

The Department of the Interior's Bureau of Ocean Energy Management (BOEM) promotes energy independence, environmental protection and economic development through responsible, science-based management of energy and mineral resources on the U.S. Outer Continental Shelf (OCS). BOEM manages non-energy marine minerals (sand, gravel, etc.) in the OCS in a manner that facilitates access, promotes responsible use and minimizes or avoids environmental impacts.

## **Overview**

Erosion along U.S. coastal beaches, dunes, barrier islands and wetlands is a serious problem affecting the nation's natural resources, energy supply, defense, public infrastructure and tourism. OCS sand and gravel resources are vital for the construction of coastal protection and restoration projects, including efforts to protect coastal communities, national defense facilities and federal and state infrastructure. Natural disasters have also increased demand for emergency sediment to restore damaged areas.

The OCS Lands Act gives BOEM the authority to manage minerals on the OCS. BOEM leases sand, gravel or shell resources from the OCS for shore protection, beach nourishment and barrier island restoration providing vigorous safety and environmental oversight. The bureau also evaluates and manages other strategic and critical minerals to support our nation's security and economy.

To date, BOEM has authorized more than 165 million cubic yards of OCS material for 60 coastal restoration projects in eight states, restoring more than 380 miles of the nation's coastline. .¹ Current

statistics are available at https://www.boem.gov/MMP-Current-Statistics

In 2019, BOEM joined federal, state and local partners to celebrate the completion of Phases 1 and 2 of the Mississippi Coastal Improvement Program. This included the restoration of Ship Island, which will be the largest coastal restoration initiative in the bureau's history.

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Marine minerals are most critical along the Atlantic and Gulf Coasts, with an evolving interest in the Pacific and Alaska. As the sole federal agency responsible for leasing OCS marine minerals, BOEM has a number of initiatives and responsibilities including the following:



**National Offshore Sand Inventory** – Maintain an inventory of national sand resources available for coastal protection and restoration. The inventory helps reduce response time in disaster recovery and facilitate long-term planning and ensures all parties have access to detailed offshore information that is critical to decision making.



Marine Minerals Information System (MMIS) – Maintain system of offshore sediment data from multiple sources, including BOEM-funded research, to create a one-stop, interactive tool that provides public access to information and data on offshore mineral resources throughout the U.S. Atlantic, Gulf of Mexico and Pacific OCS. To learn more about BOEM's MMIS, visit: <a href="https://mmis.doi.gov/BOEMMMIS/">https://mmis.doi.gov/BOEMMMIS/</a>.



**Environmental Oversight** – Implement science strategy that focuses on identifying compatible sediment deposits and conducting necessary environmental studies to make informed decisions regarding the use of federal mineral resources. Oversee/support environmental assessments, environmental impact statements, and consultations on the effects of dredging on biological, physical and cultural resources. Use science to make informed decisions regarding the use of OCS mineral resources. Identify sound mitigation practices to minimize or avoid impacts.



**Marine Mineral Research** – Utilize four types of research—biological studies, physical modeling studies, environmental impact investigations and marine mineral resource evaluations —to evaluate the effects of specific proposed dredging or mining operations, as required under current environmental laws. Incorporate results into lease requirements and stipulations for dredging of OCS marine minerals.



**Critical Minerals** – Inventory and identify new supplies of marine mineral resources of commercial or economic interest. Continue to work with other federal agencies to determine which areas of the OCS have potentially significant critical mineral resources, with a focus on cobalt, manganese and rare earth elements. These minerals are essential cathode components in Lithium-ion batteries and are used in a range of applications from personal electronics to electric vehicles to military uses.

The success of BOEM's marine minerals initiatives depends on partnerships with other federal agencies, state and local governments, regional planning bodies, industry, business communities, academia, non-governmental organizations, Tribes and the general public.

BOEM conducts meetings with regional sand management working groups to discuss coastal restoration issues, concerns and challenges. These meetings encourage information and perspective sharing. They also foster communication and coordination and program updates on funding opportunities, research efforts and coastal projects.

