

## **Marine Minerals Program**

# **BOEM's Sand Resource Vision to Support Coastal Communities**







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## Overview

- Vision for the Marine Minerals Program (MMP)
- Top Four Priorities
- 2016 MMP Highlights
- Trends in OCS Activity
- Challenges and Opportunities
- The Takeaway









# Vision for the Program

- To serve as the lead federal agency and liaison in support of the Nation's current and long-term interests in OCS non-energy marine minerals.
  - OCS sediment resources are critical to future coastal infrastructure projects such as constructing beaches and dunes
  - Not limited to leasing sand or responding to latest disaster
- BOEM making scientific and economic study investments
- Post Hurricane Sandy \$16.3 Million. Successful in investing:
  - \$12.8 M conducting surveys to identify OCS sand resources,
    - updating data bases, maps,
  - \$ 3.1 M environmental and monitoring studies
  - \$ 400 K stakeholder outreach



# Vision for the Program

- In Gulf, we plan to invest \$5.1 million over next 2 years for environmental studies, resource evaluation and economic research. Coastal erosion significantly affecting on environment, industry, coastal protection
- In Pacific, study with USGS and CA Natural Resource Agency to characterize sand resources in coordination with Coastal Sediment Mgt. Workgroup: Ocean Beach, San Francisco Littoral Cell; Oceanside Littoral Cell (Northern San Diego); Silver Strand Littoral Cell (Southern San Diego)
- National Program Serving National Interests
  - USACE North Atlantic Div. estimates 140 MCY sediment needed for coastal storm risk management over next 20
  - years



# **Top Four Priorities**

- 1. Create a National Sand Inventory
- 2. Create and share an OCS Marine Minerals Information System
- 3. Strengthen partnerships, expand dialogue
- 4. Continue environmental studies and study partnerships





### #1 - Create a National Sand Inventory

- Build upon historic investments the bureau has made in resource evaluation with coastal states over nearly 25 years along with recent data acquisition efforts such as Atlantic Sand Assessment Project (ASAP).
- Sharing data through Lamont-Doherty, NROC and MARCO Data Portals; Planning GOM sand inventory



## **Lamont Doherty Core Repository**



#### **BOEM collection:**

- 250 core samples and metadata available for coastal managers to access
- Data on sediment thickness, composition, organic content, beach sand compatibility

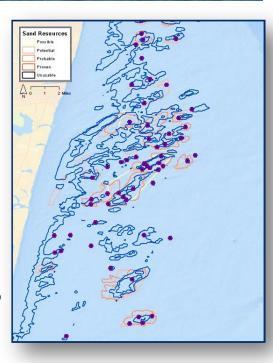
- Available for researchers
- Lamont's System for Earth
   Sample Registration (SESAR)

  <a href="http://www.geosamples.org/">http://www.geosamples.org/</a>

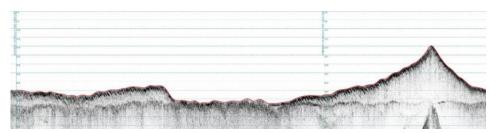


# #2 – Produce and roll out a Marine Minerals Information System

Deliver the best data available on offshore sediment characteristics and locations of significant sand resources to coastal planners and managers



## Hoping to launch next yr.







### #3 - Strengthen partnerships, expand dialogue

# At Federal, state, and local levels with stakeholders

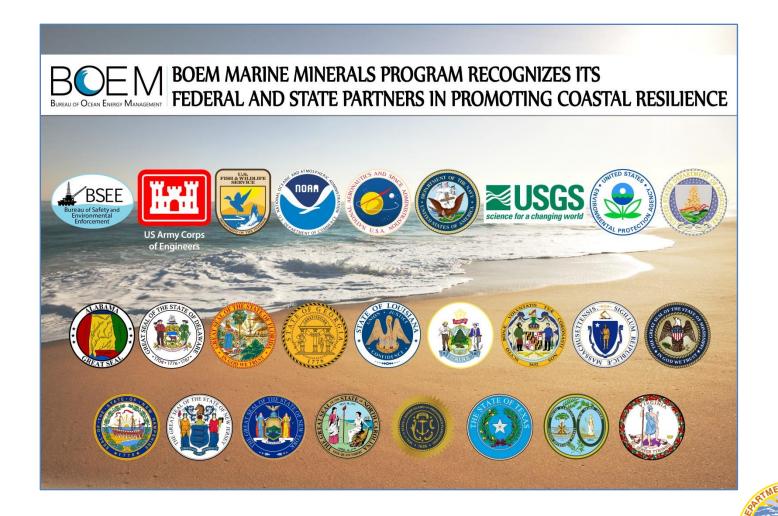








## **Priority 3 - Partnerships**

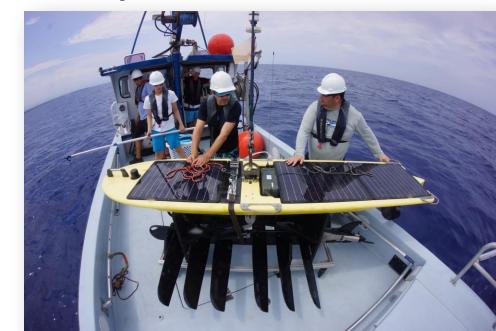




# #4 – Continue environmental studies and study partnerships

# With Federal, state and academic partners to help inform decisions and reduce impacts

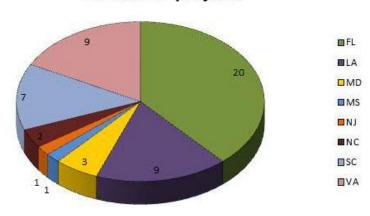
- USACE Nearshore Coastal Research
- USGS Pacific San Francisco; San Diego
- USACE Sea Turtle Entrainment
- USACE Sediment Sorting
- NOAA EFH Geospatial Analysis
- State Cooperative Agreements



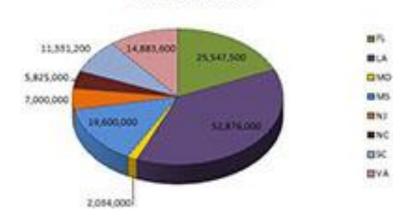


### **MMP Statistics Since 1995**

#### **Number of projects**



#### Cu Yd Allocated



### 303 Miles of coastline restored

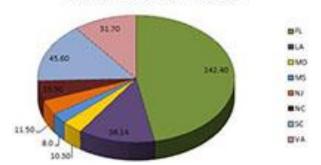
139+ MCY OCS Sand Allocated

**52** Leases Executed

**42** Projects completed

8 States

#### Miles of Shoreline Restored







## 2016 MMP Highlights

#### **4 New Negotiated Agreements –**

- Jacksonville, FL (1.4 MCY);
- Dare Co (4.8 MCY for Duck, Kitty Hawk, Kill Devil Hills, NC)
- Myrtle Beach (1 MCY for Garden City & Surfside Beach, SC);
- Gulf Island National Seashore (19.6 MCY, largest in MMP history, MS MsCIP)

**Sandy-Funded State Cooperative Agreements -** Round 1 completed , and Round 2 underway

Marine Minerals Information System – Data model developed, data input, hosting environment being evaluated

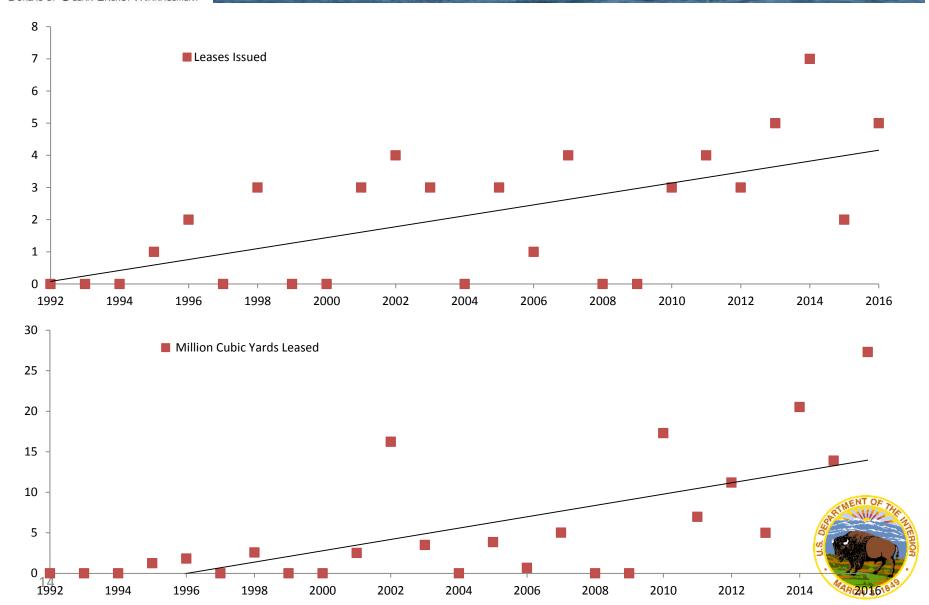
**ASAP** – reconnaissance level data being evaluated, design levels surveys completed, contract mod for add'n surveys in 2017

**Environmental Studies -** USGS IA in Pacific, DE Coop, Sea Turtle Entrainment Decision Tool w/ USACE, MCDA w/ USACE,

Northeast and Mid-Atlantic Ocean Plans - Offshore Sand Management



## **MMP Trends - Activity Increase**





## Challenges and Opportunities

- Can't manage what you don't measure whether it's the sand resource, the ecosystem, or wildlife
- 2. Is Federal sand limited in certain regions?
- Multiple use conflicts pipelines, submarine cables, fishing interests
- 4. Tradeoffs Help communities understand their options
- 5. Reminder of the sometimes invisible value of the program to the Nation: enjoying a day at the beach, restoring wetlands, protecting defense and other public infrastructure.



## Closing/Take away messages

**BOEM** is developing a National OCS Sand Inventory

BOEM continues to develop and conduct environmental studies to inform program

BOEM is a future-oriented agency looking over the horizon

Ultimately my goal is that we become known as the Bureau of Ocean Energy & *Minerals* 







# Thank You

### **Contact us:**

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### For more Information

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



