

More frequent and powerful storms along the coastal United States and diminished sand resources in state waters mean greater demand for federal sediment resources used to restore and protect coastal communities and habitats. Finding the right sand and gravel for these shoreline projects is critical for success. BOEM’s publicly available Marine Minerals Information System (MMIS), a repository for the National Offshore Sand Inventory data (NOSI), is designed to make that first step quicker, easier, and less expensive.

What is the MMIS?

The Marine Minerals Information System (MMIS) is an interactive online support tool that provides public access to government-funded and BOEM-sponsored data and information about offshore mineral resources on the Outer Continental Shelf (OCS) in the Atlantic, Gulf of Mexico and Pacific (See Figure 1).

As the environmental steward of sand and sediment resources from the OCS, BOEM created the MMIS to assist coastal communities, including representatives of state and local governments, academia, industry and other federal agencies, in understanding what resources may be available and if there are any barriers to retrieving them.

One goal for MMIS is to assist project proponents in identifying potential sediment to support the construction of coastal resilience projects in the face of a changing climate. Another goal is to make publicly funded, trusted data and information accessible so others may use them.

Why is finding the right sand a challenge?

Coastal communities require sand, gravel, and sediment for projects, including shore and habitat restoration and construction of protective barriers against rising seas. They also require the same resources for emergency projects, which occur due to increasing frequency of hurricanes and other extreme weather. States have limited resources in their waters due to historic use, so they often look to federal waters. BOEM created the MMIS to provide potential users locations of sand resources as well as locations of potential conflicts such as underwater telecom cables, oil and gas infrastructure or important fish habitat. This type of detailed information is central to responsible management of the finite OCS sediment resources.

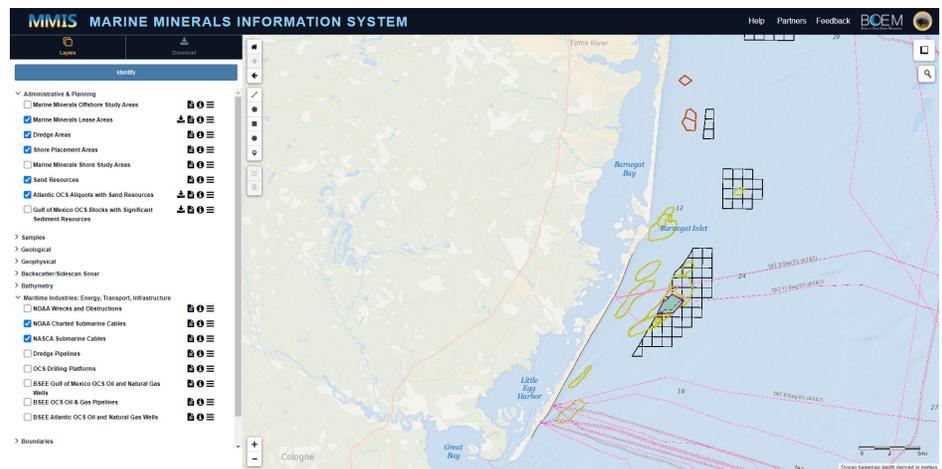


Figure 1 Marine Minerals Information System depicting offshore New Jersey lease, dredge and sand resource areas with submarine cables.

MMIS is accessible at <https://mmis.doi.gov/boemmmis/>.

What types of information does the MMIS contain?

User can find information about marine minerals lease areas, sediment sample information derived from multiple sources, identified sand resources and beach nourishment sites. The system houses more than 30 years of BOEM-funded geological and geophysical research from more than 40 partners.

For example, the dataset called Atlantic OCS Aliquots with Sand Resources depicts where potential sand resources may exist, as shown in the black boxes in Figures 1 and 2. These areas are based on remote survey evidence (seismic profiles, bathymetry or sidescan sonar) or verified through physical samples. This dataset is a registered dataset with Marine Cadastre (<https://marinecadastre.gov>), which is a joint BOEM and NOAA initiative providing discoverable data to meet the needs of offshore energy and marine planning communities.

The information from MMIS also supports the leasing dashboard (Figure 2) which shows information on a local, state and national level, including sand volume leased, miles of coastline restored and the number of projects.

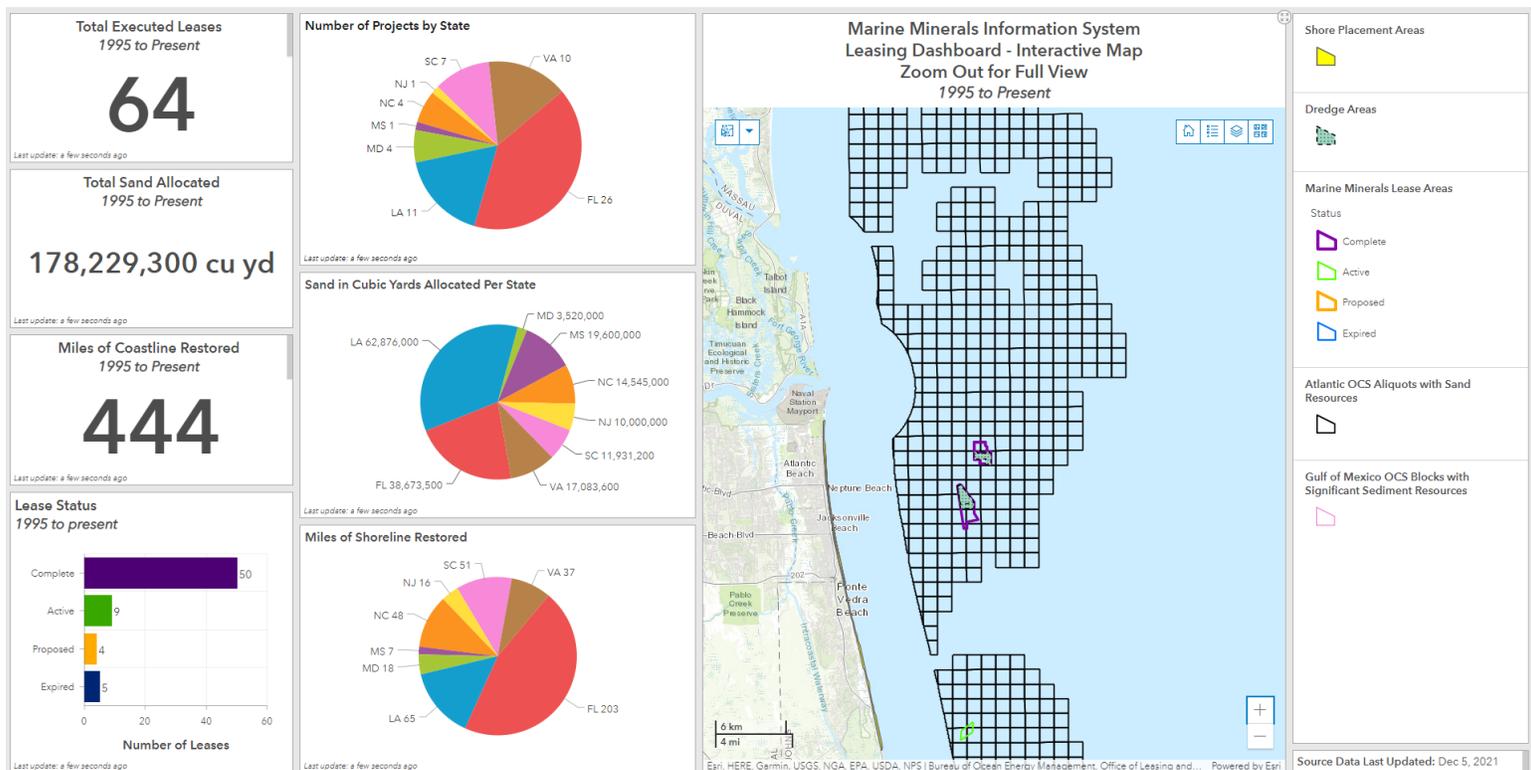


Figure 2 Minerals Leasing Dashboard Accessible at <https://www.boem.gov/current-marine-minerals-statistics>

How does the MMIS work?

The viewer is an interactive map that allows users to select from 25 data layers to display geographic data about offshore minerals. Most of the data are derived through partnerships with local, state and regional entities as well as other federal agencies. The data support BOEM's initiative to develop a National Offshore Sand Inventory.