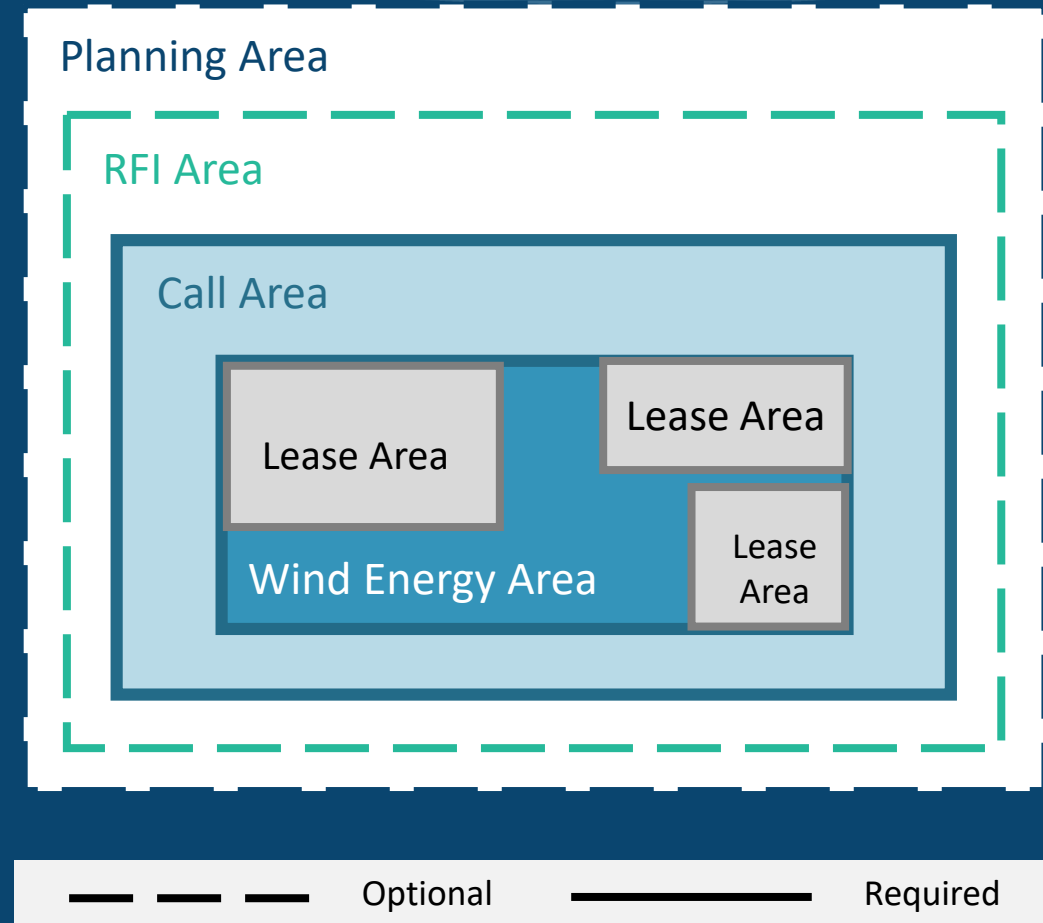


Request for Interest to Lease Sale

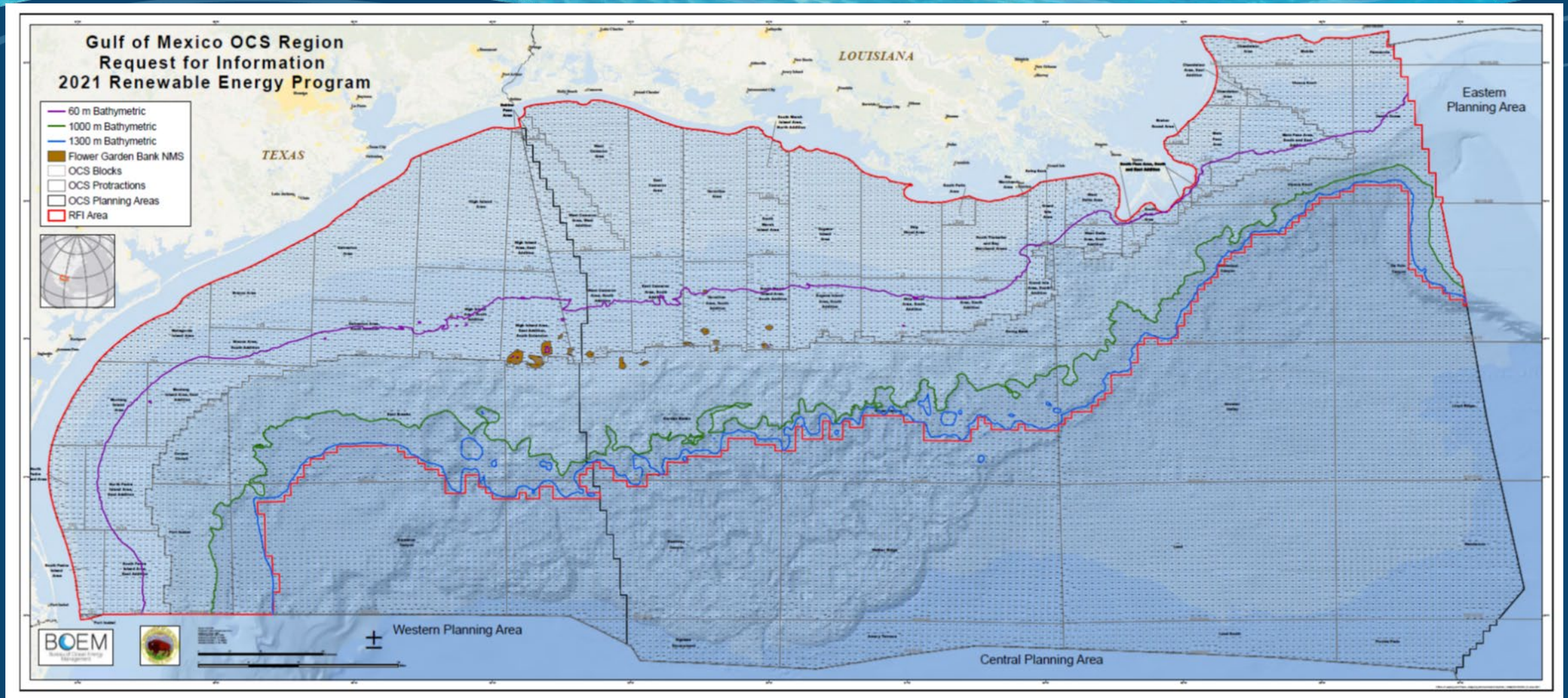


Wind Energy Area Process

- Call Area for potential interest
- Initial identification of areas that may be suitable
- Conditions in the Call Area
- Shred potential for future development



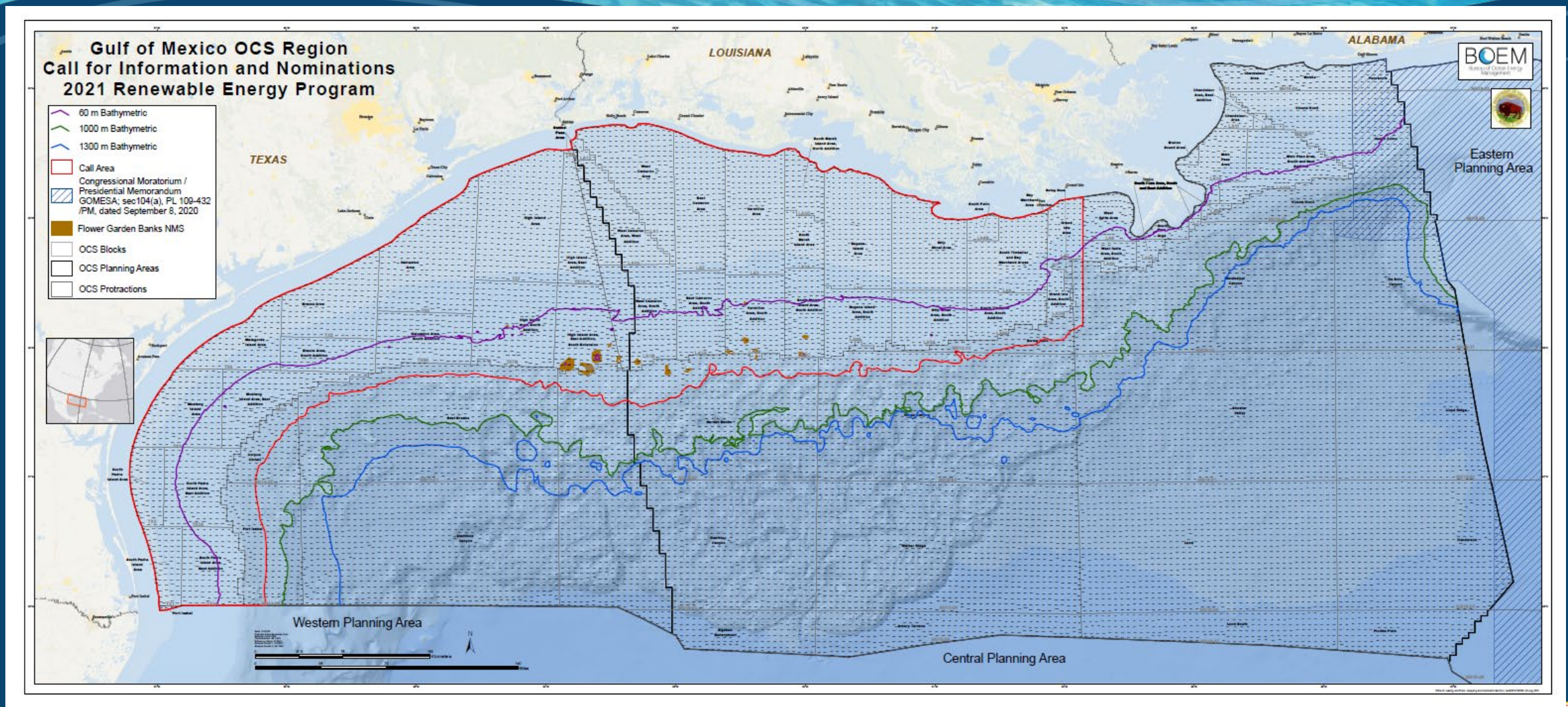
Request for Interest (RFI) Area



RFI Comment Summary

Stakeholder Comments	Number of comments
Private Citizens	10
State Agencies (LA)	2
Federal Agencies	2
Universities	1
Non-governmental Organizations (NGOs)	14
Industry	10
Total Comments	39

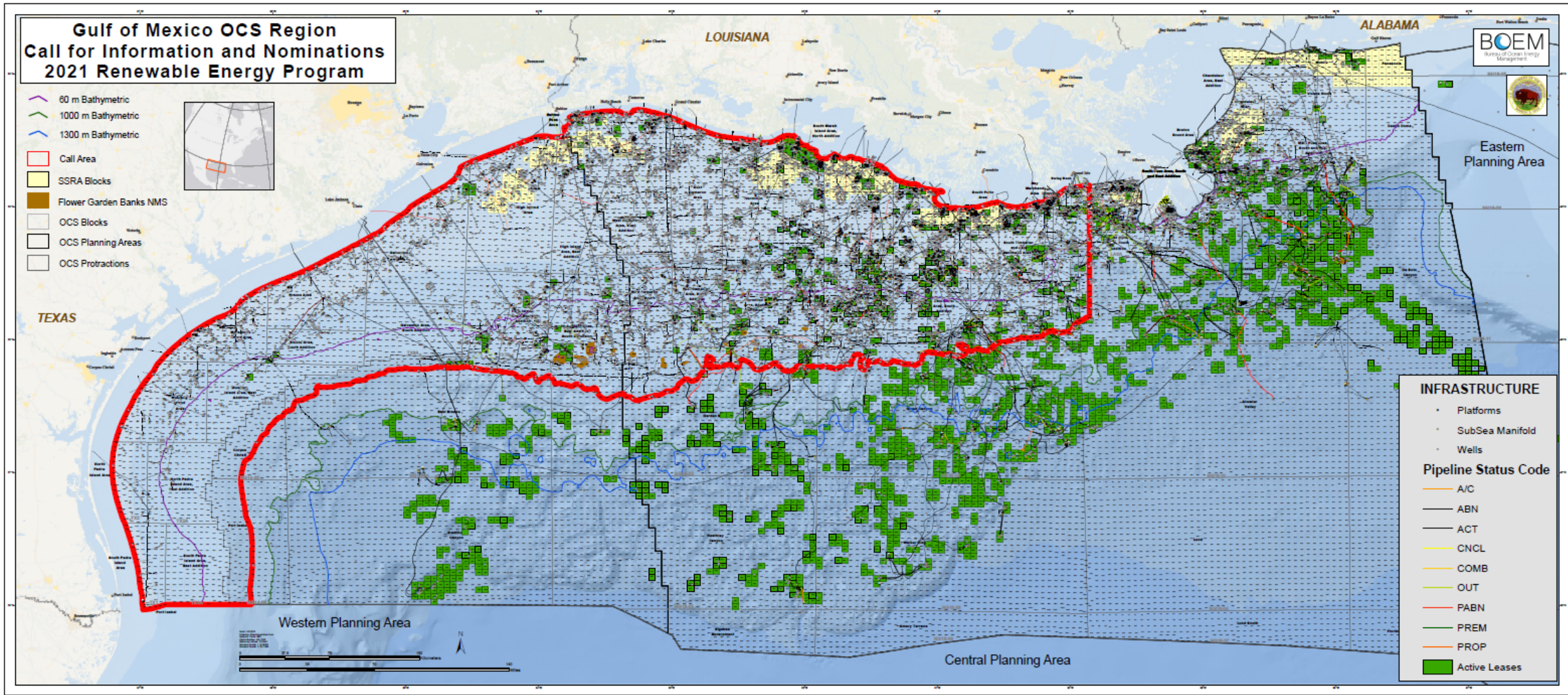
Call for Information Area



Call Comment Summary

Stakeholder Comments	Number of comments
Private Citizens	10
State Agencies	1
Federal Agencies	5
Universities	0
Non-governmental Organizations (NGOs)	16
Industry	7
Total Comments	39

Call for Information Area with Infrastructure



Comment Discussion

How will BOEM consider others' ocean uses?

- Balancing impacts to other users of the Gulf of Mexico
- Including fisheries and military activities, vessel traffic, and other energy developments
- Partnering with the National Oceanic and Atmospheric Administration to adapt Aquaculture Opportunity Areas Atlas marine spatial planning tool





Are there siting and design concerns that address navigation and safety?

- Facilities will comply with U.S. Coast Guard requirements
- Navigational and Safety Risk Assessment
- BOEM can impose restrictions on development or require mitigation measures
- BOEM will evaluate and consider facility design alternatives



What is the average height above sea surface and distance between turbines?

- Turbine height and spacing varies by project
- 65-100 ft above the surface based on current technology
- 200 ft above the surface as taller turbines are installed
- Wind projects offshore RI/MA have adopted a standard 1x1 nautical mile spacing





Will vessel traffic and fishing activity be excluded around and within offshore wind farms?

- BOEM does not have the authority to restrict vessel traffic or fishing activities
- U.S. Coast Guard implements safety zones and buffers on a case-by-case basis



- Will electrical cables be buried beneath the seafloor?
- Standard commercial practice is to bury cables 3-10 ft in waters shallower than 6,562 ft
- Although, burial depths may vary by project depending upon multiple factors
- Alternatives to burial include adding protective coverings, such as concrete mattresses





Will the wind farm facilities be removed after the expiration of a lease?

- A typical offshore wind lease is valid for ~ 30 years
- Financial assurance must be provided to cover decommissioning
- All infrastructure must be removed within 2 years of lease cancellation, expiration, or other termination
- An exception may be rights-of-way facilities



How does BOEM assess impacts to fisheries?

- Impacts are assessed through the NEPA review process, which also includes
 - Public comments
 - Coordination with stakeholders, industry, and regional fisheries management entities
- BOEM uses the best available science
- BOEM funds research to fill information gaps related to offshore wind impacts





Will there be a Fisheries Contingency Fund?

- Currently there is no Federal compensation fund available for renewable energy projects.
- Mitigation measures are evaluated during the NEPA review process and may be required as a condition of approval of a wind lessee's COP.
- Some U.S. Atlantic offshore wind developers have established fisher compensation funds.



- What are the effects of electromagnetic fields (EMF)?
- EMF decays quickly with distance from the cable
- Many studies have been performed on the impacts of EMF on marine species.
 - EMFs not observed to act as barriers to movement
 - Impacts to populations are not expected
 - Some species respond to EMF (e.g., sharks, skates, and lobsters)



National Environmental Policy Act



What is NEPA?

- National Environmental Policy Act (NEPA)
 - Provides the framework for protecting the environment by disclosing decision consequences
 - Requires Federal agencies to consider environmental impacts of their activities
 - Requires decisionmakers to incorporate environmental values into Federal programs
 - Requires coordination with other agencies and governments with resource responsibilities
- BOEM is conducting an environmental assessment (EA) to disclose the potential impacts of issuing renewable energy leases on the Outer Continental Shelf
- BOEM is asking for input for this EA



Environmental Assessment

- **Analysis will ONLY be for issuing leases and the site assessment and characterization activities**
 - Meteorological (met) buoys or towers
 - Vessel trips
 - Geological and biological surveys
- **Analysis will NOT include**
 - Specific project layouts
 - Cable routes for specific projects
 - Visual impacts of a project
- **Analysis of *SPECIFIC* projects**
 - Covered later in the process
 - After a lease is obtained and project plan submitted
 - Additional opportunities for engagement and consultation



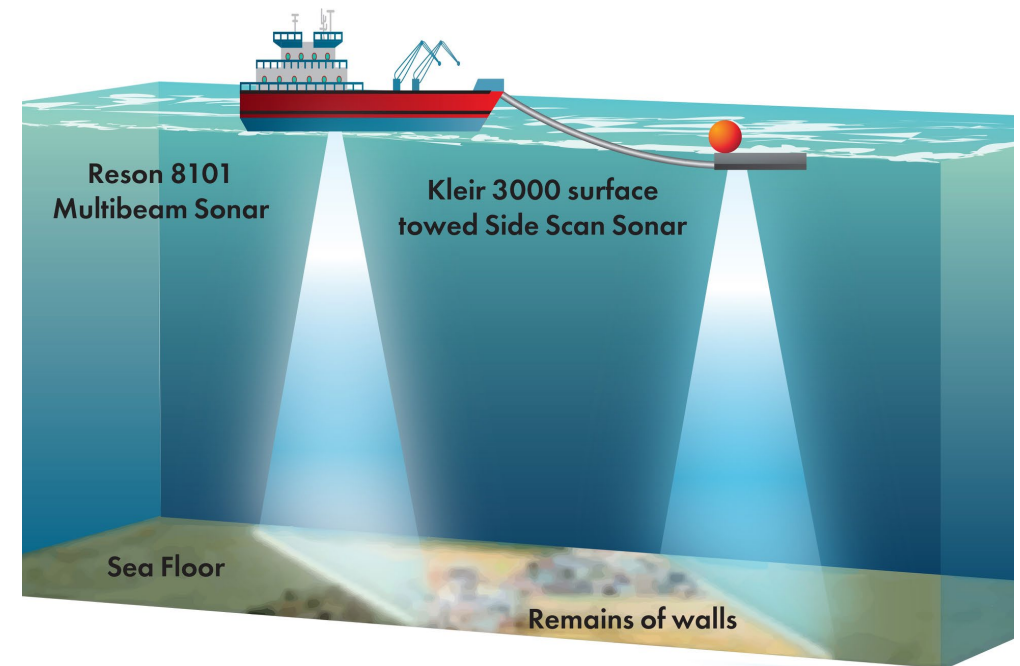
Example of a meteorological (met) buoy

Source: National Data Buoy Center, 2012



Environmental Assessment

- **EA will be a programmatic assessment**
 - May be used for more than one lease issuance
 - But the analysis will be for a single lease issuance
 - Similar to BOEM's conventional energy NEPA analysis
- **EA will incorporate analysis from background documents**
 - Affected Environment in the Gulf of Mexico
 - Physical (air, water), biological (birds, marine mammals, fish), and social (human, economic, environmental justice) resources
 - Impact-Producing Factors (IPFs)
 - Noise, bottom disturbance, air emissions
 - Cause and Effect Analysis
 - How each IPF could affect each resource
- **Analysis will cover the entire Call Area**



Example of a seafloor survey



EA Schedule

Milestone	Dates
Publish Press Release for EA	1/11/2022
Scoping Period	1/11 – 2/9/22
Draft EA Published	Summer 2022
Draft EA Comment Period	30 days following publication of Draft EA
Final EA Published	Early 2023
Auction	Early 2023



Immediate Action: **Next Six Months**

Next Steps

- Start an Environmental Assessment
- Wind Energy Area (WEA) analysis
- Draft Area Identification (ID) memo and determine WEAs
- Identify lease areas, auction format, and publish Proposed Sale Notice (PSN)
- Proposed Lease Auction



Team Members

GOM Regional Director:

Michael Celata – Michael.celata@boem.gov

Chief of Emerging Programs:

Tershara Matthews - Tershara.Matthews@boem.gov

Renewable Energy Coordinator:

Idrissa Boubé - idrissa.boubé@boem.gov

Fisheries Team Lead:

Mariana Steen- mariana.steen@boem.gov

Data Management:

Dana Inzinna - Dana.Inzinna@boem.gov

Communications:

John Filostrat - john.filostrat@boem.gov

Hillary McKey - Hillary.mckey@boem.gov





Bureau of Ocean Energy Management
U.S. Department of the Interior

BOEM.gov



Michael Celata | michael.celata@boem.gov

