

BOEM Response to Hurricane Sandy: Update on Recovery Assistance and Resilience Planning

In October 2012, Hurricane Sandy struck the East Coast, affecting millions of people, causing billions of dollars of destruction, and creating widespread environmental damage. The Bureau of Ocean Energy Management (BOEM) was called upon along with partners at all levels of government to help restore coastlines and communities devastated by Hurricane Sandy. BOEM also added extra resources to foster long-term resilience planning.

BOEM's Marine Minerals Program (MMP) is responsible for managing non-energy minerals (primarily sand and gravel) on the ocean floor, and is the only Federal program authorized to grant access to outer continental shelf (OCS) sand. OCS sand has been a source of material for numerous storm damage reduction and coastal restoration projects taking place as a result of Sandy. As stewards of these resources, the bureau ensures that the removal of any mineral resource is conducted in a safe and environmentally sound manner, and that any potentially adverse impacts on the marine, coastal, or human environments are avoided or minimized.



BOEM's Hurricane Sandy response included sand from the Outer Continental Shelf to reinforce the dunes and restore the beach at Sandbridge, Virginia Beach in 2013. Photo: Marjorie Weisskohl, BOEM.

Priorities:

BOEM is committed to long-term recovery and resiliency of coastal areas damaged by Hurricane Sandy. The five primary aspects of the MMP's role in Hurricane Sandy recovery have been to:

- participate in the Federal Emergency Management Agency's (FEMA) National Disaster Recovery Framework;
- dedicate personnel to negotiate agreements for urgent coastal restoration projects;
- coordinate with stakeholders to ensure exchange of vital information on a continuing basis;
- collaborate with state agencies to determine current and future OCS sand resource needs; and
- identify additional sand resource borrow areas.

In 2013 BOEM received \$13.6 million for Hurricane Sandy response under the Disaster Relief Appropriations Act, and in 2016, an additional \$2.7 million to address critical needs for OCS sand throughout the areas undergoing recovery and rebuilding. BOEM has used approximately \$6 million of these funds for cooperative agreements with Atlantic coast states to identify OCS resources and update maps and data for future projects, determine future sand needs, conduct coastal resiliency studies and OCS sand resource evaluations, and supplement broad scale environmental monitoring. The Act strengthened the bureau's ability to work with its partners to identify sand resources and ensure that

appropriate work can be completed so sand is conveyed in a timely and environmentally responsible manner. Each Hurricane Sandy [state page](#) contains summary reports from the cooperative agreements.

Since Secretary of the Interior Sally Jewell announced the funding in May 2013, BOEM has been fully engaged in executing all aspects of its response plans, including restoration projects in [Sandbridge Beach](#) and [Wallops Island, Va.](#); [Brevard County, Fla.](#); and [Long Beach Island, N.J.](#)

In 2014, BOEM awarded a contract to identify, map, take core sediment samples of new sources of offshore sand in federal waters from Massachusetts to Miami, Fla., and analyze the data. To support the effort, BOEM completed an [Environmental Assessment](#) describing and evaluating the potential environmental impacts related to reasonably foreseeable geophysical and geological impacts from the survey activities. It also issued a [Finding of No Significant Impact](#) for proposed activities under the initiative, called the [Atlantic Sand Assessment Project or ASAP](#). When coupled with broad scale environmental monitoring, the ASAP will facilitate a regional sand resource management perspective. BOEM and the Lamont-Doherty Earth Observatory dedicated the ASAP core repository and database in October 2016.

Florida's southeast coast provides an example of sand resources within state waters being depleted. BOEM balances its responsibility to optimize OCS resource use while considering a myriad of physical, biological, economic and social implications. To address this responsibility, BOEM is actively engaged with Florida's Department of Environmental Protection and the U.S. Army Corps of Engineers to determine how best to manage the allocation of Federal sand resources to that region.

BOEM has conducted regional sand management working group [meetings](#) and participated in regional ocean council meetings. Hurricane Sandy highlighted the need for all stakeholders to take a more proactive regional approach to building coastal resilience, rather than addressing needs at the individual project scale.

Other work related to Hurricane Sandy includes broad-scale environmental monitoring offshore Cape Canaveral, begun in October 2013 through [agreements](#) with the University of Florida and the Navy. Data obtained from this six-year study will support more informed resource management decisions by helping BOEM to better understand the ecological function and recovery of dredged ridge-swale habitats.

Another lasting benefit from the disaster relief funding and BOEM's ramped-up engagement is the strengthened relationships with existing and new stakeholders. These include ongoing discussions with sand management working groups in the Northeast, Mid-Atlantic, South Atlantic, Florida, and the Northeast Regional Ocean Council; the Mid-Atlantic Regional Planning Body; Association of American State Geologists, American Shore and Beach Preservation Association, Florida Shore and Beach Preservation Association, American Fisheries Society, and other groups concerned with building coastal resilience.



After surgically implanting a transmitter to track the movement of a juvenile finetooth shark, a researcher returns the fish to its native habitat off Florida's Cape Canaveral. Adult finetooth sharks are abundant on the Canaveral Shoals complex from fall through spring. About 400 fish have been tagged in the first three years of the study. Photo courtesy of Eric Reyier, Kennedy Space Center Ecological Program.

For the latest information on the program, see <http://www.boem.gov/Marine-Minerals-Program/>.

Follow us @   