Marine Minerals Information System (MMIS)

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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**)
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?
• 30+ years of BOEM funded data

• Multiple formats

• Multiple locations
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**

- **Discover**
- **Analysis**
- **Id Gaps**
- **Metrics**

**MMIS is a tool to support a National OCS Sand Inventory**
1996-2017
131,239 files processed out of 146,816 files

2018-2022
275,000+ files projected
Data Development Challenges

131,329 files processed out of 146,816

6,622 files requiring manual data extraction identified as of June 2017, files containing core logs

MMP Data incorporated within MMIS (Gulf and Atlantic)

Percent Complete

Historical Digital

Manual Core Entry
• 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
The SediSearch tool provides an opportunity to input information about a needed resource in order to match a potential beach restoration project. Required parameters are stated below. If a beach has no requirement for a particular attribute use the widest value to include all options. Munsell color is based on wet Munsell values.

Enter the desired parameters into the respective locations in the user interface and click OK to start the processing. The default bathymetry dataset is NOAA's Coastal Relief Model, but it is recommended that the user provide a higher resolution dataset for more accurate results.
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…)}