



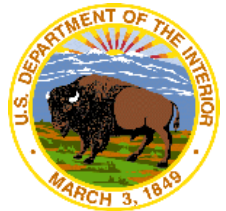
# Coastal Restoration



## Bureau of Ocean Energy Management's Role

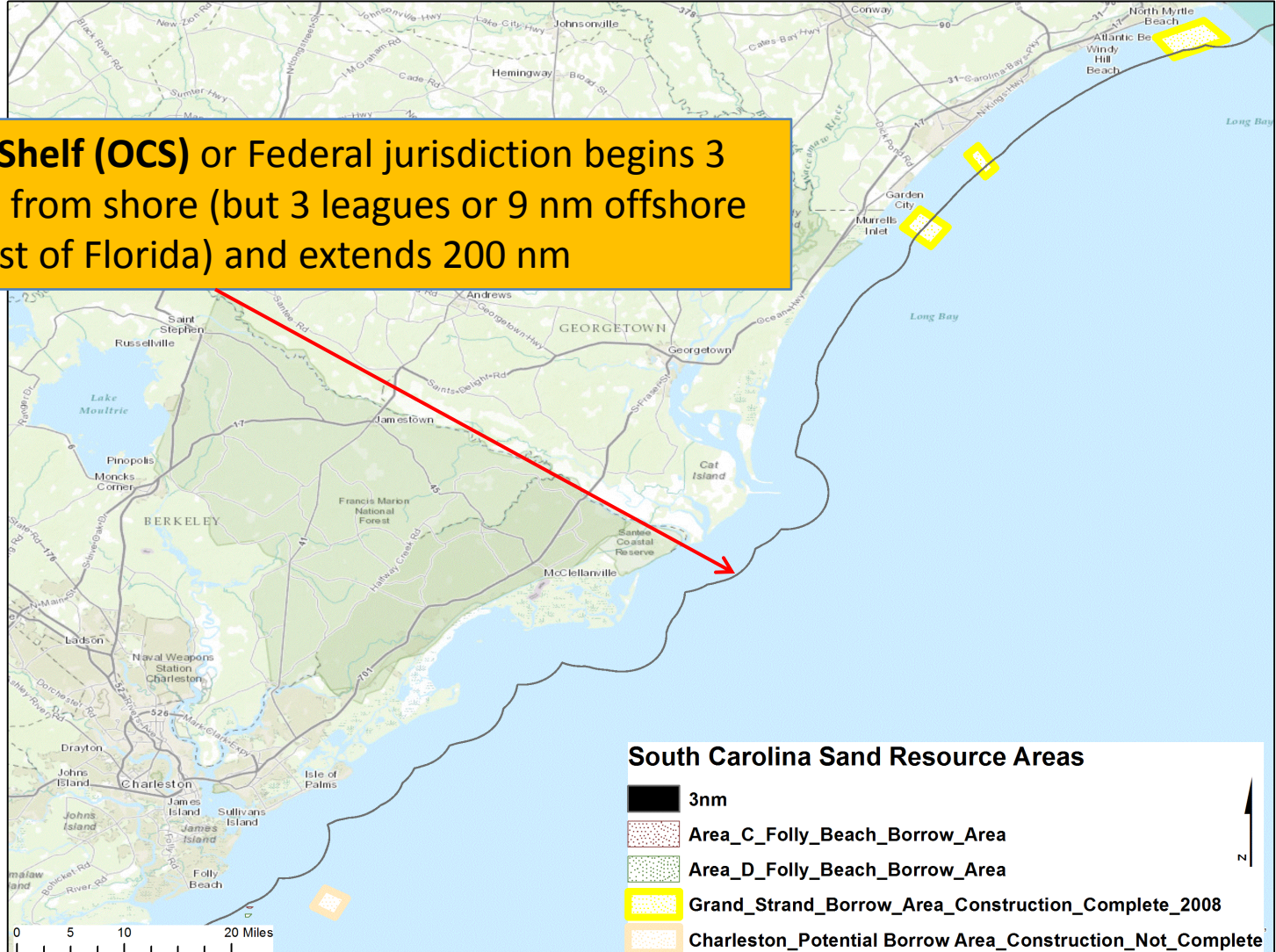
Jeff Reidenauer, PhD  
Chief, Marine Minerals Branch

*South Carolina Beach Communities Meeting*  
August 13, 2014



## Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. 1331, et. seq.)

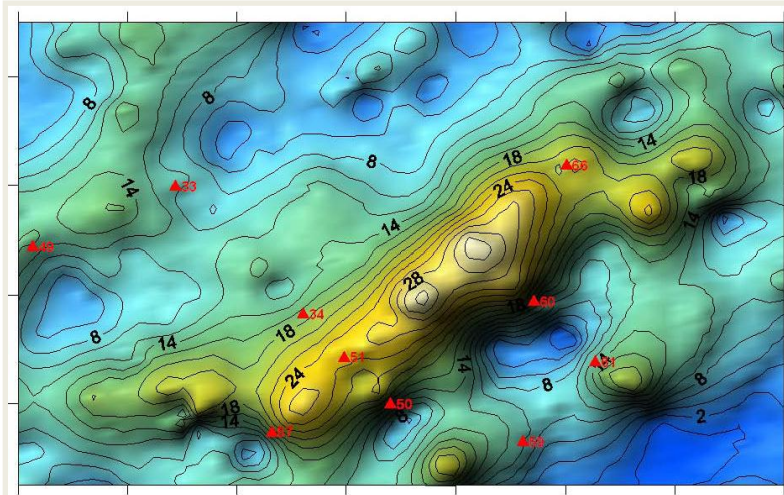
**Outer Continental Shelf (OCS) or Federal jurisdiction begins 3 nautical miles (nm) from shore (but 3 leagues or 9 nm offshore Texas and west coast of Florida) and extends 200 nm**



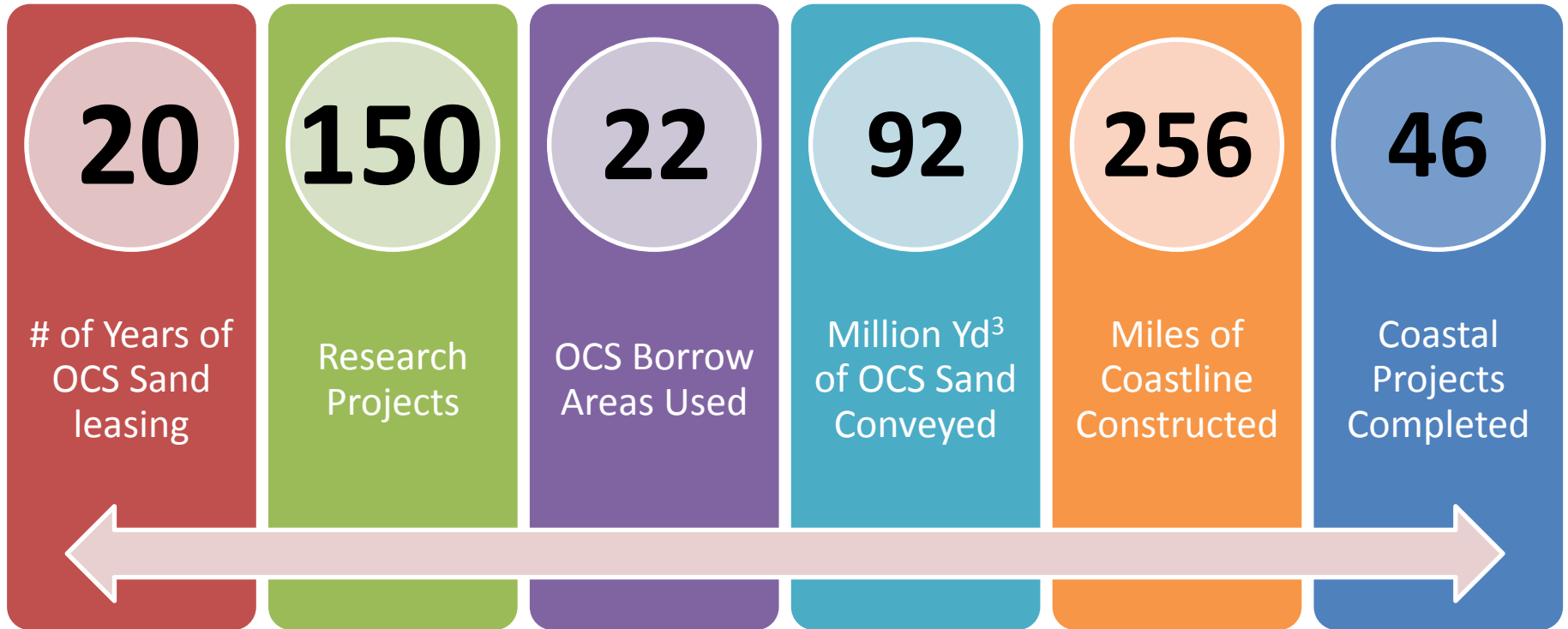


## Marine Minerals Program (MMP)

- Identify and evaluate potential OCS sand resources
- Respond to requests for OCS sand for coastal restoration through issuances of leases/agreements
- Conduct thorough environmental reviews of the use of sand borrow areas through NEPA and other environmental consultations
- Use stakeholder outreach and coordination in decision-making process
- We do not design or construct projects but convey the rights to OCS sand/minerals



## Two Decades of OCS Sand Stewardship



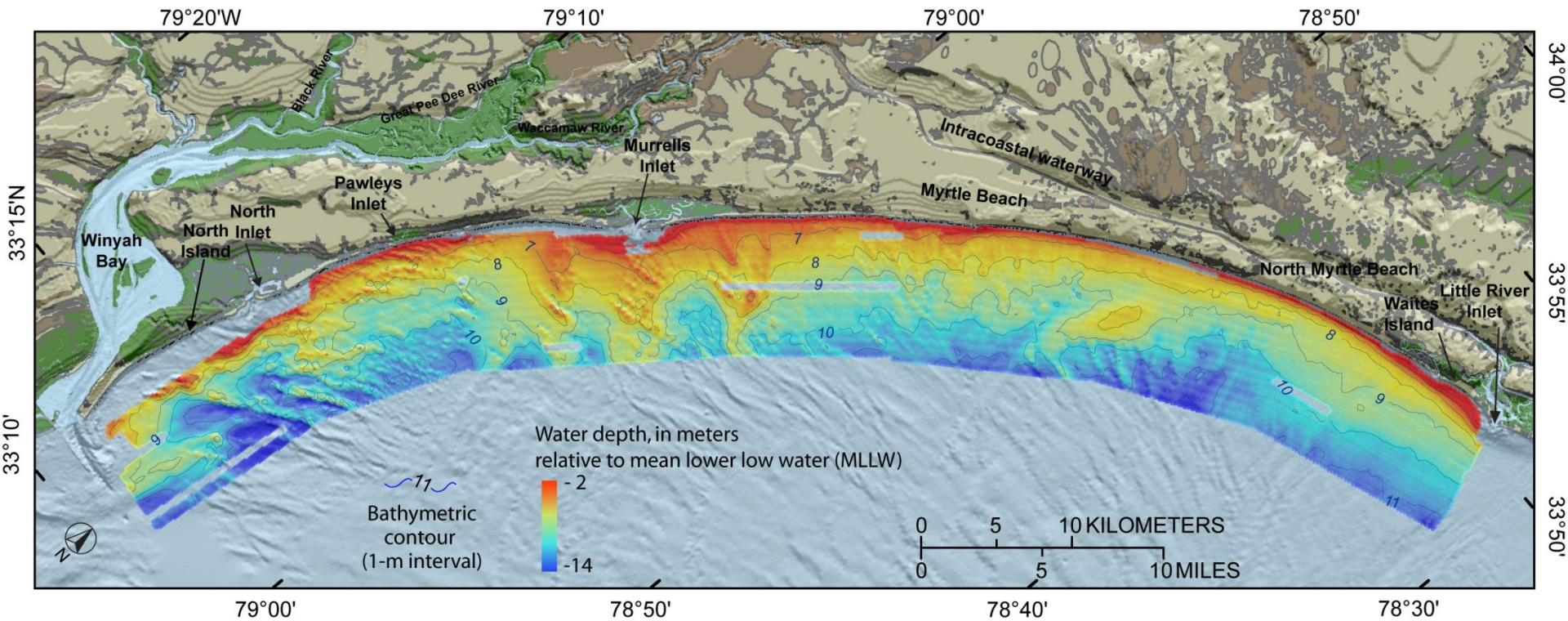


**Suitable OCS sand is a finite resource**

**Grain size compatible w/ native beach**

**Shoal/sand ridges**

Source: USGS 2009





**Long Beach Island**  
7 M cu yds

**NASA Wallops Island**  
1 M cu yds

**N. Myrtle Beach, Myrtle Beach, Horry County**  
2.2 M cu yds

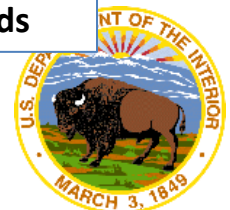
**Folly Beach**  
850,000 cu yds

**Port of Charleston**  
6 M cu yds

**Brevard County**  
2.4 M cu yds

**Whiskey Island**  
8.3 M cu yds

● Active Projects  
● Completed Projects





**Public Law 103-426 (1994):** Amended OCSLA to allow BOEM to grant **noncompetitive negotiated agreements** for Federal sand, gravel, or shell resources for use in shore protection or other public works projects

**A 1999 Amendment** prohibits BOEM from charging Federal, state, and local governments a fee for OCS sand



## 3 Types of Agreements Are Used to Convey Sand and Gravel Noncompetitively

- **2-Party Memorandum of Agreement (MOA)**

- ✓ Negotiated between another Federal Agency and BOEM

- **3-Party Memorandum of Agreement (MOA)**

- ✓ Negotiated between a Locality (State, county, city, parish etc.), another Federal Agency and BOEM

- **2-Party Lease**

- ✓ Negotiated between a Locality (State, county, city, etc.) and BOEM

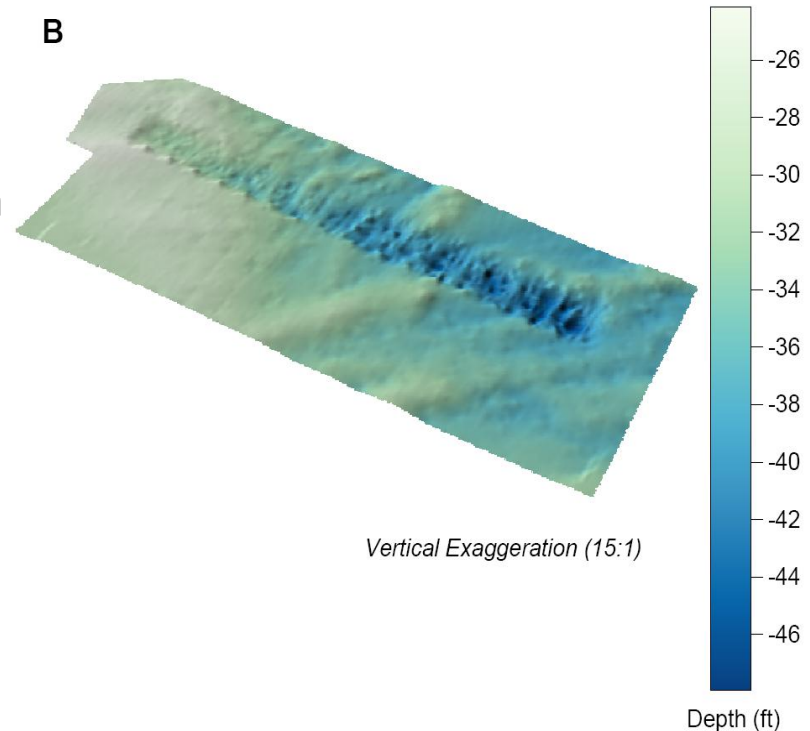
*Each Agreement is for a one-time use and valid for 2 yrs*





- Notifications
- Dredge Positioning
- Dredge Operating Requirements
- Production and Volume Information
- Marine Pollution Control/Contingency Plan
- Discovery of Munitions and Explosives of Concern (MEC) Procedures
- Bathymetric Surveys
- Protection of Archaeological Resources
- Project Completion Reporting
- Environmental Compliance Reporting
- Environmental Monitoring

Sorted Bedform and Low-Relief Sand Ridges -  
Myrtle Beach (SC)  
Surfside Borrow Area  
Post-Construction Bathymetry (Hopper Dredge)

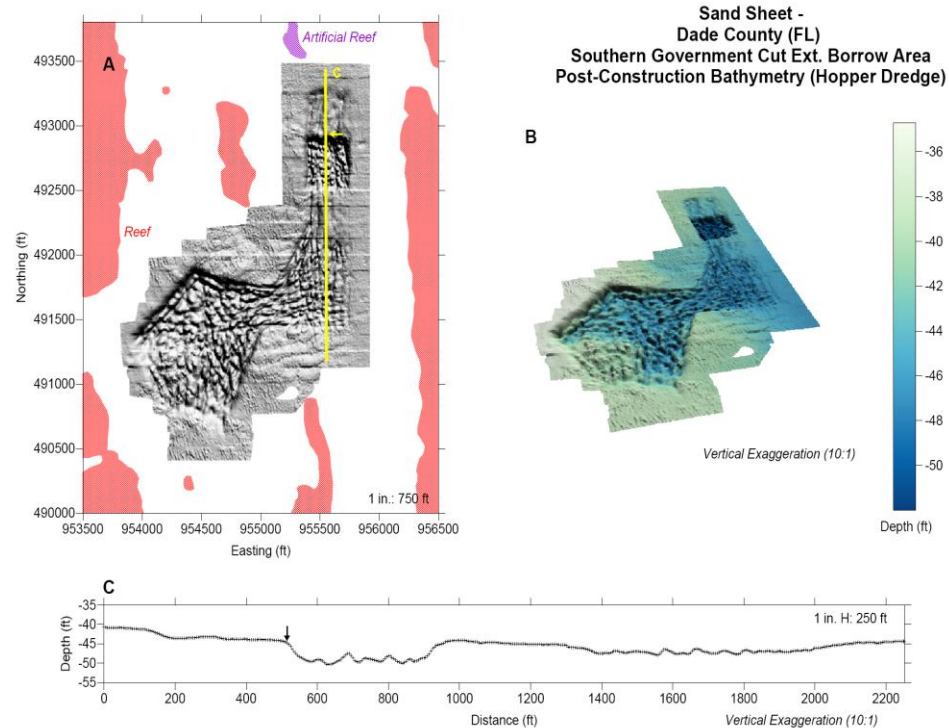
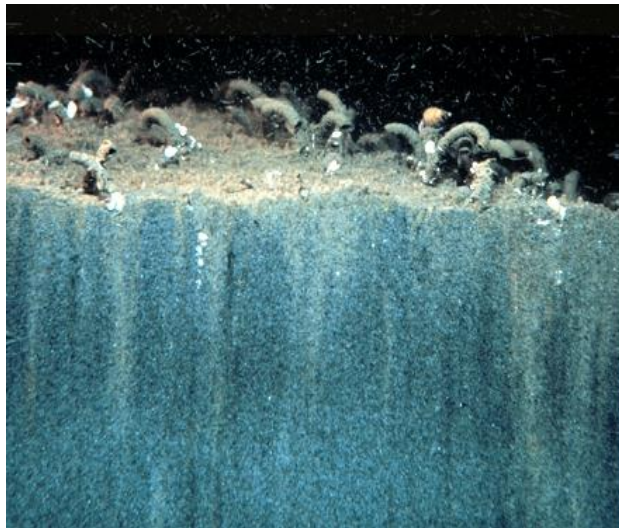


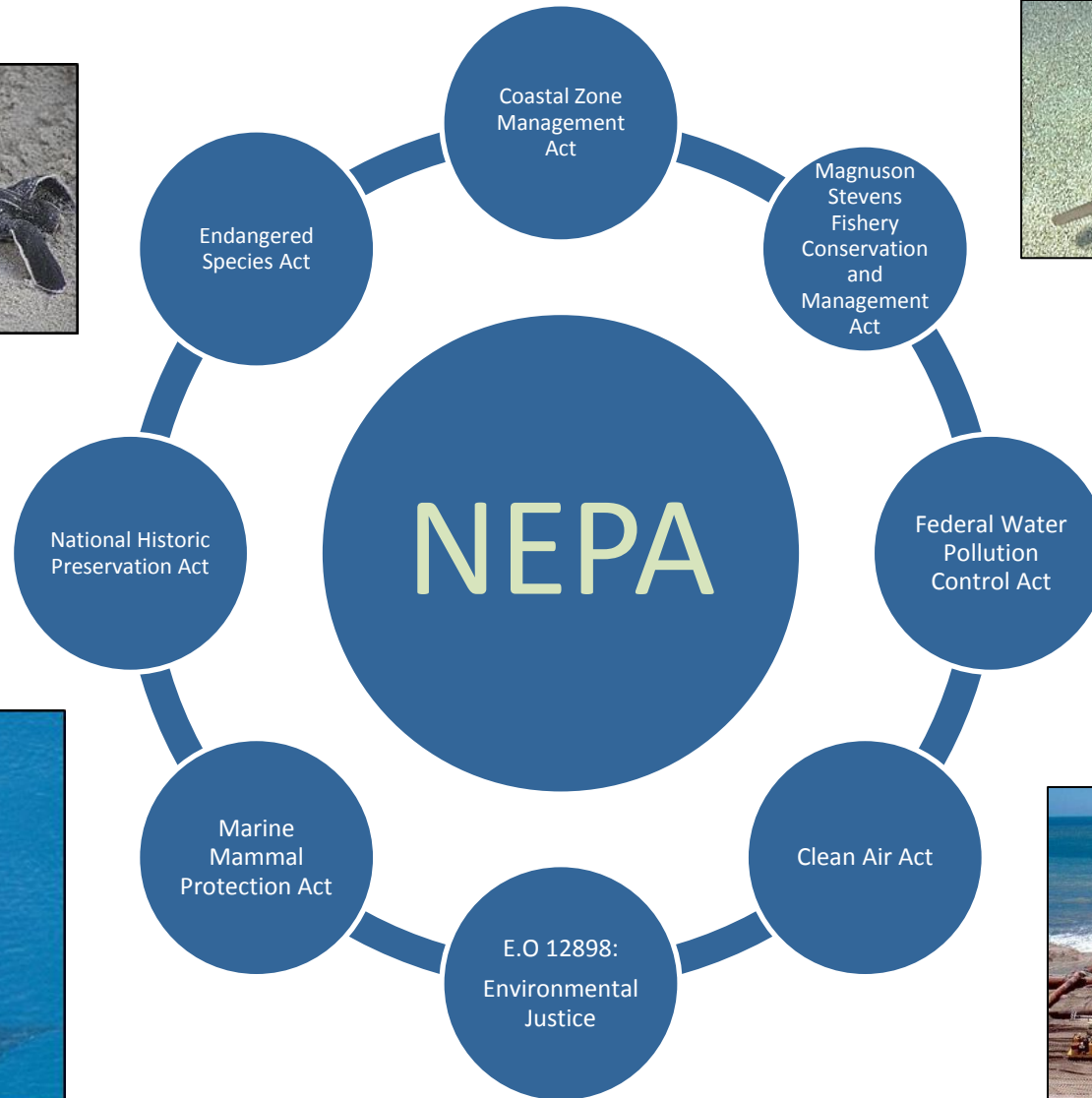
# Offshore Dredging





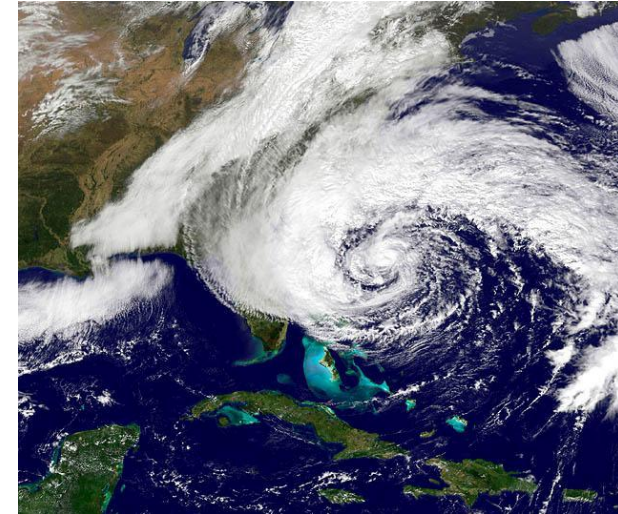
- Protected species
- Substrate characteristics and bathymetry
- Near-field currents and sediment transport
- Submerged historic resources
- Benthic habitat and species diversity
- Essential Fish Habitat (EFH)







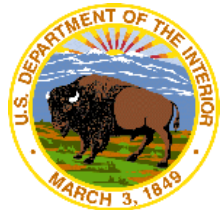
- **\$13.6 M Disaster Relief Appropriations Act**
- **Analysis Existing Sand Resource Data and Determination of Sand Needs**
  - ✓ Cooperative Agreements w/ 13 Atlantic States
  - ✓ \$400K NY & NJ; \$200K for remaining states
- **Identification of New OCS Sand Resources**
  - ✓ Broad Agency Announcement (BAA) for OCS Data Acquisition issued 3/21/2014 and closed 6/2/2014
  - ✓ Approx. \$5 million
- **Environmental Monitoring**
  - ✓ Canaveral Shoals, FL and Acoustics Study
  - ✓ Approx. \$3 million



## Agreement Executed August 6, 2014

- **Develop a database of existing geophysical and geological (G&G) information offshore SC, including the Federal OCS**
- **Determine and prioritize areas for future surveys**
  - Determine potential need for sand resources for SC beaches
  - Identify data gaps in G&G coverages offshore SC
  - Locate potential areas of sand resources based on existing data
- **Technical report of the state of knowledge of sand resources offshore SC**

<http://www.boem.gov/press08062014/>

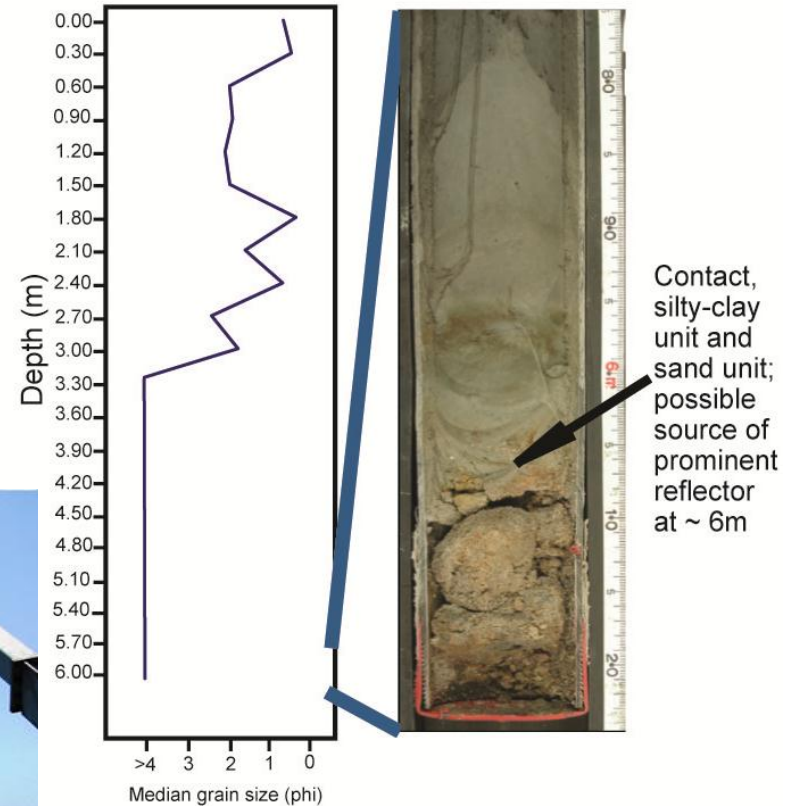




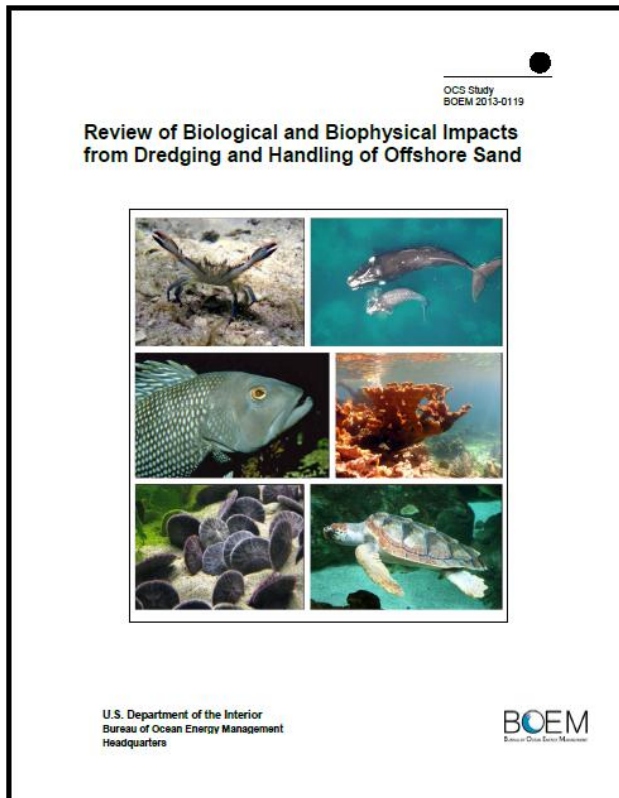
## Broad Agency Announcement

- Data Collection
- Surficial Geology and Sediment
- 3 – 8 nm offshore
- Maine to Miami, FL
- Reconnaissance and Site-Specific Level

Median grain size    Core photograph



## *Applied Science for Informed Decisions*

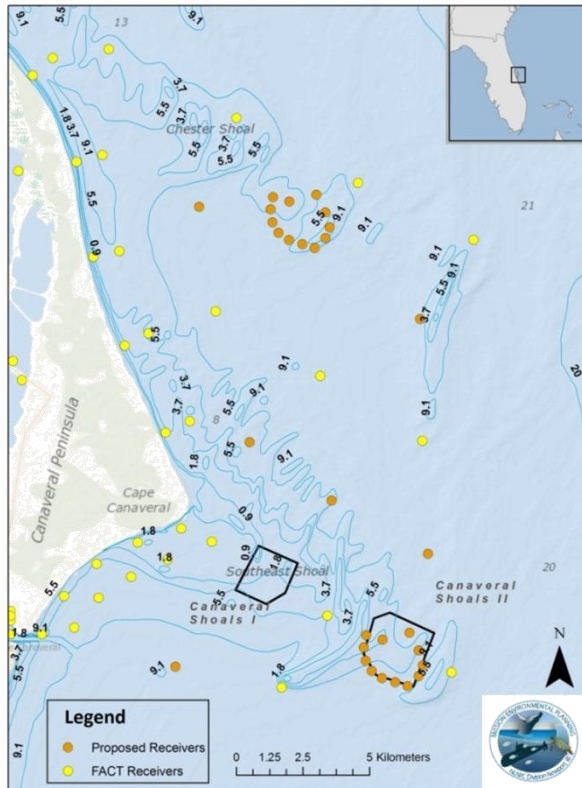


- Predict, assess, and manage impacts from marine mineral exploration and extraction
- \$15.2 million spent on MMP Environmental Studies to date
- Mitigation and minimization measures derived from research findings such as rotational dredging methods and better emissions estimates
- Identify critical data gaps for guiding future research needs
- <http://www.boem.gov/Marine-Minerals-Research-and-Studies/>





## Characterize biological differences and ecosystem changes in dredged and non-dredged areas – Canaveral Shoals, FL



- Long-term (3+ yrs) studies
- Characterize benthic and fish communities
- Radio-tagging of fish

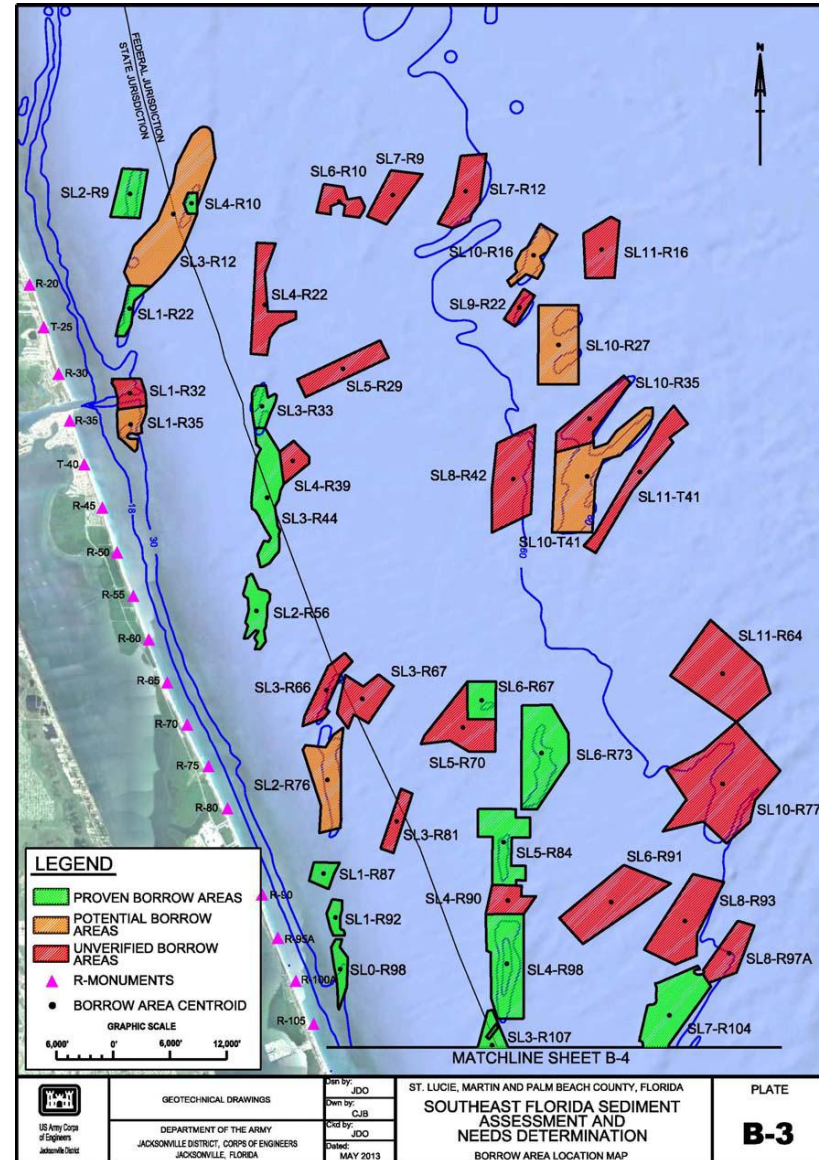


## Sand Management Working Groups

- Central Atlantic - 31 March 2014
- Florida
- New England
- Northeast

## Florida Regional Use Agreement

- Five SE counties (St. Lucie, Martin, Palm Beach, Broward, Miami-Dade)
- FDEP and USACE Jacksonville
- “Pilot” Project





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**[www.boem.gov/Non-Energy-Minerals/](http://www.boem.gov/Non-Energy-Minerals/)**



# Complete Restoration Process

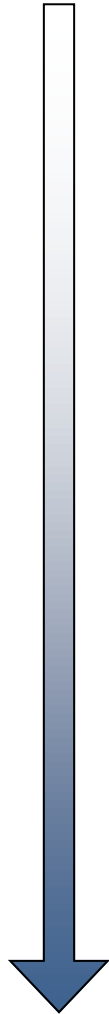
## Assateague Island



Before



After



### Problem Identification

- Local community driven
- Congressional involvement

### Reconnaissance

- Define Problem & Stakeholders
- Define cost sharing agreement

### Feasibility

- Planning, Analysis, Options
- NEPA & Consultations

### Engineering & Design

- Congressional Authorization
- Technical Studies

### Real Estate Acquisition

- Responsibility of Local Sponsor

### BOEM Agreement

- 2-Party Lease
- 2-Party or 3-Party MOA

### Construction

- Funds are appropriated
- All requirements completed

### Maintenance

- Inspections and Monitoring
- Local sponsor takes ownership

### BOEM Involvement

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

- Cooperating/Lead Agency 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

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

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

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

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