

Facts and Figures

3. Authorized But Not Yet Constructed

Work under this category includes constructing flood and storm damage risk reduction projects at sites where either an authorized but not yet constructed Corps project or a partially constructed Corps project existed.

18 Projects

Delaware: 1 project
New Jersey: 11 projects
New York: 5 projects
Virginia: 1 project

4. Coastal Storm Damage Risk Reduction Studies

Work under this category includes completion of ongoing Corps of Engineers flood and storm damage risk reduction studies that were underway at the time of Hurricane Sandy and received funding in any of the three fiscal years prior to enactment of the Disaster Relief Appropriations Act of 2013.

17 Studies

Delaware: 1 study
New Jersey: 9 studies
New York: 6 studies
Rhode Island: 1 study

5. Continuing Authorities Program

This program allows the Corps of Engineers to plan, design, and construct smaller projects under existing program authorities in place from Congress.

9 Projects

Connecticut: 1
Delaware :1
Maryland: 1
Massachusetts: 2
New Jersey: 1
New York: 1
Virginia: 2

Existing CAP Authorities in use

- Section 103: Hurricane Storm Damage Reduction
- Section 111: Shore Damage Attributable to Federal Navigation Works
- Section 205: Small Flood Damage Reduction Projects

Websites for information

- <http://www.nad.usace.army.mil/Sandy>
- <http://www.nad.usace.army.mil/CompStudy>
- www.facebook.com/HurricaneSandyCoastalRecovery
- www.twitter.com/ArmyCorpsNAD



For more information about projects in your area, contact our nearest Corps office or centers of expertise:

North Atlantic Division (Entire Region)

347.370.4550
dll-cenado-pa@usace.army.mil

New York District

917.790.8007
cenan-pa@usace.army.mil

Philadelphia District

215.656.6515
philly@usace.army.mil

Baltimore District

410.962.3787
cenab-pa@usace.army.mil

New England District

978.318.8238
cena-pa@usace.army.mil

Norfolk District

757.201.7673
cenao-pa@usace.army.mil

Institute for Water Resources

703.428.8015

Engineer Research & Development Center

601.634.3188
erdcpublicaffairs@usace.army.mil

National Planning Center of Expertise for Coastal Storm Risk Reduction

347.370.4550
PCXCSDR@usace.army.mil

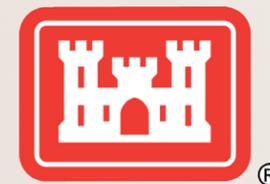
Updated 10/2013

Hurricane Sandy Coastal Management

Facts and Figures

October 2013

With the passage of the Hurricane Sandy Disaster Relief Appropriations Act of 2013, the U.S. Army Corps of Engineers has both the authority and the funding to repair and complete ongoing coastal storm damage risk reduction projects and studies in the Northeast. These projects and studies seek to reduce the vulnerability of the region from future storms.



U.S. Army Corps of Engineers
North Atlantic Division

Facts and Figures

Authorities

The Disaster Relief Appropriations Act of 2013 (PL 113-2) appropriated more than \$5 billion to the U.S. Army Corps of Engineers to address areas impacted by Hurricane Sandy. The Corps' North Atlantic Division received more than \$4 billion of this funding. Under the Disaster Relief Appropriations Act, the North Atlantic Division will be executing projects and studies in the following five categories.

1. Near-Term Coastal Restoration

Funded through Flood Control and Coastal Emergencies appropriations, this work restores previously constructed Corps projects that were severely impacted by Hurricane Sandy. Degraded coastal features increase risks and vulnerability from future storm events. This work entails placing more than 26 million cubic yards of sand.

25 Approved Projects

Connecticut: 2 projects
• 2 not yet awarded

Delaware: 5 projects
• 5 construction in progress

Maryland: 1 project
• 1 awarded

New Jersey: 8 projects
• 3 completed
• 5 construction in progress

New York: 6 projects
• 4 construction in progress
• 1 awarded
• 1 not yet awarded

Rhode Island: 1 project
• 1 not yet awarded

Virginia: 2 projects
• 2 completed

2. Operations and Maintenance

Work in this category entails repair of Sandy-damaged navigation channels and structures that the Corps has built and maintains. These projects include surveys and repairs to breakwaters, storm surge barriers, jetties, bulkheads and revetments, as well as restoration of federal navigation channels that experienced shoaling as a result of Hurricane Sandy.

85 Approved Projects

Connecticut: 6
Delaware: 6
Massachusetts: 11
Maryland: 3
Maine: 3
New Jersey: 20
New York: 17
Rhode Island: 3
Virginia: 16

18 Completed Projects

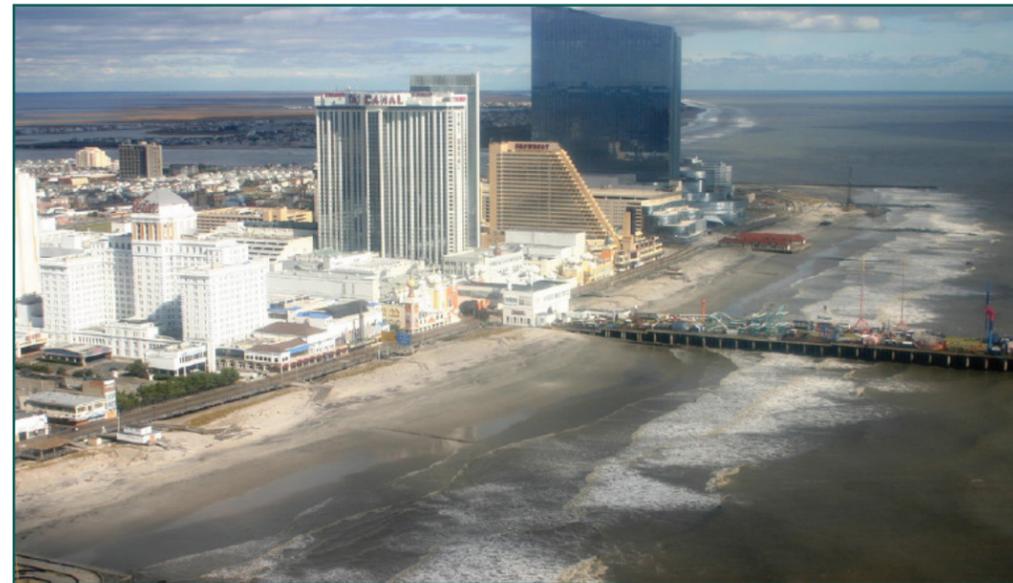
Massachusetts: 4
Connecticut: 1
New York: 4
New Jersey: 2
Delaware: 2
Virginia: 5

Beaches: A vital resource

Beaches serve to reduce damage from coastal storms by absorbing wave energy and avoiding water overtopping dunes, which could subsequently flood communities situated behind the beach. Beaches are sacrificial in nature, which means they absorb the energy, but the trade-off is millions of gallons of salt water washing the sand into the ocean. A storm of Sandy's magnitude is capable of completely destroying a dune and leaving the beach (berm) much narrower.

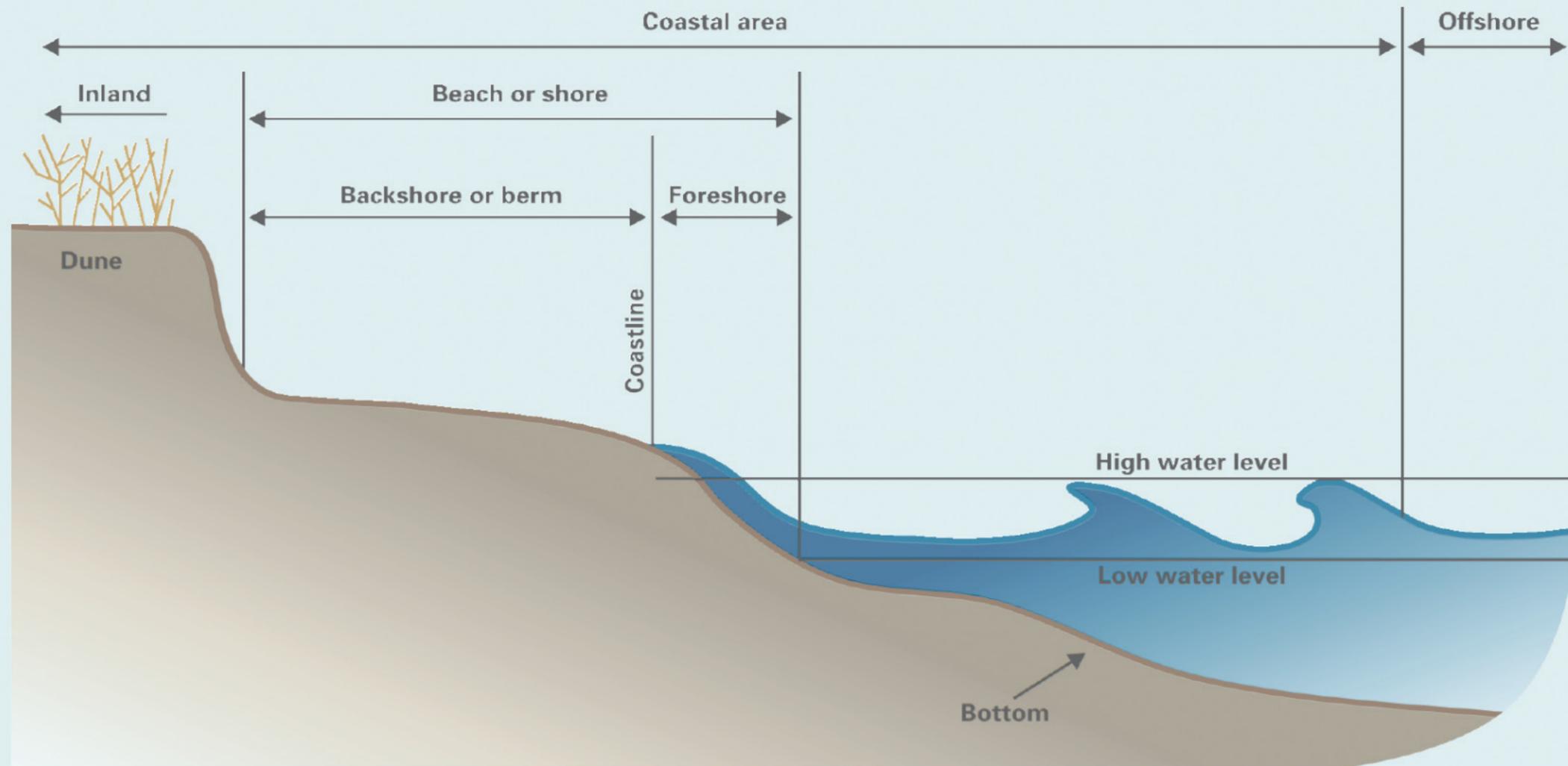
Near-term Hurricane Sandy recovery the U.S. Army Corps of Engineers is responsible for in the North Atlantic Division includes restoration of beaches and dunes. where a Corps project existed during Sandy. In the eight months since federal funds were appropriated, the Corps has placed more than 40 percent of a total 26 million cubic yards of sand, which is enough sand to fill 19 Empire State Buildings, on identified beaches in Connecticut, Rhode Island, New York, New Jersey, Delaware and Virginia to restore dunes and berms to their pre-storm conditions. The beach restoration in all states is expected to be completed by fall 2014.

Beginning in spring 2014, the North Atlantic Division is scheduled to begin work on new projects to pump sand on beaches and then construct dunes and widen beaches (berms) in areas where the Corps did not have a completed project in place during Sandy. These new projects, in addition to restoration of existing projects, will provide a stronger coastal defense along nearly every mile of the north Atlantic coast in New York and New Jersey to reduce the risk of future coastal storm damage.



Beach damage caused by Hurricane Sandy on the coast of Atlantic City, N.J.

The components of a coastal beach work together as a system



Coastal beaches function as a system. The beach not only includes the dunes and berm, or the dry part of the beach, but also the wet part of the beach that slopes underwater.

Program Overview

The U.S. Army Corps of Engineers is committed to fulfilling the requirements set in the Hurricane Sandy Disaster Relief Appropriations Act of 2013. Degraded coastal features in the Northeast have impacted engineered projects resulting in increased risks and vulnerability from future storm events. Expected changes in sea level and the frequency and severity of extreme weather events are likely to increase those risks even further. The Corps is working closely with federal, state, tribal, and local partners to restore our coastlines so that we can prepare for future storms. The safety of the public is our priority.

North Atlantic Coast Comprehensive Study

The North Atlantic Coast Comprehensive Study (NACCS) is a collaborative effort, bringing together governmental, academic, and non-governmental experts in coastal planning, engineering and science to collaboratively develop a risk reduction framework for the 31,000 miles of coastline within the North Atlantic Division that were affected by Hurricane Sandy. The study is authorized up to \$20 million and will be submitted to Congress in January 2015. For more information on the NACCS, visit <http://www.nad.usace.army/CompStudy>.

Current Working Estimates

Near-term Coastal Restoration	\$600 M
Operations and Maintenance	\$386 M
Authorized But Not Yet Constructed	\$2,160 M
Coastal Storm Damage Risk Reduction Studies*	\$26 M
Continuing Authorities Program	\$48 M

Contract Awards

Contracts that have been awarded represent the number of projects currently underway. For more information on Hurricane Sandy opportunities, please visit www.fbo.gov.

Contract Awards	Number
Awarded	59
Ready to Advertise	13

* Authorized funds are available for future construction of study recommendations at current rough order magnitude levels.