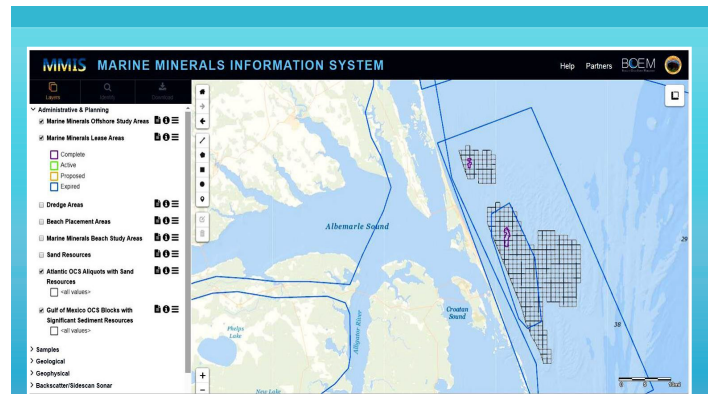


# Marine Minerals Information System

*Integrating and Visualizing Marine Minerals Data for Science, Policy, and Decision-Making*

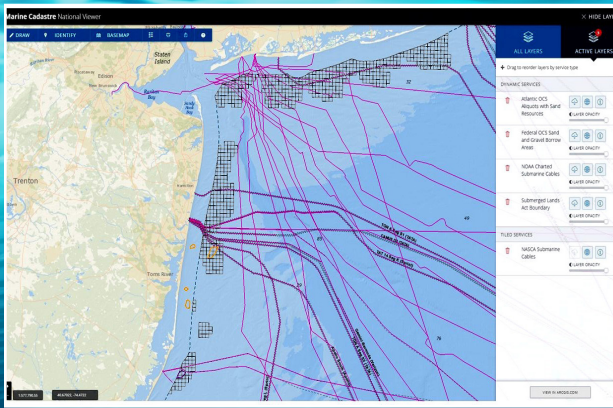
**Context:** Outer Continental Shelf (OCS) sand and gravel resources are vital sources of material for the construction of coastal protection and restoration projects, including efforts to protect coastal communities, national defense facilities, and federal and state infrastructure. In recent years, there has been a growing demand for OCS sediment for planned projects, as well as for emergency needs to restore areas damaged by natural disasters. At the same time, proponents of planned infrastructure projects are requesting higher volumes of OCS sediment, driven by diminishing resources in state waters and a high frequency of recent storms along the Atlantic and Gulf of Mexico coasts. Further, given the significant number of other ocean users (e.g., developers of offshore energy projects, and owners and operators of submerged telecommunication or power cables), BOEM strives to reduce or eliminate the potential for multiple use conflicts or environmental impacts that could result from marine minerals projects, which can make it challenging to identify new potential areas from which to borrow or dredge sediment.



*Map depicting various data sets for offshore North Carolina. The user selects data categories on the left, then zooms in to learn more about a resource, such as the source of the data, whether a resource is being leased, its bathymetry and dimensions, its characteristics (grain size, color and other attributes), where it will be placed, and other ocean uses such as submerged communication cables or unexploded munitions.*

Ensuring all parties have access to detailed offshore information is critical to responsible decision-making. To help address this need, BOEM's Marine Minerals Program has developed the Marine Minerals Information System (**MMIS**) Viewer as part of the National Offshore Sand Inventory. The MMIS is a one-stop, state-of-the-art interactive support tool, available online, that provides public access to data and information relevant to the non-energy offshore mineral resources throughout the U.S. Atlantic, Gulf of Mexico and Pacific OCS. It is accessible at <https://mmis.doi.gov/BOEMMMIS>.

**How does the MMIS fit into the National Offshore Sand Inventory?** Fundamental to being a good steward of a resource is knowing how much exists. Therefore BOEM has made it a priority to create a **National Offshore Sand Inventory**. Marine minerals geological, geophysical, and environmental information collected throughout the past three decades provides the underlying organization for the inventory, while recent and ongoing data collection and analysis helps us further our understanding of available marine mineral resources. The inventory includes data archived by academic, governmental, and other sources; this information is captured in the MMIS to support proactive planning for expected and emergency needs.



The MMIS is hosted on a Department of the Interior platform. The viewer and select datasets can be found at [MarineCadastre.gov](http://MarineCadastre.gov), which BOEM developed in partnership with the NOAA Office for Coastal Management.

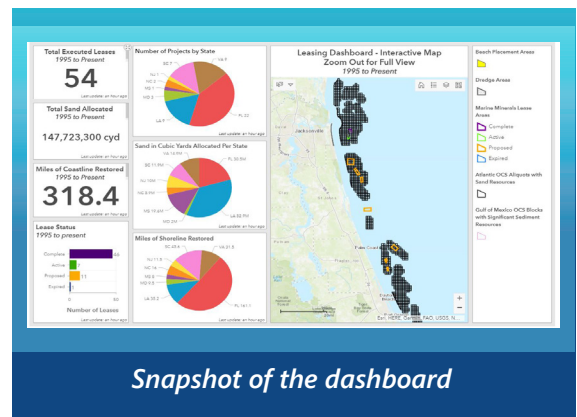
MMIS data feeds into the MarineCadastre. This map displays data such as Atlantic OCS sand resource areas and other relevant data. Other data sets allow the user to view existing offshore projects, submerged power lines, shipwrecks, or offshore oil and gas infrastructure in other regions.

**How does it work?** By selecting any of the data layers, the interactive map viewer allows users to easily download, visualize, and explore geographic data about non-energy offshore materials. More than 20 data layers are available in the viewer, and are available for download in several formats (e.g., geodatabase, shapefile, or .csv files). Map-based queries enable users to find relevant marine minerals information products, which have been generated from other authoritative sources.

**What types of information does it contain?** Through the MMIS, users can find information about marine minerals lease areas, core sample information derived from multiple sources, identified sand resources, and beach nourishment and coastal restoration sites. The system pulls from more than 30 years of BOEM-funded geological and geophysical research, much of it previously stored on CDs and in PDFs. The MMIS is the result of coordination through our *partnerships* with other federal agencies and state and local governments, particularly research conducted through our cooperative agreements with states.

**What is on the dashboard?** The easy-to-navigate dashboard shows information on a local, state and national level, including sand volumes leased, lease and nourishment sites, miles of coastline restored, and the number of projects.

**Who can use the system?** BOEM expects that coastal communities, government officials, coastal engineers and planners, academics, and those involved in national defense, telecommunications, offshore energy, or fisheries will find the MMIS Viewer to be an informational and educational tool that supports responsible resource stewardship.



**Does the MMIS provide environmental data?** The MMIS provides citations for BOEM environmental study reports and environmental assessments through the *Environmental Studies Program Information System (ESPIS)* or through *MMP in Your State pages*, and includes topics such as sea turtle behavior or habitat, and fish use of shoal habitat in specific offshore areas. Geological and geotechnical data are incorporated into the MMIS to help future analysis and inform reviews under the National Environmental Policy Act (NEPA) process.

Learn more at <https://mmis.doi.gov/BOEMMMIS> or <https://www.boem.gov/Marine-Minerals-Program/>

**About the Bureau of Ocean Energy Management**

The Bureau of Ocean Energy Management (BOEM) promotes economic development, energy independence, and environmental protection through responsible, science-based management of offshore conventional and renewable energy, and marine mineral resources.



**For More Information:**

Marjorie Weisskohl | BOEM Office of Public Affairs | (703) 787-1304  
[Marjorie.Weisskohl@boem.gov](mailto:Marjorie.Weisskohl@boem.gov)