

BOEM

Bureau of Ocean Energy
Management

THE MARINE MINERALS PROGRAM

FSBPA 35th National Conference on Beach Preservation Technology

February 3, 2022

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Marine Minerals Program

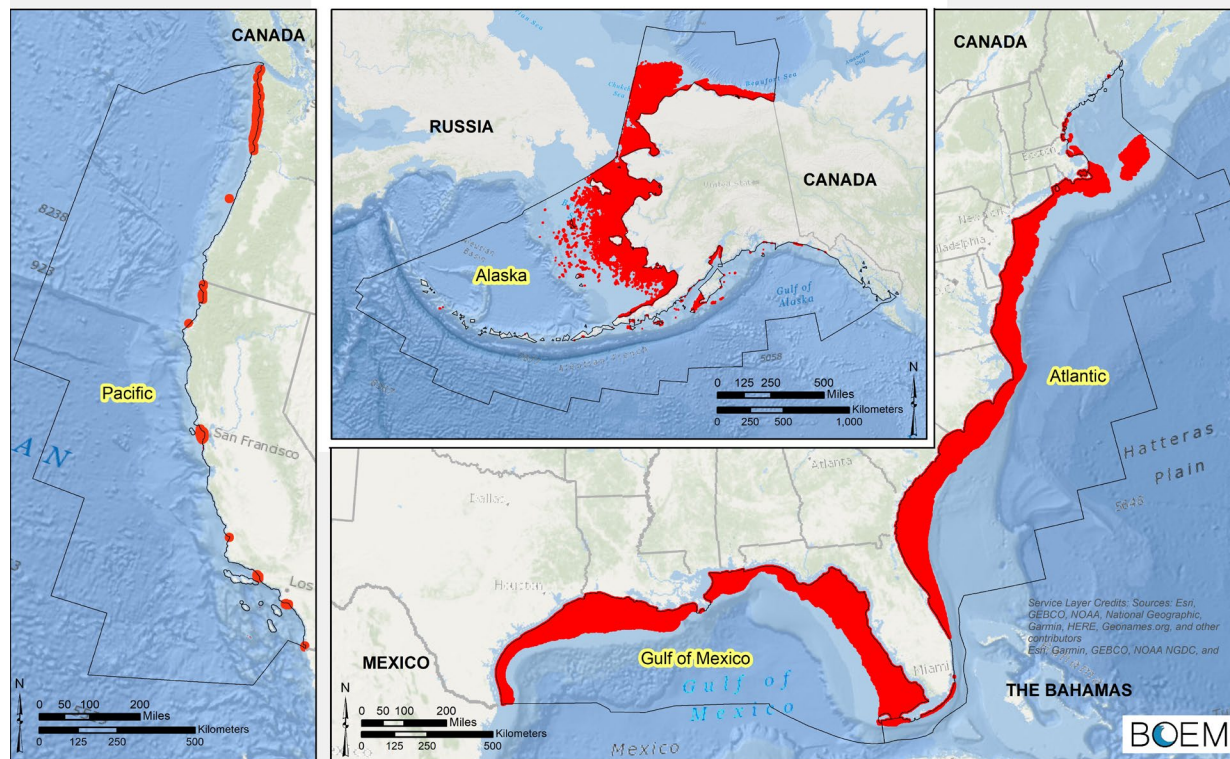
MISSION

Facilitate access to and manage the Nation's Outer Continental Shelf (OCS) non-energy marine minerals through environmentally responsible stewardship, prudent exploration and leasing activities, coordination with governmental partners, stakeholder engagement, and mission-focused research to improve decision-making and risk management.



Noncompetitive OCS Sand and Sediment

- Leasing authority - Section 8(k) of the Outer Continental Shelf Lands Act (OCSLA)
- Negotiate agreements with federal partners (e.g., U.S. Army Corps of Engineers) and localities (e.g., counties)
- Most projects 3-8 nautical miles off the Atlantic and Gulf of Mexico



Red: Depths Accessible to Dredging (<50m) White: BOEM Jurisdiction

63 negotiated agreements executed



50 coastal restoration projects completed

Nearly 172 million cubic yards of material authorized

Nearly 433 miles of shoreline restored in 8 states

Noncompetitive OCS Sand

- **“The Secretary may negotiate with any person an agreement for the use of Outer Continental Shelf sand, gravel and shell resources—**
- **(i) for use in a program of, or project for, shore protection, beach restoration, or coastal wetlands restoration undertaken by a Federal, State, or local government agency; or**
- **(ii) for use in a construction project, that is funded in whole or in part by or authorized by the Federal Government.” (Outer Continental Shelf Lands Act)**

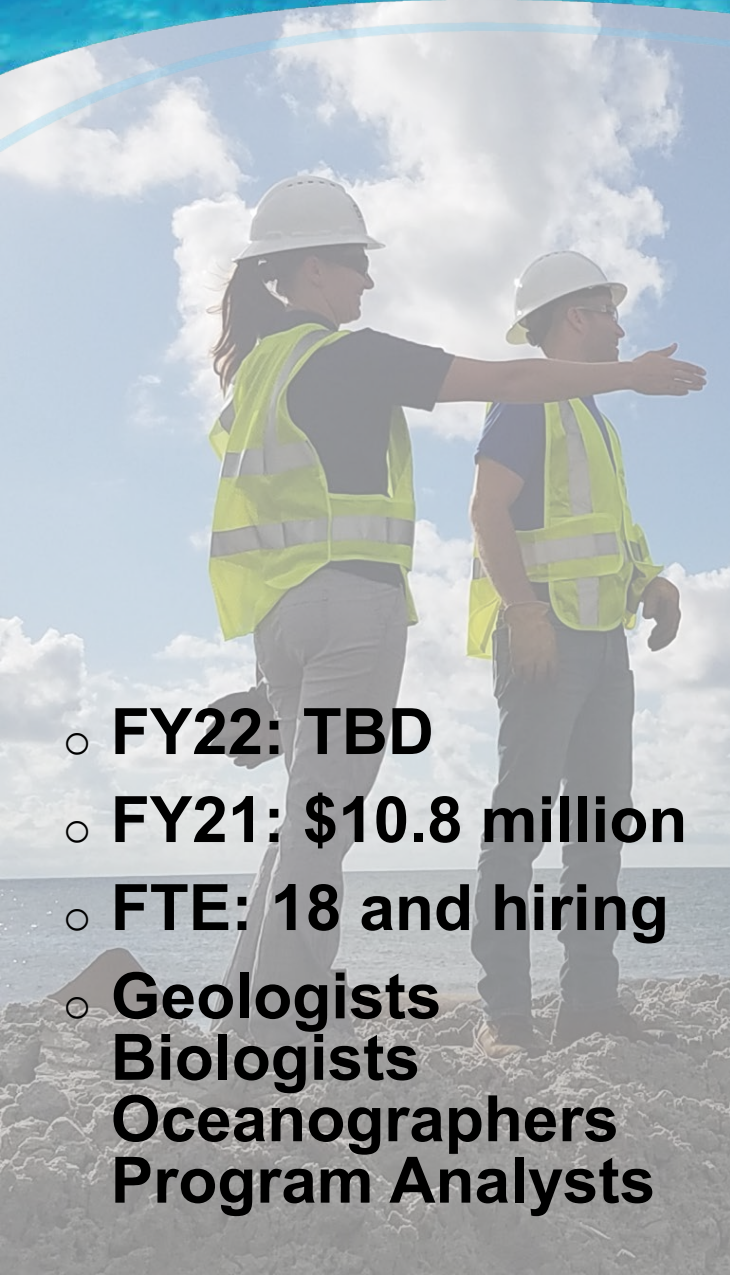


Competitive Marine Minerals

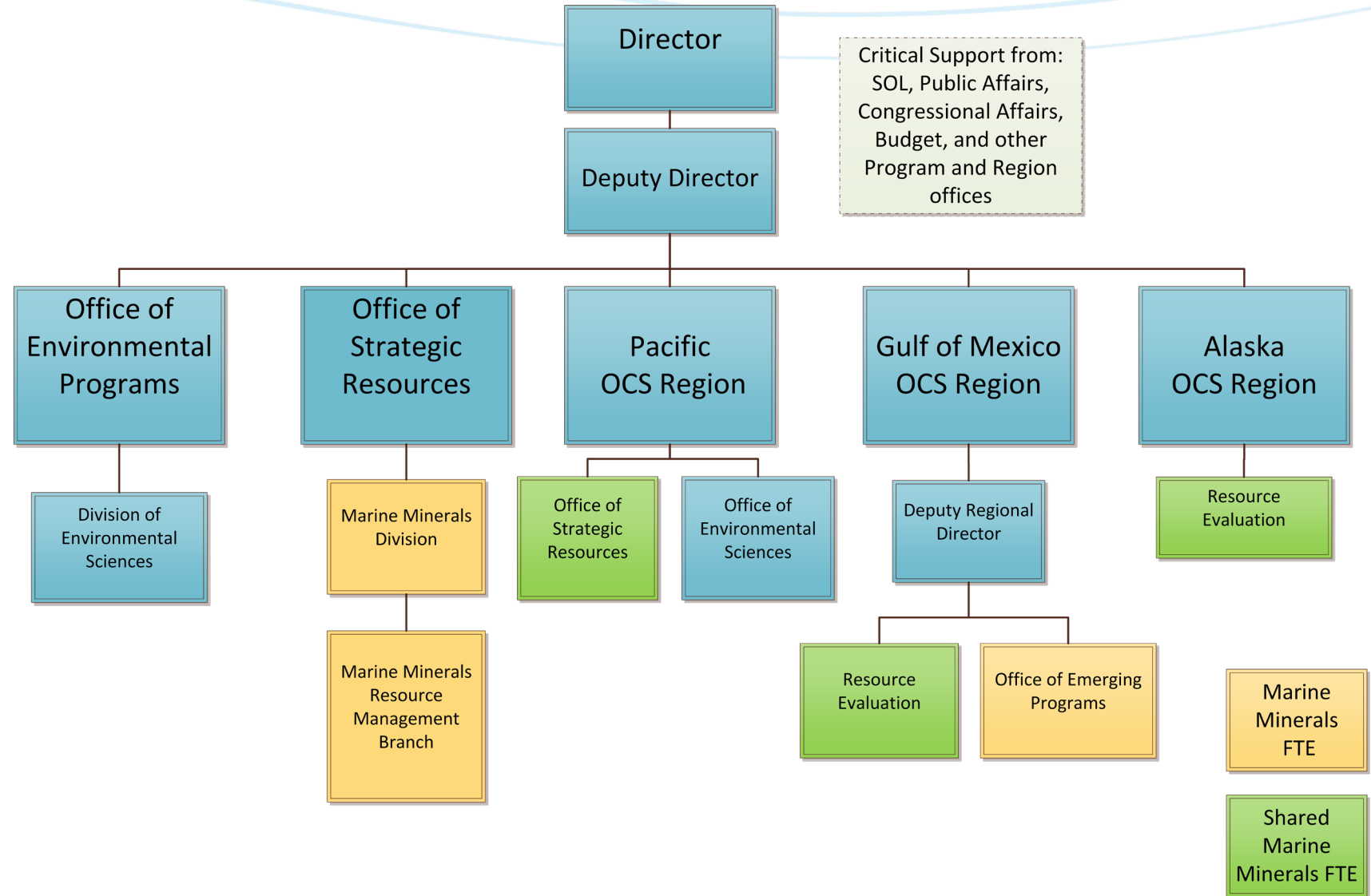
- **OCSLA Section 8(k) establishes competitive, commercial leasing process**
- **Leasing offshore the U.S. territories not included in OCSLA authority**
- **Current program efforts**
 - Interagency coordination
(e.g., National Science and Technology Council Subcommittee)
 - Synthesize existing offshore data
 - Innovative research related to critical minerals
 - Evaluate exploration and leasing strategies



MMP Organization and Budget



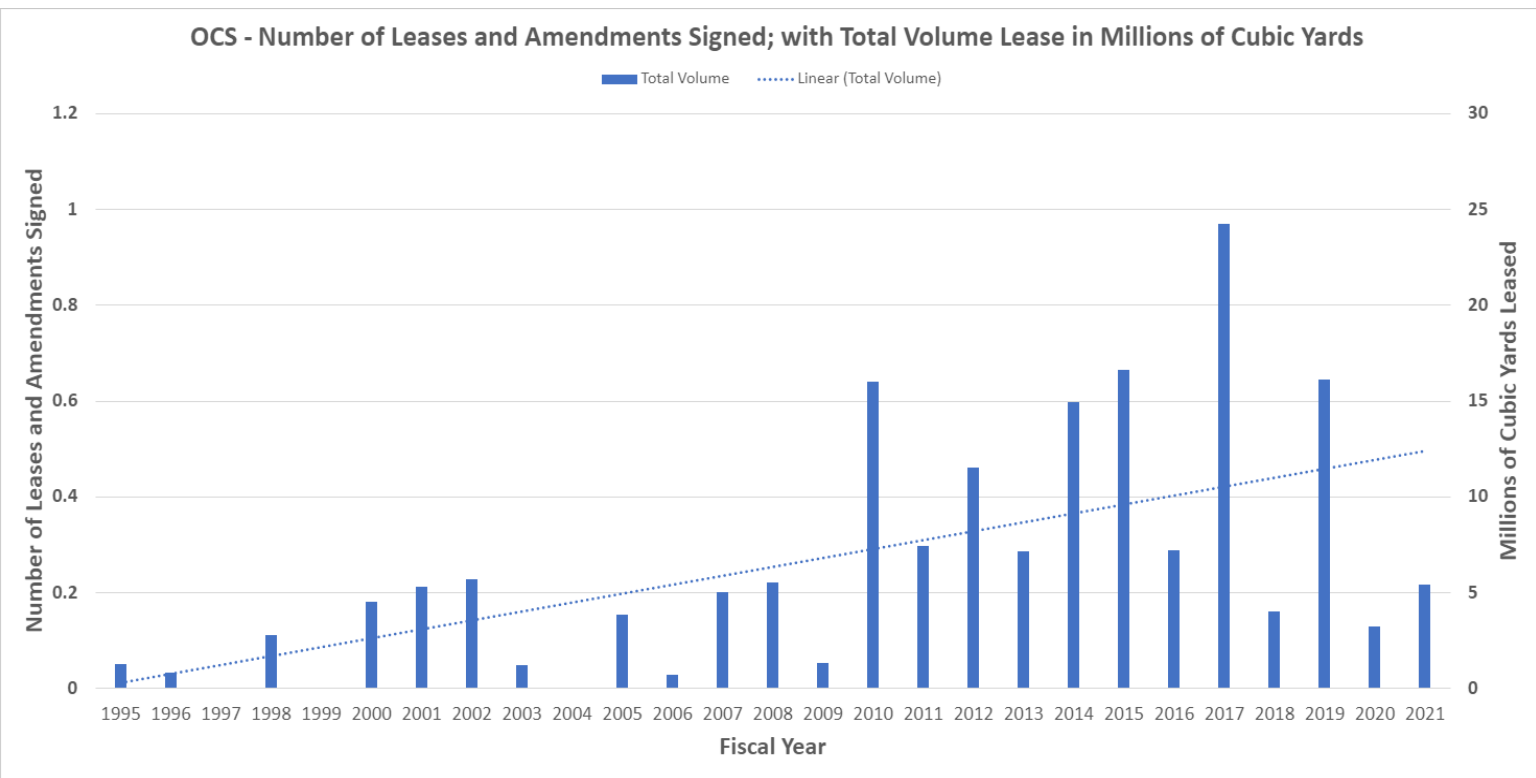
- **FY22: TBD**
- **FY21: \$10.8 million**
- **FTE: 18 and hiring**
- **Geologists**
- **Biologists**
- **Oceanographers**
- **Program Analysts**



Why Demand for OCS Sand is Increasing



Ship Island, MS



- Storm activity and coastal erosion increasing
- Diminishing resources in nearshore
- Adds to nearshore sediment budget
- Wave Climate nearshore unaffected
- Improves project long-term sustainability and geomorphic/ecologic function

G&G Coordination Process Improvements

BOEM Authorization Required:

Section 11 authorization of persons (i.e., state, state contractor, companies, etc.) undertaking pre-lease mineral G&G exploration (e.g., search for minerals)

- Sand Search EA (2019) is a Programmatic Environmental Document that covers most equipment used in sediment investigations.
- Stipulations incorporated into the EA are recommended in workplan to streamline review of proposed G&G activities.
- Timeline for review: 2-4 weeks

<https://www.boem.gov/Regional-Projects/>



Caminada Headlands, LA

Work Plan Stipulations Examples

- **No Airguns/Sparkers** are proposed for use.
- Chirp or boomer sub-bottom profiler, including hydrophone array (with boomer only), **operated at ≤ 205 dB rms Sound Pressure Level (SPL) and lower than 180 kHz**
- Magnetometer, Bathymetric multibeam or interferometric transducer, Side-scan sonar or acoustic backscatter from multibeam (towed or mounted) or interferometric swath side-scan sonar, **operated >180 kHz**
- NMFS certified **PSOs Required**
- Historic and pre-contact site **avoidance and reporting** requirements
- Nighttime surveying and **passive acoustic monitoring** protocol



Lease Agreements

Each project is unique, having different parties involved, different environmental concerns and different leasing concerns. As a result, each Agreement is for a one-time use on a first-come first-serve basis.



Ship Island, USACE



Complete Leasing Process

<https://www.boem.gov/Leasing-NC-Marine-Minerals>

Assateague Island



Before



After

Problem Identification

- Local community driven
- Congressional involvement

Reconnaissance

- Define Problem & Stakeholders
- Define cost sharing agreement

- Identifying information gaps
- Environmental Studies feed into information on potential impacts
- Join the USACE Project Development Team (if warranted)

Feasibility

- Planning, Analysis, Options
- NEPA & Consultations

- Participation/Lead on consultations
- BOEM Subject Matter Experts review all NEPA and consultation reports
- Environmental studies provide information for impact analysis
- Develop EA/EIS and execute FONSI/ROD

Engineering & Design

- Congressional Authorization
- Technical Studies

- BOEM Subject Matter Expert review of technical studies and design
- Review for consistency and compliance with BOEM standards and known requirements

Real Estate Acquisition

- Responsibility of Local Sponsor

BOEM Agreement

- 2-Party NNA
- 2-Party or 3-Party MOA

- BOEM's approving action
- Executed as an agreement with all parties involved

Construction

- Funds are appropriated
- All requirements completed

- Review all pre-construction requirements for consistency and compliance with BOEM Agreement

Maintenance

- Inspections and Monitoring
- Local sponsor takes ownership

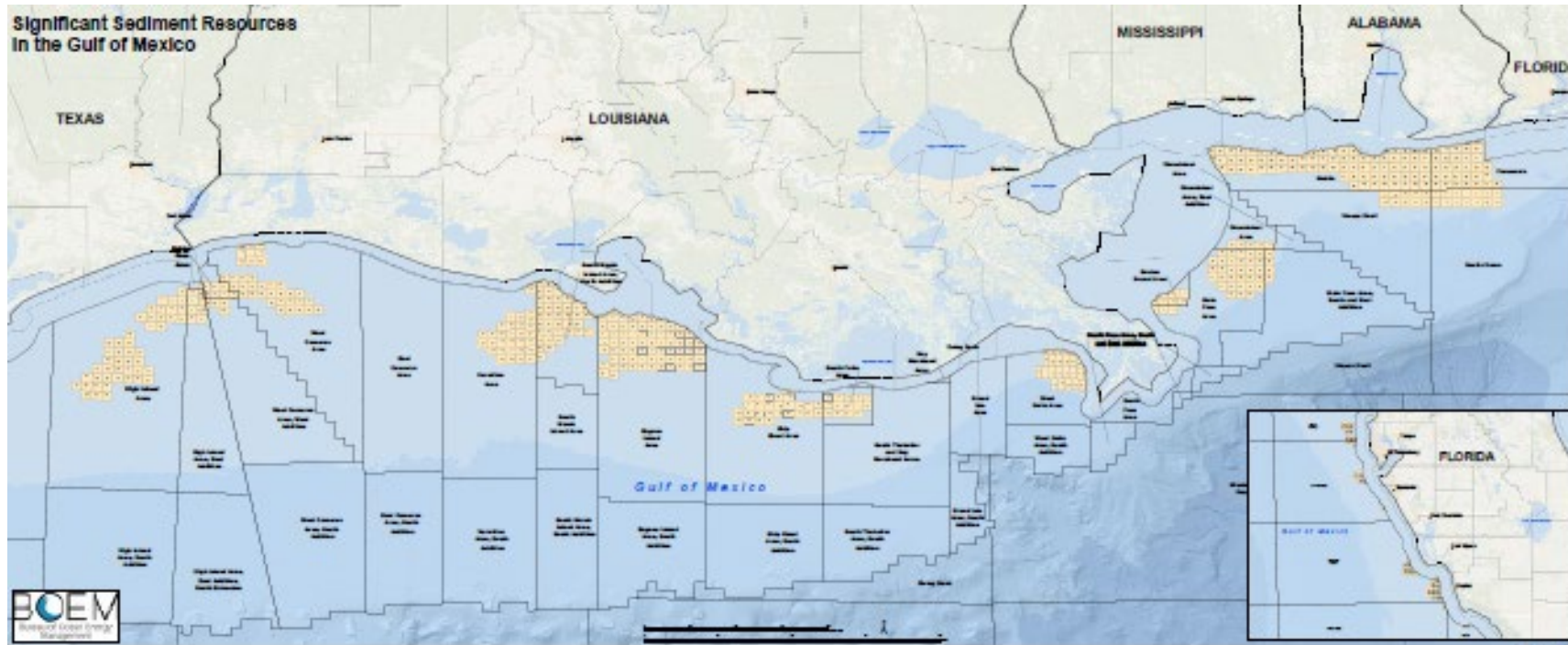
- Review all requirements for consistency with BOEM Agreement
- Conveyance of information to BSEE for compliance

Designation of Significant Sediment Resource Areas(SSRA)

- In continuing BOEM's mission to facilitate access to mineral resources needed to address the Nation's coastal needs, BOEM's Marine Minerals Program evaluates data collected through its National Sand Inventory initiative and cooperative agreements with States to determine areas of significant reserves of surface and shallow subsurface mineral deposits.
- BOEM designates these OCS areas as Significant Sediment Resource Areas (SSRAs- GOM) or Aliquots (Atlantic).
- Available for download at: <https://mmis.doi.gov/boemmmis/> ,
or <https://www.boem.gov/marine-minerals/marine-minerals-mapping-and-data>

Significant Sediment Resource Area Updates

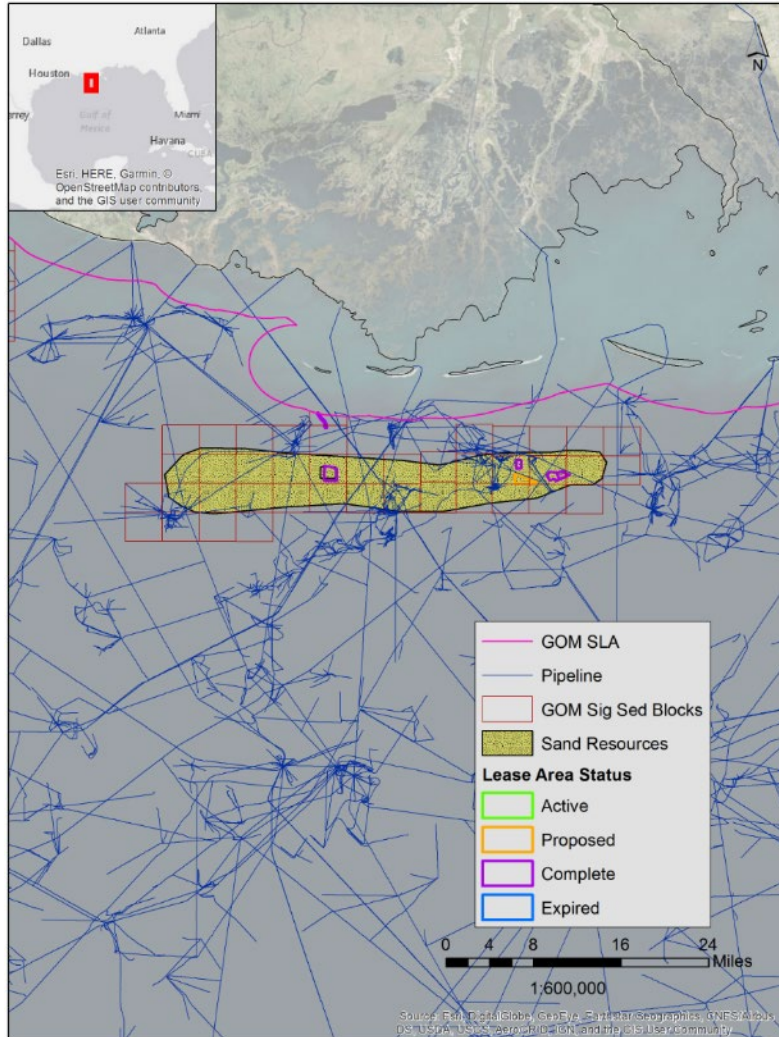
- 650+ OCS SSRA blocks flagged in the Gulf of Mexico
- 7,000+ OCS Aliquots flagged in Atlantic
- Anticipating an OCS update to incorporate new potential resources identified through ongoing investigations.



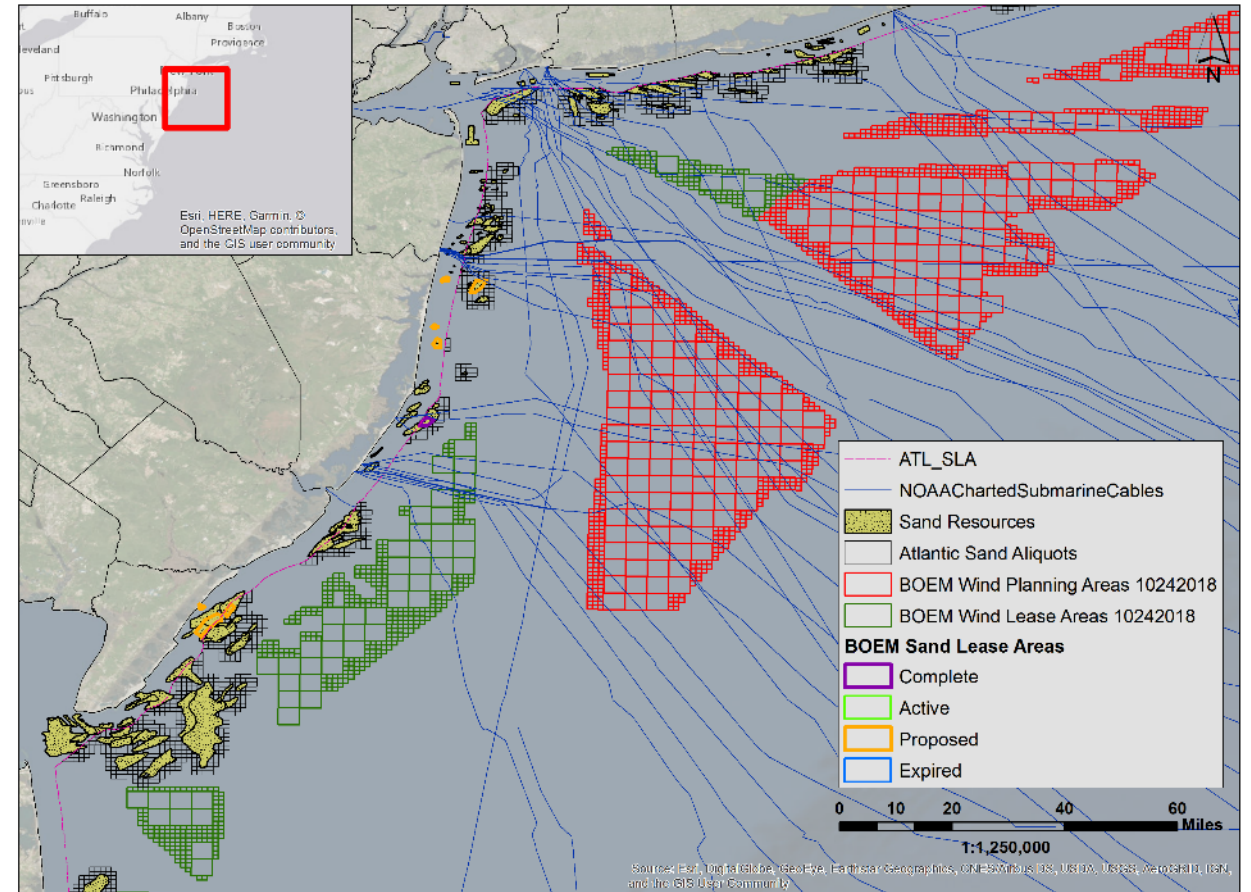
Managing Multiple Uses of the OCS

(Anchorage Basins, Artificial Reefs, Cables, Aquaculture, Renewables...)

Oil and Gas Infrastructure – Gulf of Mexico



Submarine Cables – North Atlantic



How do you ensure your OCS projects are successful?

- **Engage BOEM early, even if the borrow area is not determined.**
- **Budget time and coordinate with BOEM to ensure an efficient G&G activity review.**
- **Establish process to verify leasing and environmental commitments are clear and implementable.**
- **Florida continues to be a priority for BOEM, let us know about needs and data gaps.**

Partnerships and Stakeholder Engagement



- Leverage investments
- Locate sand resources
- Manage conflicts
- Execute research
- Exchange information



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