

## Developing a Roadmap to Address an Increasing Demand for Sand from the Outer Continental Shelf



*NASA Wallops Island, VA  
Before shoreline restoration (2010)*



*NASA Wallops Island, VA  
After restoration (2014)*

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**AASG**

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- **BOEM's Jurisdiction, Authority, and Stewardship Role**
- **Demand and Interest for OCS Sand**
- **OCS Resource Availability**
- **National Offshore Sand Inventory**
  - Where Resources Present
  - Where Resources Absent or Limited
- **Marine Mineral Information System (MMIS)**
- **Managing OCS Resources**
  - Future Needs
  - Potential Conflicting Uses
  - Multiple Interest in Same Resource Area



*Long Beach Island, NJ*

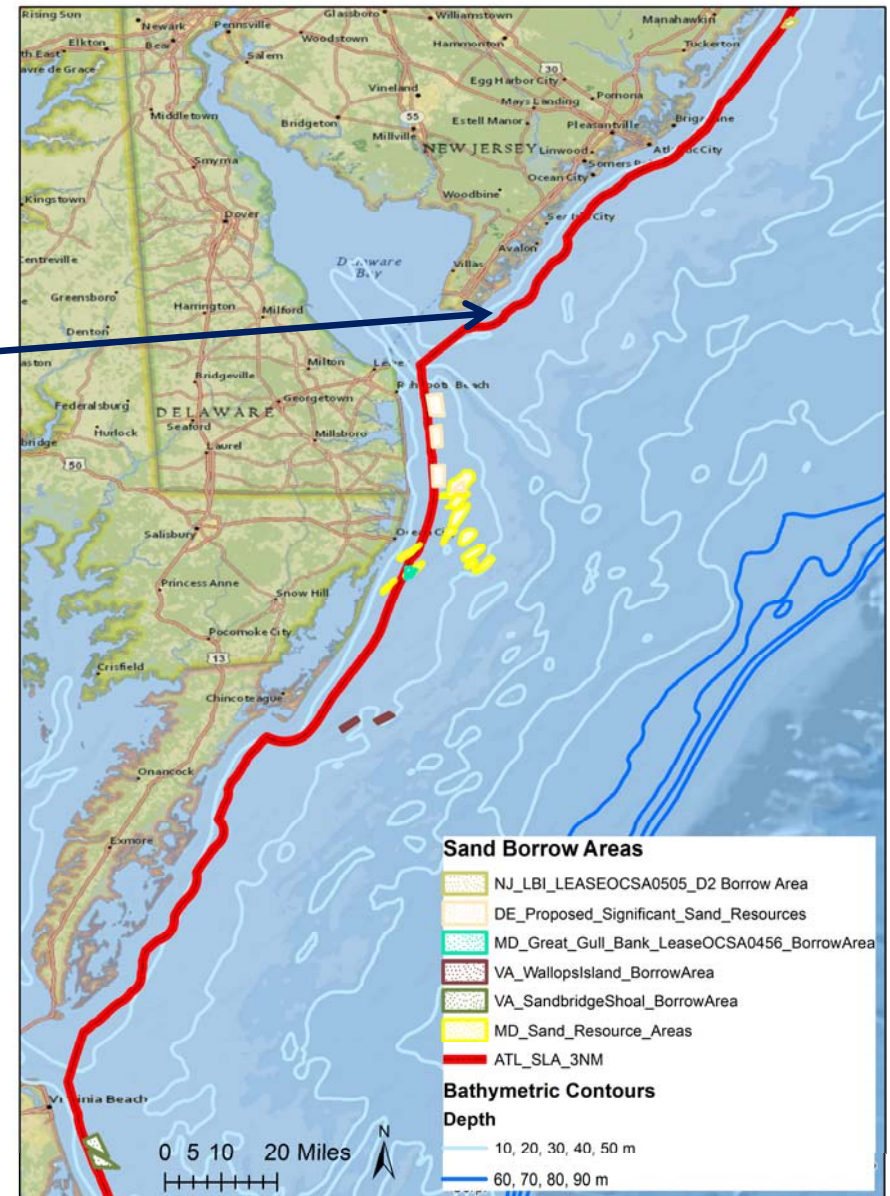


**Outer Continental Shelf (OCS)** or Federal jurisdiction begins seaward of the Submerged Lands Act (SLA) boundary.

Generally 3 nautical miles (nm) from shore (but 3 leagues or 9 nm offshore Texas and west coast of Florida) and extends 200 nm.

**BOEM's Authority = OCS Lands Act (43 U.S.C. § 1331, et. seq.)**

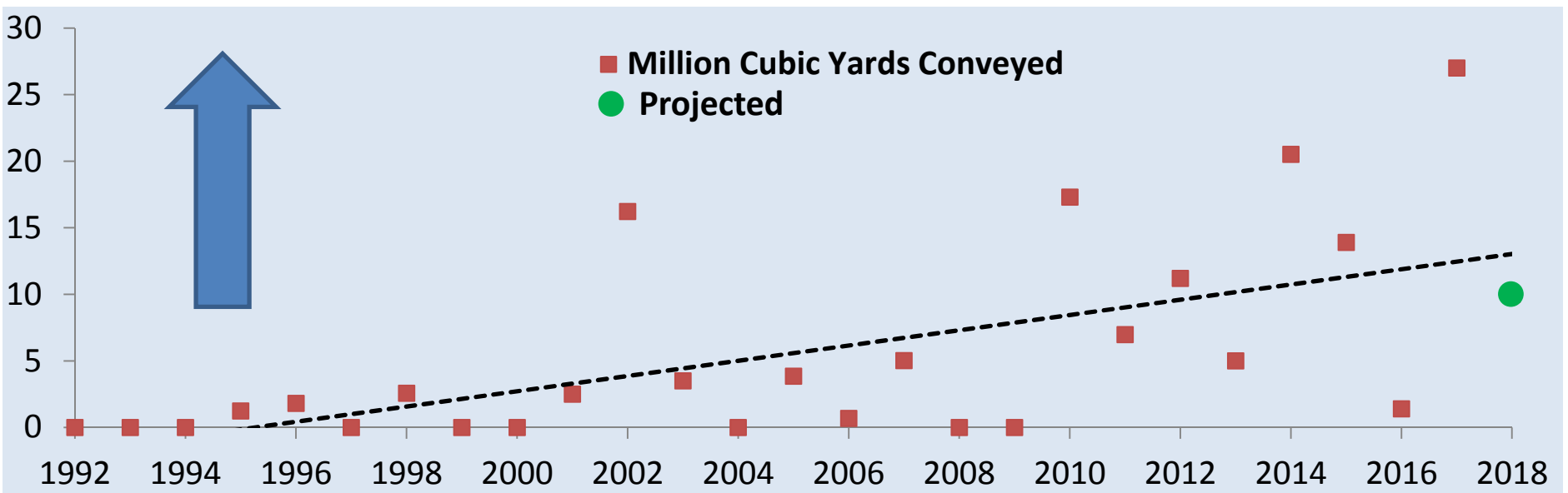
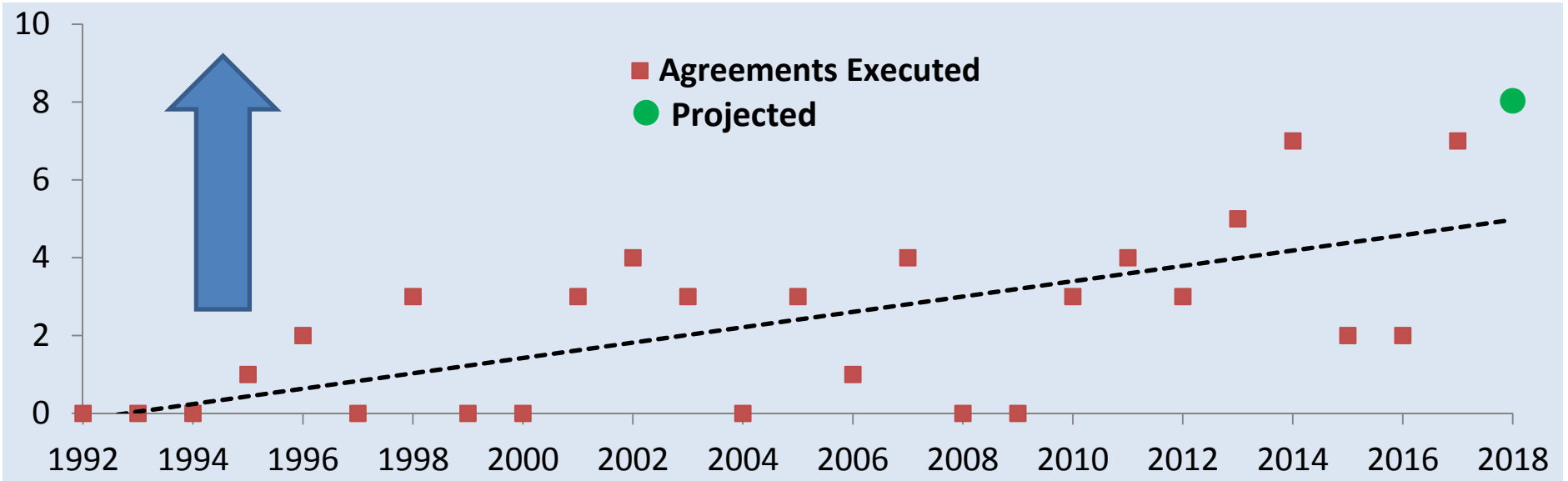
**Regulations = 30 CFR Parts 580, 581, 582, and 583**



- **BOEM is responsible for managing development of Outer Continental Shelf (OCS) non-energy marine mineral resources.**
- **As the nation's steward for these resources, BOEM must ensure that the removal of any mineral resource is done in a safe and environmentally sound manner.**
- **As a responsible steward and resource manager, BOEM needs to know where and how much resource may be available in order to make informed decisions on its use.**
- **DOI and BOEM play a critical role in shoreline protection projects - without sand/material projects cannot be constructed.**



# Increasing Demand for OCS Sand



# What is Driving OCS Demand ?

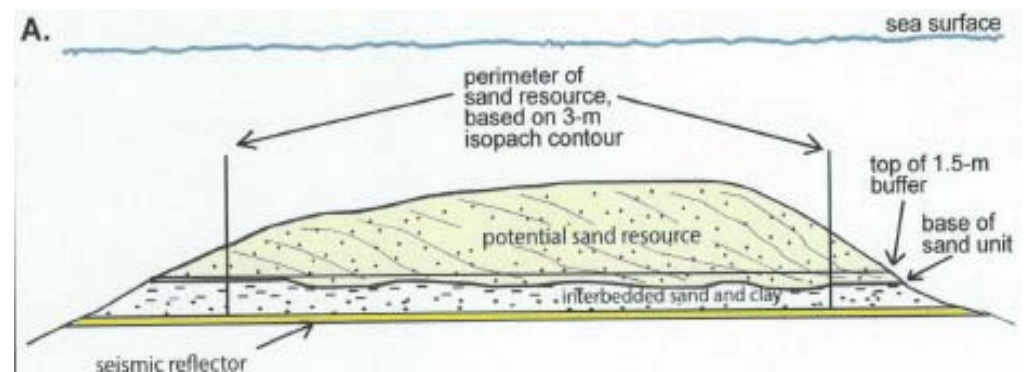
- **Diminishing Resources in State Waters**
- **Environmental Concerns w/ Dredging in State Waters**
- **Larger & Higher Quality Resources in Federal Waters**
- **Increased Recent Storm Activity ?**
- **More States Interested in OCS Sand (8 total)**
  - Recent: NJ (2014) and MS (2016)
  - Future: DE, NY, and others (?)



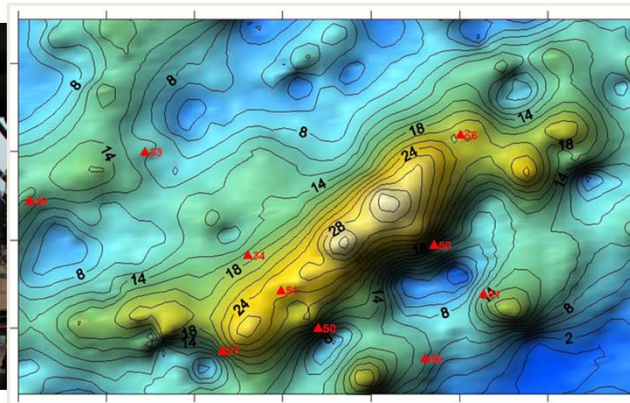
“Bad news...we’ve run out of unlimited resources”

- **Several factors determine the availability and feasibility of dredging OCS sand:**

- Compatibility
- Water depth
- Sediment thickness
- Resource area shape
- Transport distances
- Environmental impacts
- Conflicting uses



- **BOEM/state cooperative agreements**
- **Atlantic Sand Assessment Project (ASAP)**
- **Project/Lease Data**
- **Environmental Study Data**
- **Identification of Data Gaps**
- **Prioritize Areas for Future Assessment**





## Northern New Jersey

State/Federal Boundary

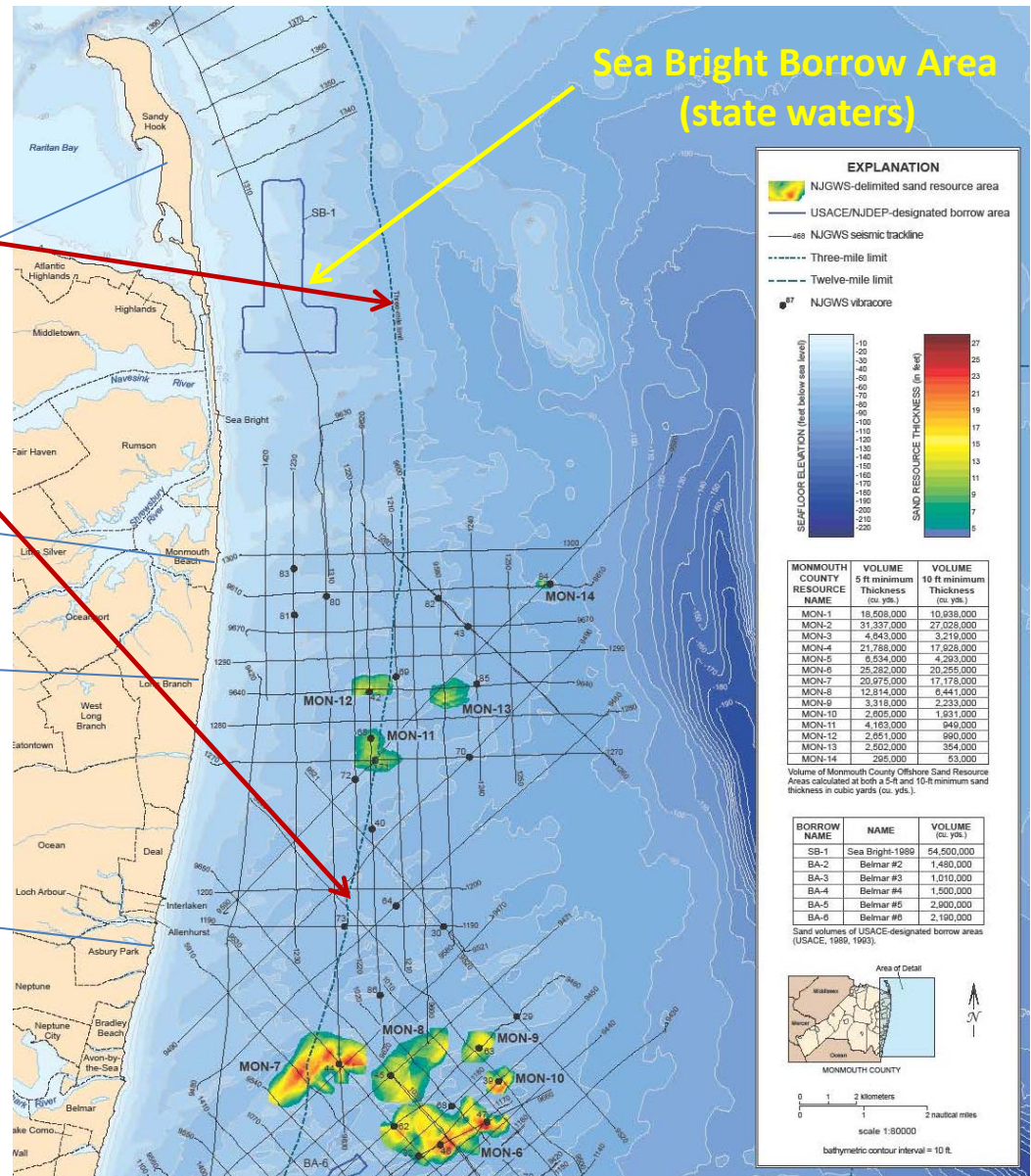
Sandy Hook

Monmouth Beach

Long Branch

Asbury Park

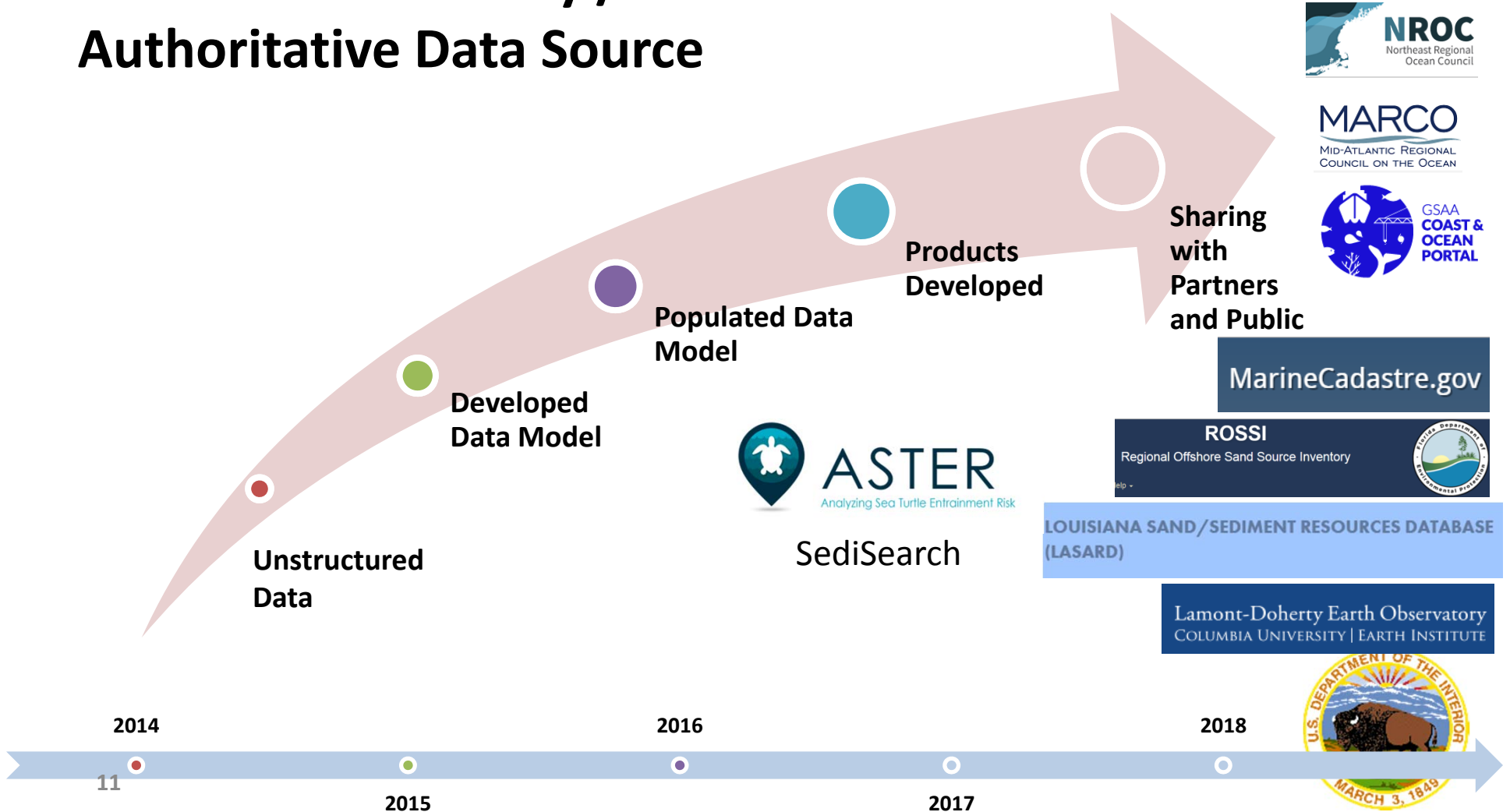
Sea Bright Borrow Area  
(state waters)



- **History of BOEM/state cooperative agreements**
  - Since early 1990s
  - Have worked w/ 18 states (Atlantic, GOM, Pacific)
  - Currently have 15 active agreements
  - Invested tens of \$\$ millions
  - Reports on website (<https://www.boem.gov/Marine-Mineral-Resource-Evaluation>)



## Data Accessibility / Authoritative Data Source



# MMIS MARINE MINERALS INFORMATION SYSTEM

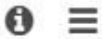


Identify Layers Download

## Administrative & Planning

Marine Minerals Offshore Study

### Areas



Marine Minerals Lease Areas



Dredge Areas



Beach Placement Areas



Marine Minerals Beach Study

### Areas



Identified Sand Resources



Atlantic OCS Aliquots with

Sand Resources



Gulf of Mexico OCS Blocks

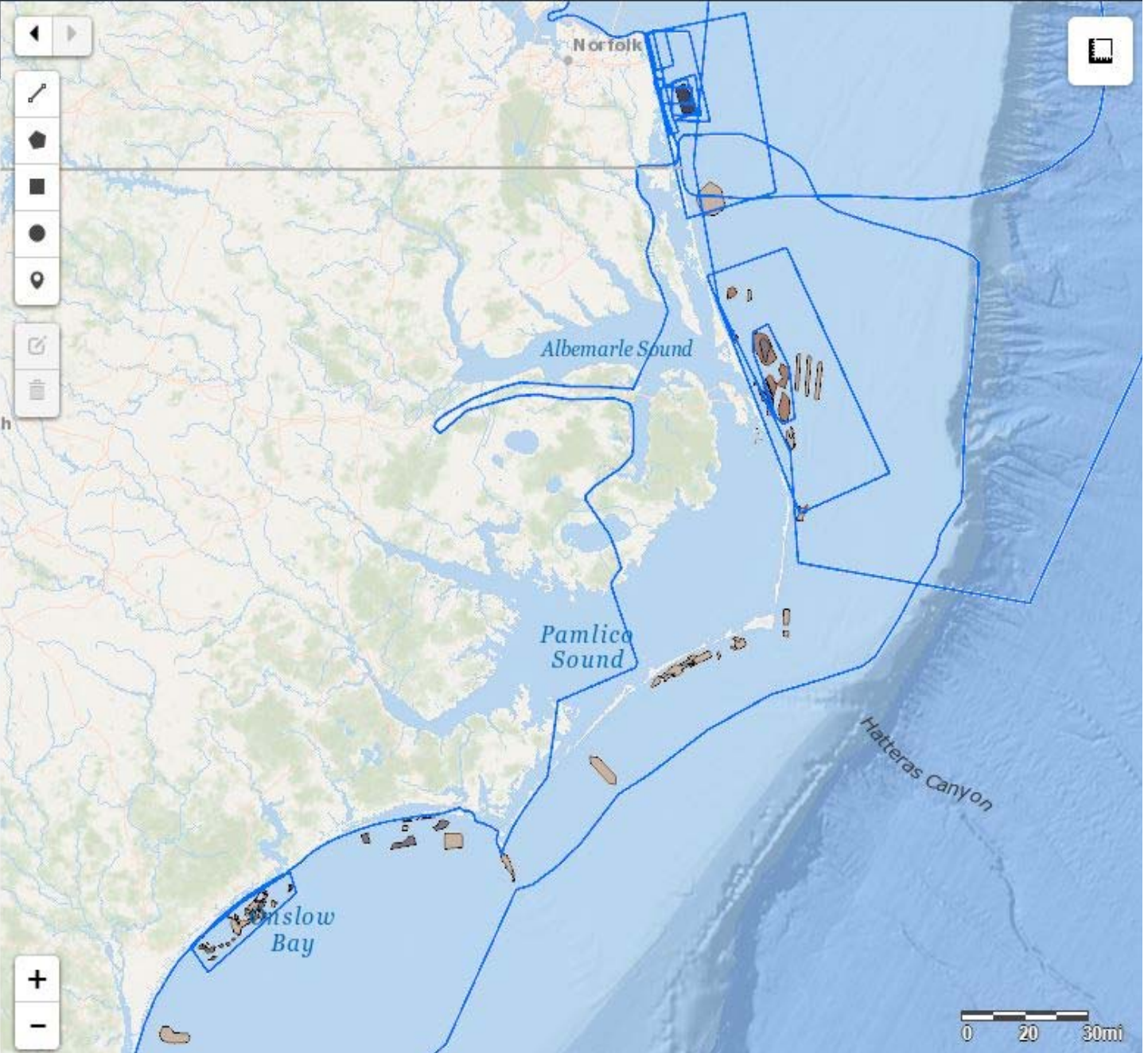
with Significant Sediment

Resources



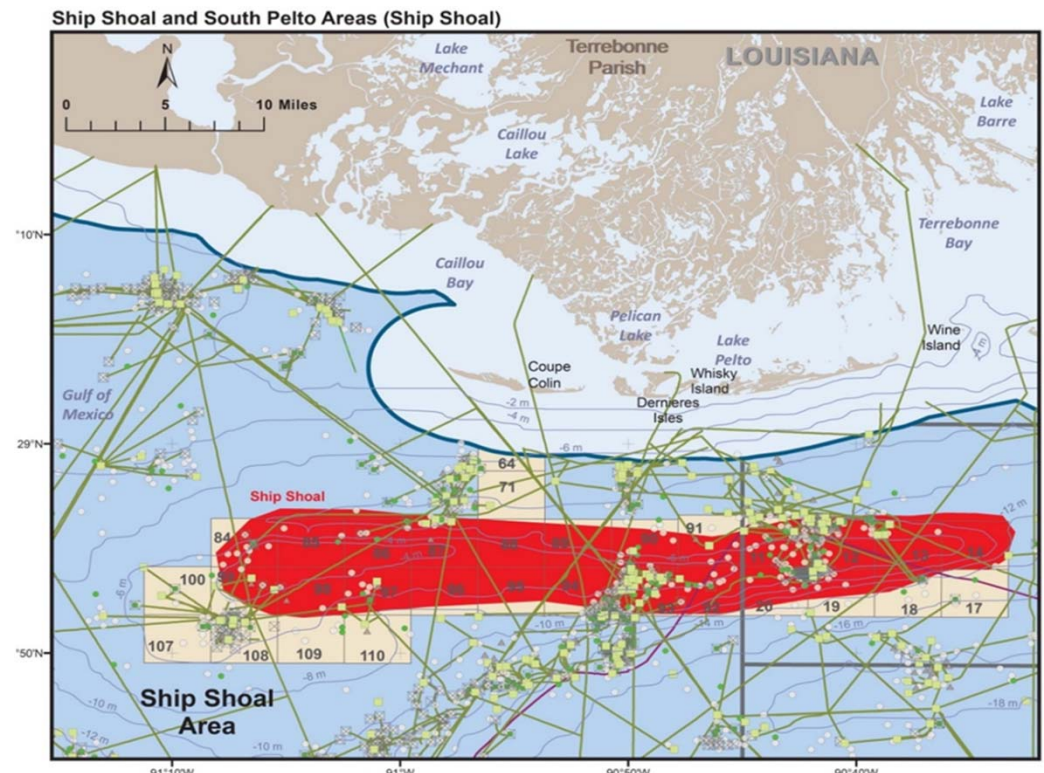
> Samples

> Contact



## Types:

- Fiber optic and electric transmission cables, pipelines, platforms
- Other material demands
- Fishing
- Heavy mineral mining



- **BOEM supplies the sand for projects**
- **BOEM does not identify needs or plan projects BUT !**
  - Where, how much, and when material is needed are critical for management decisions
  - Planning is challenging when oftentimes need driven by last storm event and projects are funded individually
  - Regional perspective – FL example (Irma)



- Resource Allocation May Become an Issue
- Regional Strategies for OCS Sand Use
- Storm Contingencies
- Regional Agreements
- Regional Programmatic EISs
- Rulemaking (?)



**“This really is an innovative approach, but I’m afraid we can’t consider it. It’s never been done before.”**

- **Demand for OCS Sand Increasing**
- **National Offshore Sand Inventory to ID Resources**
- **States play a critical role**
- **MMIS = BOEM Authoritative Data Source**
- **Mechanisms to Address:**
  - Competing Use of Resources
  - Multiple Interests in Same Resource Area
  - Regional Resource Limitations





# For More Information

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

