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Marine Minerals Information System (MMIS)

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NOAA National Oceanic and Atmospheric Administration U.S. Department of Commerce

U.S. Department of the Interior March 3, 1849

quantum SPATIAL

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What is the Marine Minerals Information System?

- MMIS is a **tool** to support a **National OCS Sand / Sediment Inventory** and foster access to the Nation's offshore mineral resources

- Serves **current** and **historical** marine minerals data and information (Atlantic, Gulf of Mexico, Pacific)

- Geodatabase and Query tools (**SediSearch**) lets users select sites and parameters to further analyze

- *Web services to publicly share marine minerals information (planned)*

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What questions will the MMIS support?

- **Where** are the OCS sand / sediment resources to **inform** management and environmental decisions within **ocean planning** and **lease use**?

- What is the **extent of compatible** sand / sediment **resources** in the OCS to support restoration?

- Where is the **authoritative source data** for sand resources?

- What vital marine mineral **products** and data on national, regional, and local scales do managers, planners, and scientists need?

- How do we **improve sharing** marine mineral datasets with our partners?

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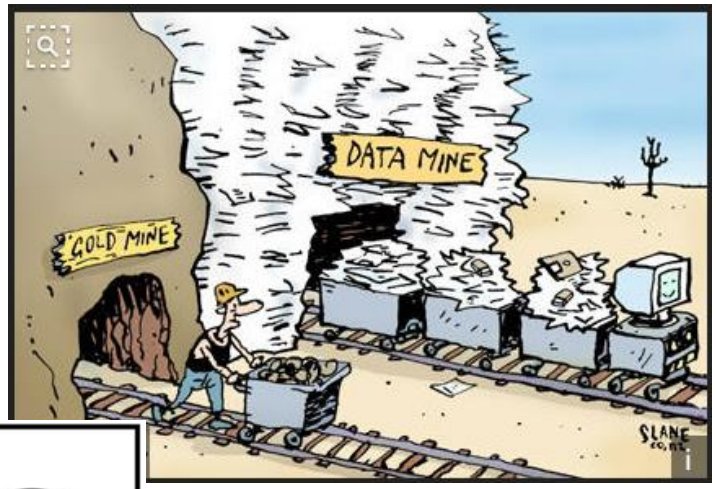
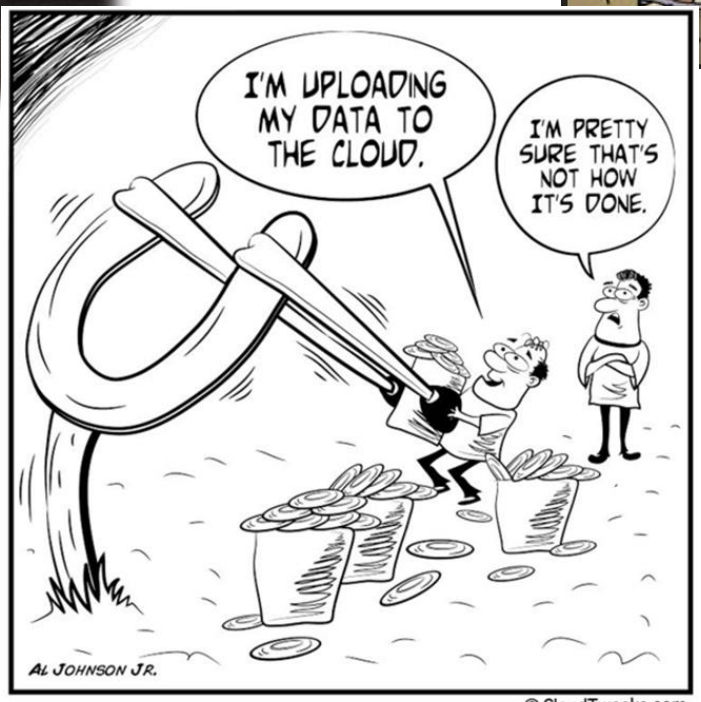
MMIS in the Past





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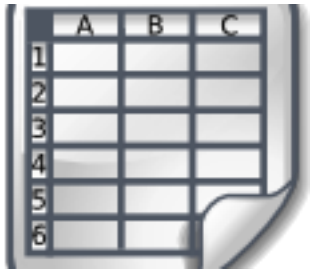
System of Record

- 30+ years of BOEM funded data
- Multiple formats
- Multiple locations



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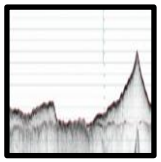
Data Model

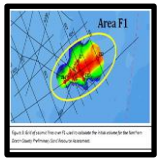


ASAP / GSAP – Analyzed Geotechnical / Geophysical Source Data

Digital data from physical core samples

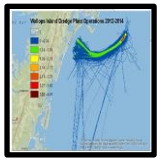
Digital derived data from external drives, CD's, paper sources

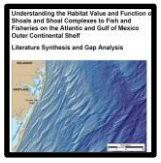
Cooperative Agreements



Leasing data

Dredge data

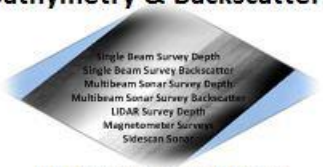




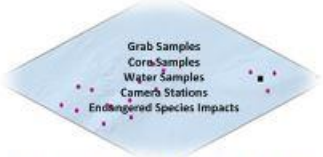
Environmental Studies Data

MMIS

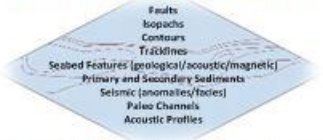
Bathymetry & Backscatter



Environmental Data



Bottom Characteristics



Leasing / Planning/Construction

Discover

Analysis

Id Gaps

Metrics

MMIS is a **tool** to support a **National OCS Sand Inventory**

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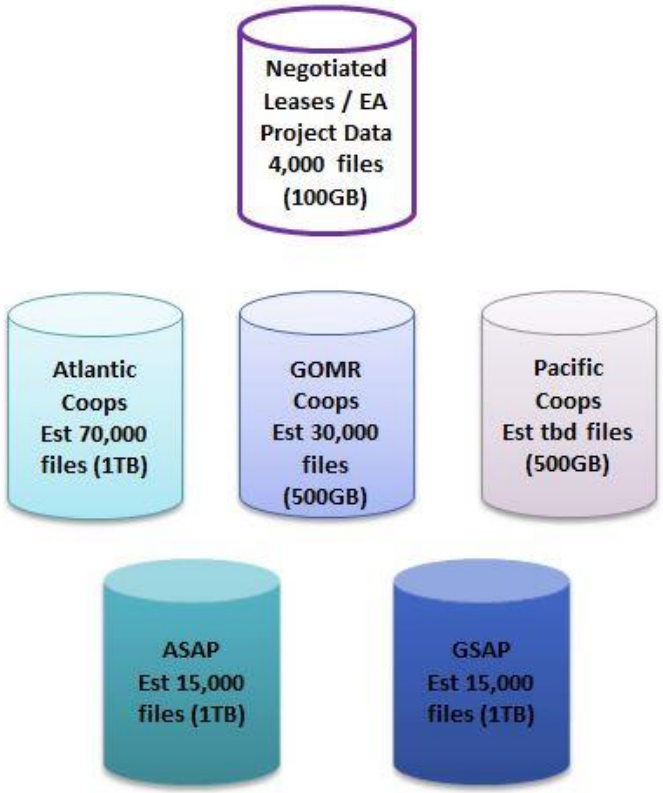
Data Development

1996-2017

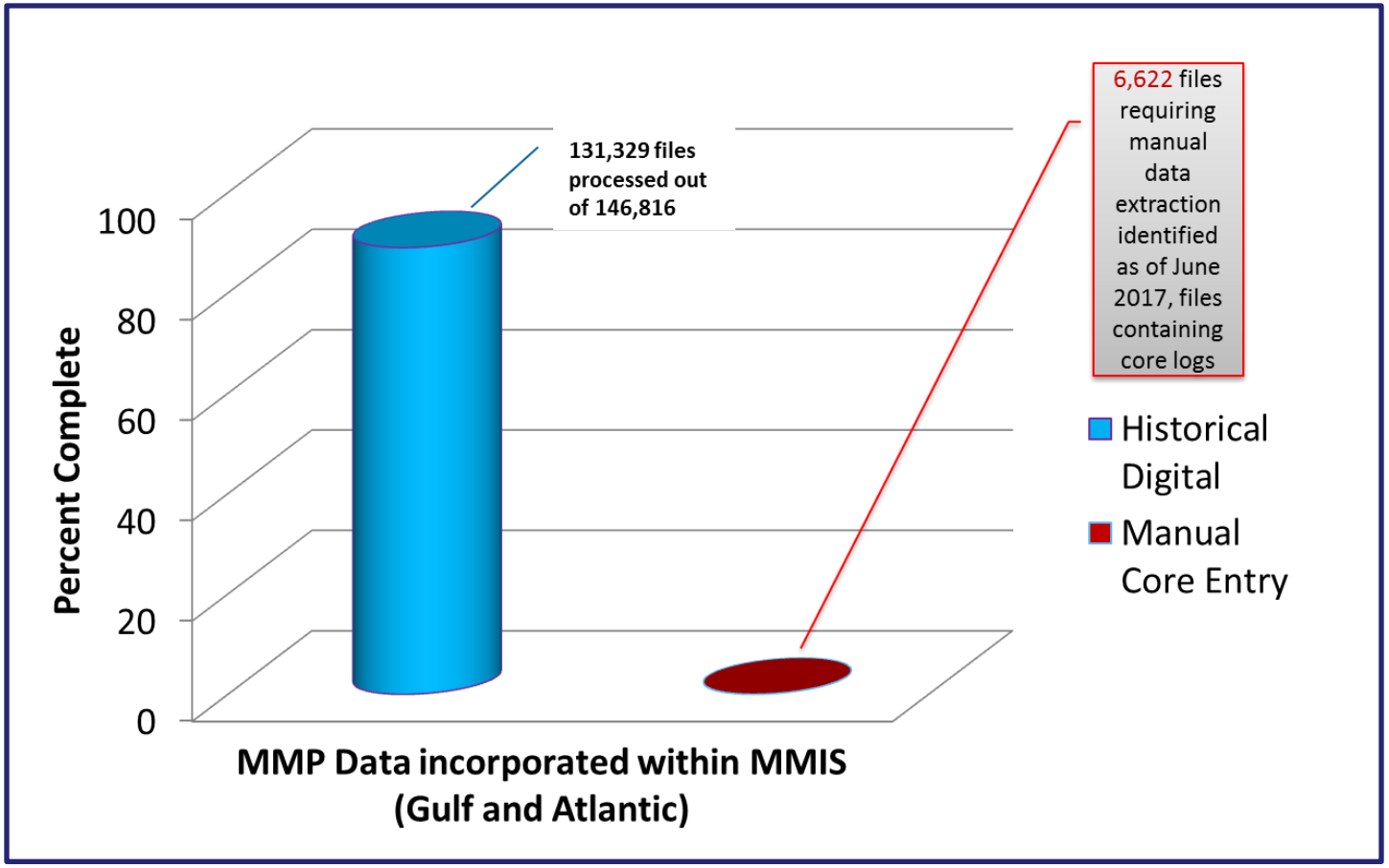
131,239 files processed out of 146,816 files

2018-2022

275,000+ files projected



Data Development Challenges



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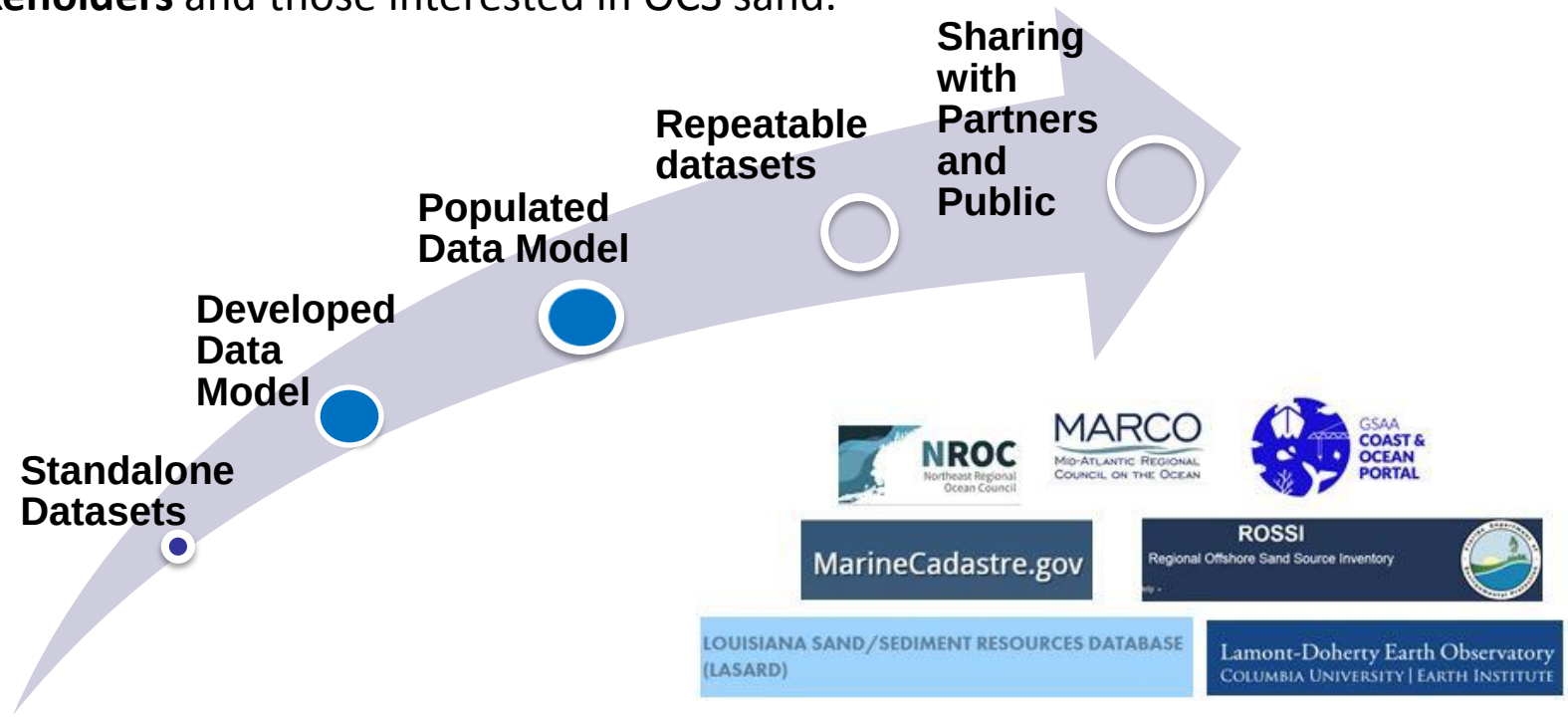
Data Accessibility

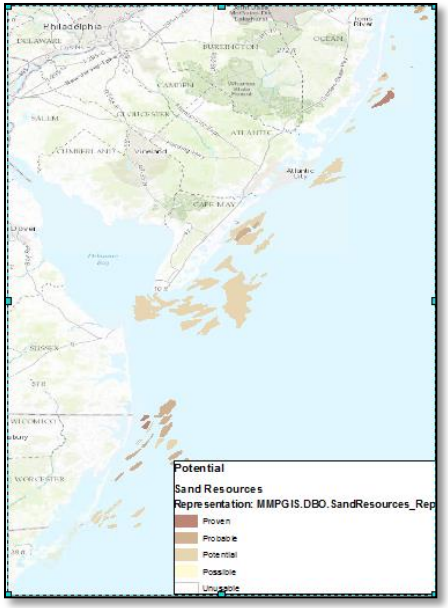
- Our goal is for BOEM to be the authoritative data source for federal offshore sand information and to **provide credible and reliable information to stakeholders** and those interested in OCS sand.

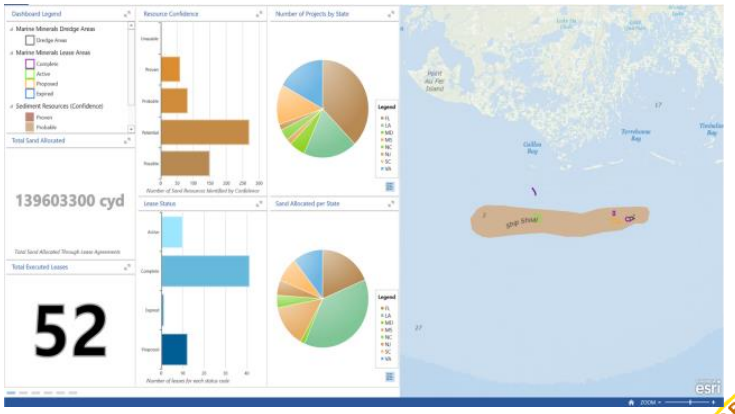


- Make information available through the Marine Cadastre and regional data portals such as those hosted by NROC and MARCO.

Products

- MMIS
  - Desktop Tools
    - SediSearch
    - Print Map
    - Aster
    - Habitat/Shoals (planned)
  - Web
    - Dashboard
    - Viewer





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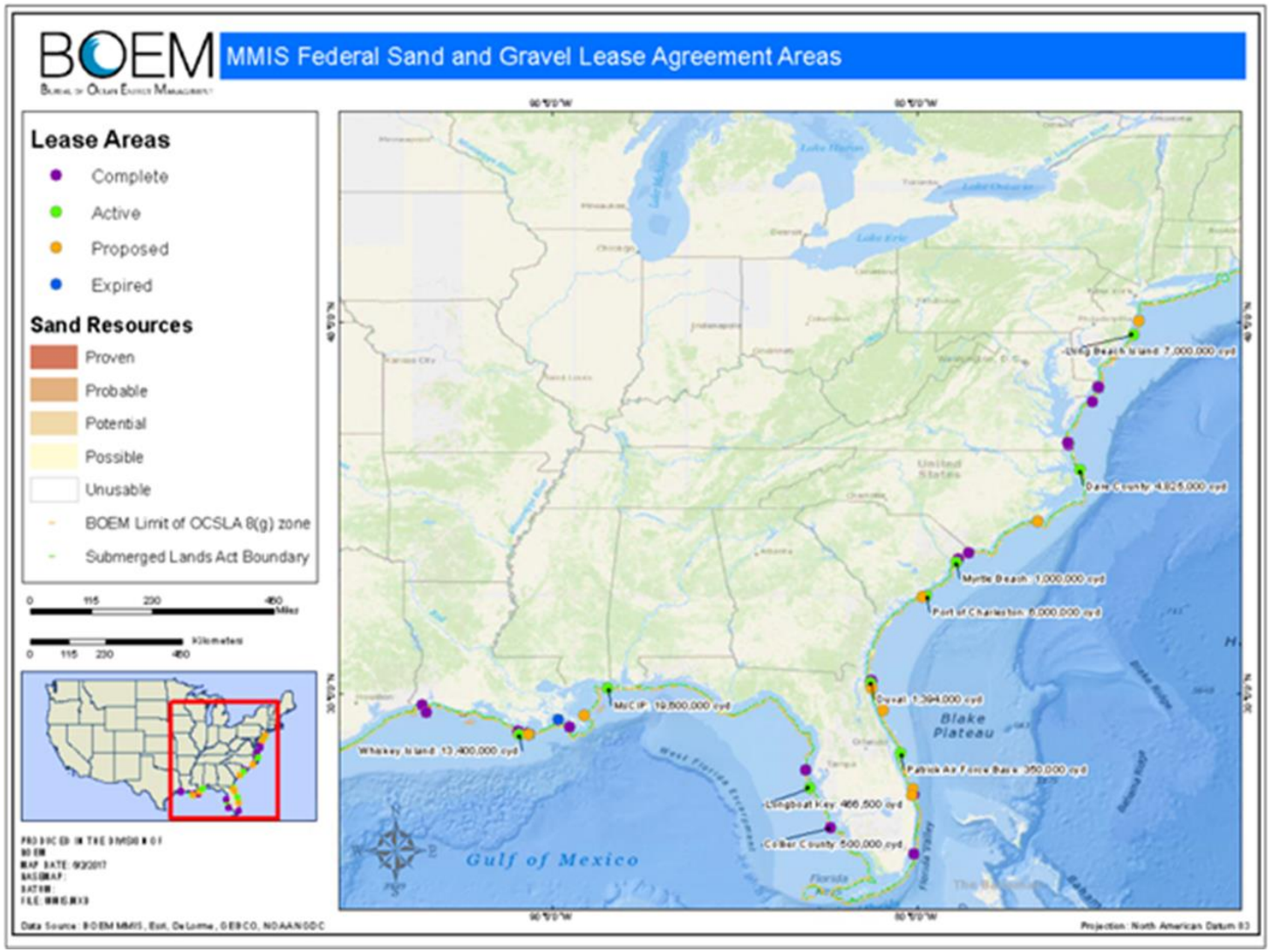
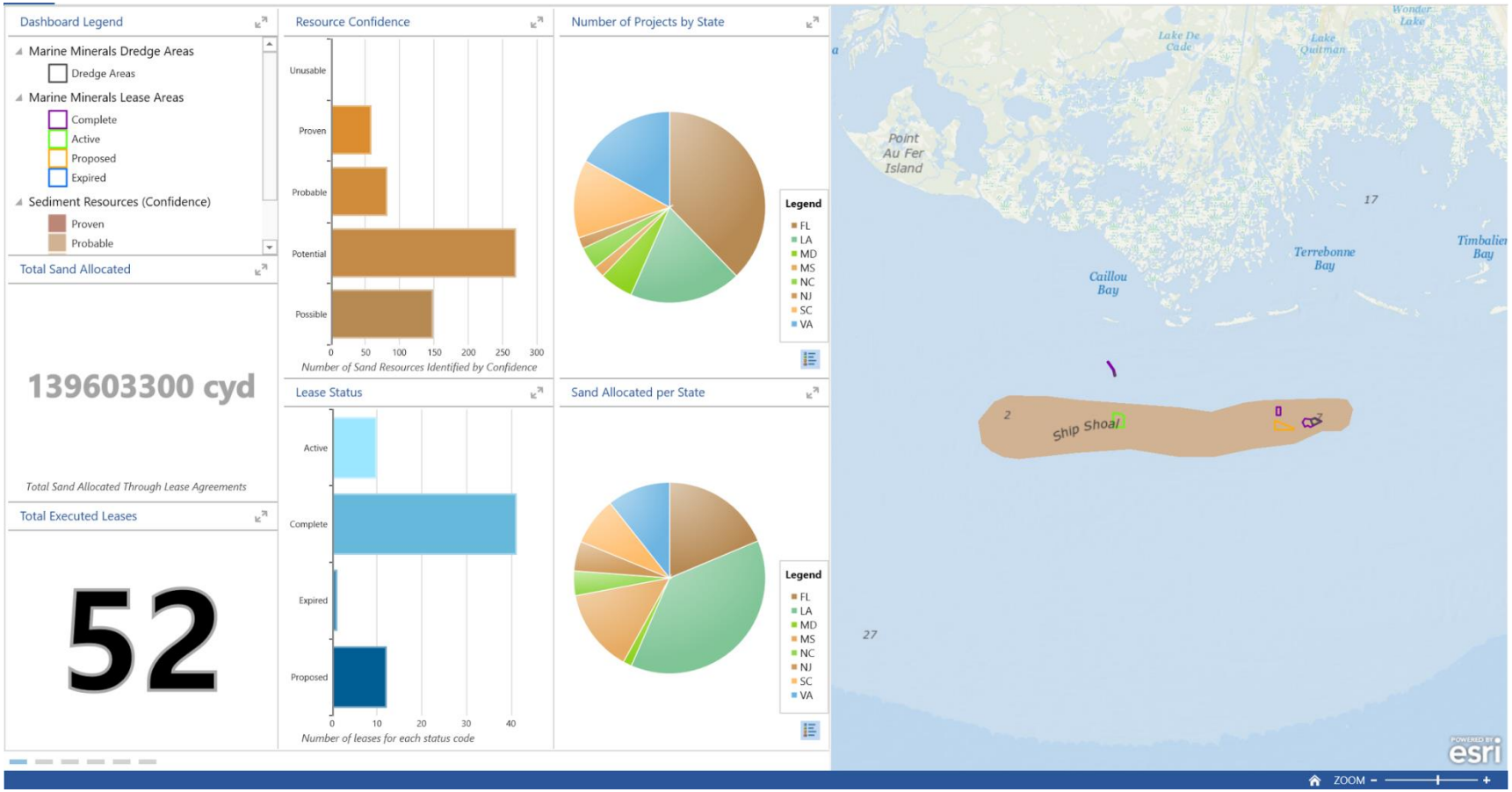
MMIS Project Dashboard



MMIS Dashboard



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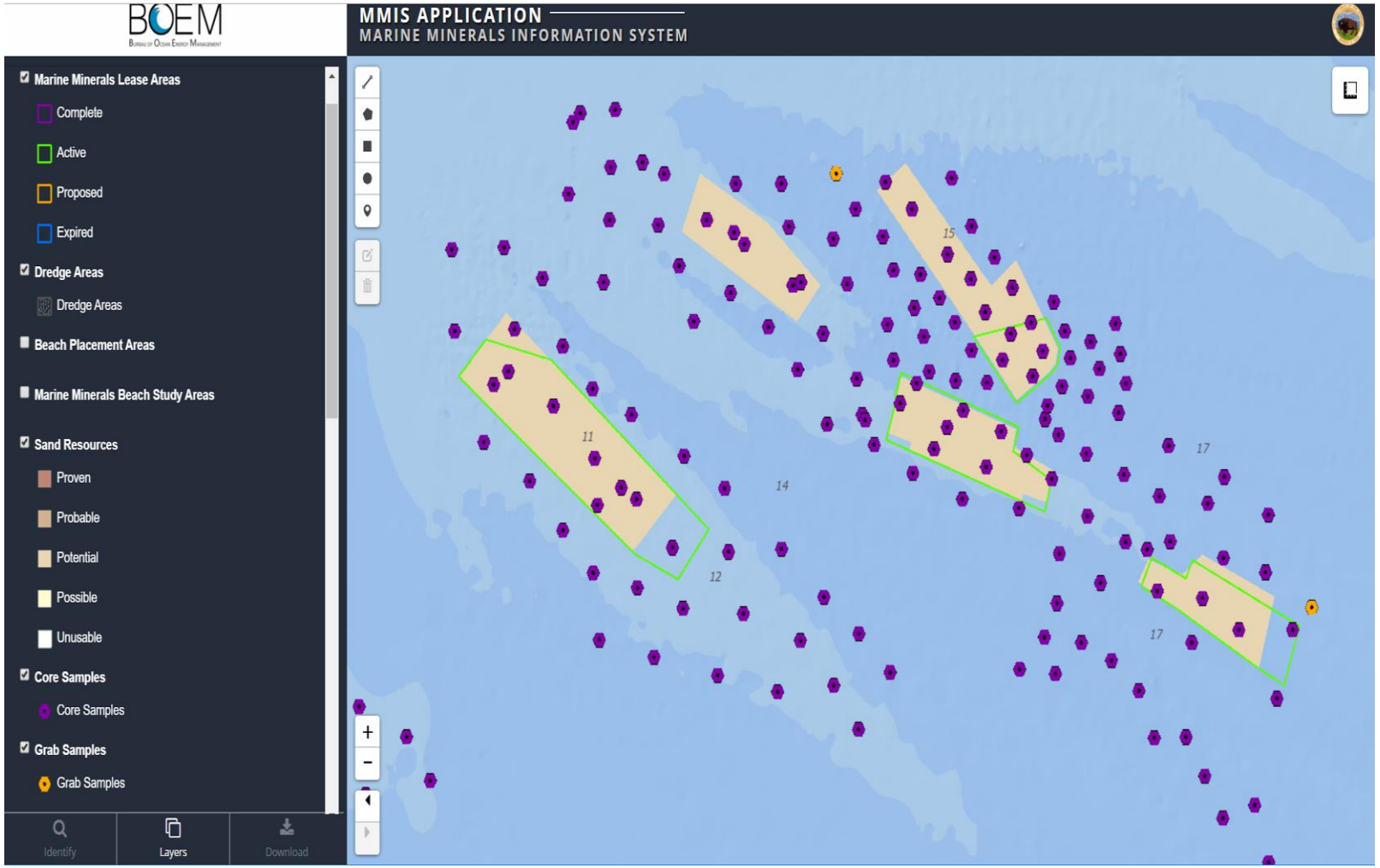
MMIS Viewer



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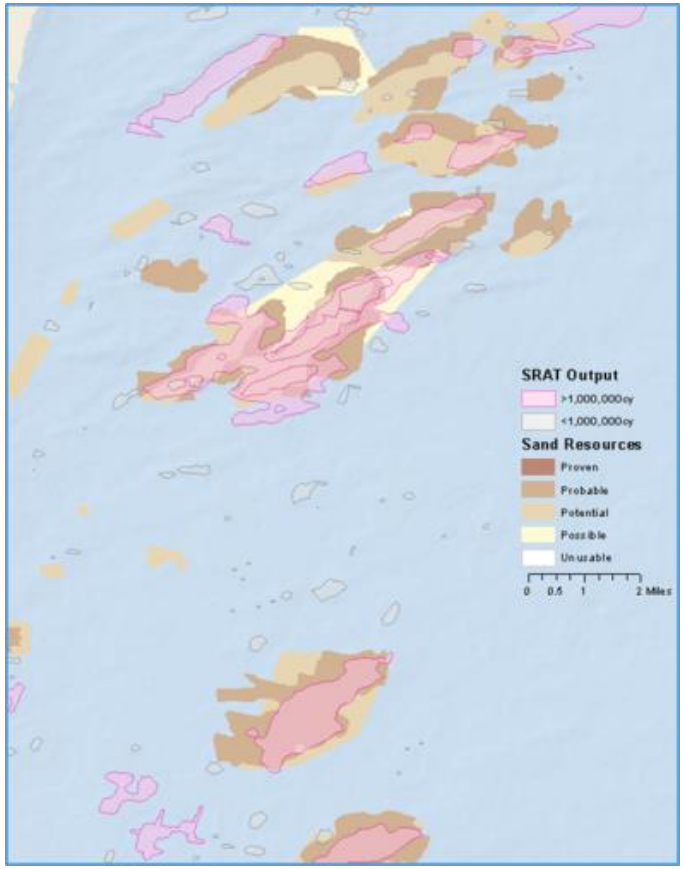
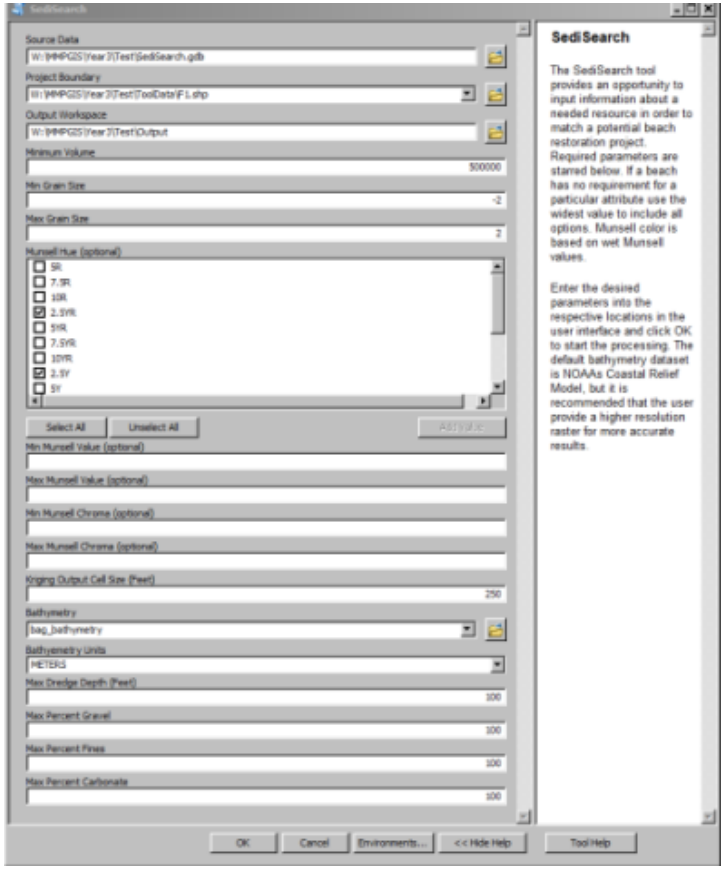
SediSearch

- SediSearch.gdb
- MMIS_103.tbx
  - SediSearch
- SediSearch_Sand_Resources_Rank_Category.lyr





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Next Steps

- QSI supporting transition of system to DOI host
- Maintaining the system with DOI
- Training (MMP Staff and ¼ FTE DBA within DOI)
- Continued analysis work and products development
- Continued coordination with our partners (Cooperative Agreement States, Regional Planning Bodies, USACE, NOAA, USGS…)