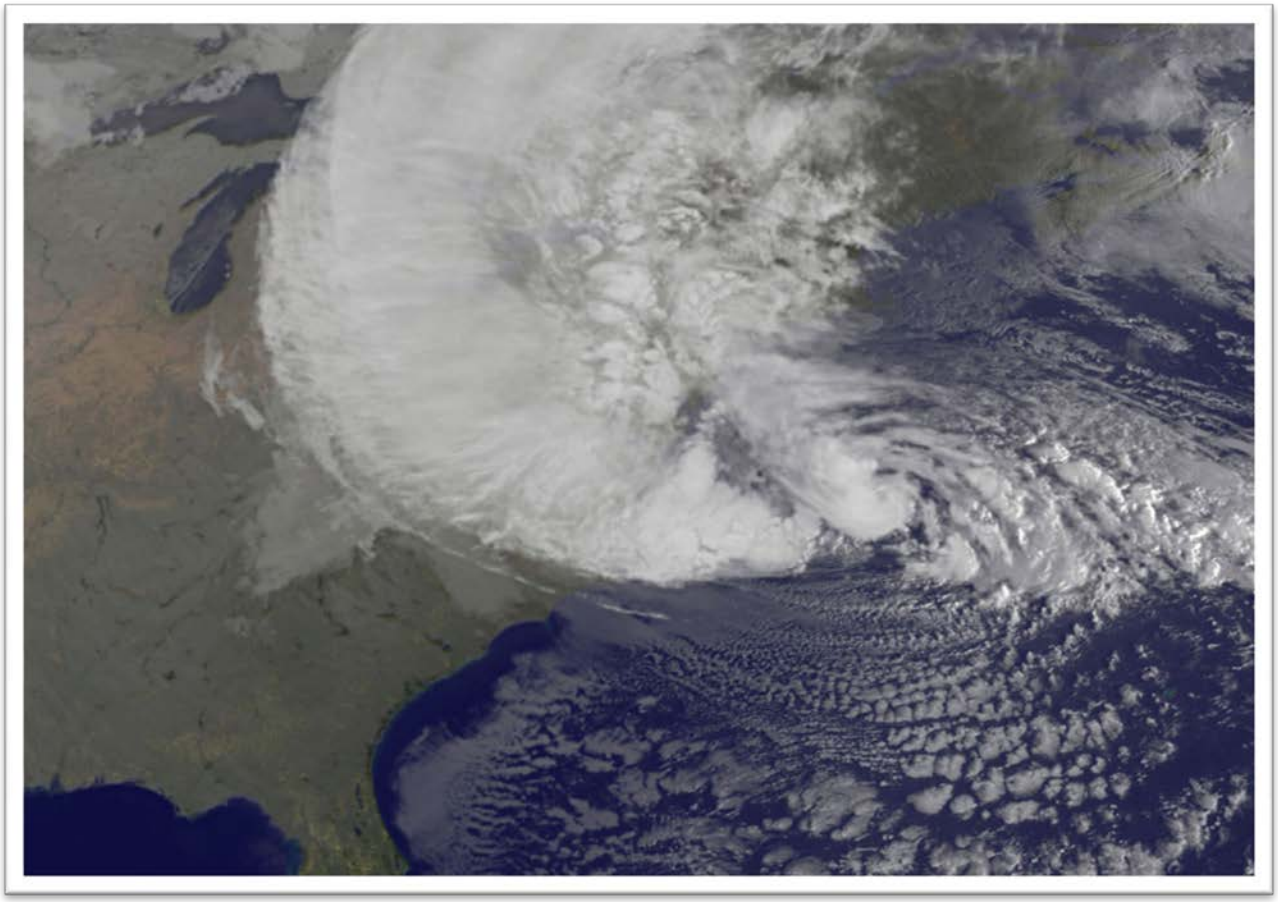
Second Interim Report

Disaster Relief Appropriations Act, 2013



Submitted
by the Assistant Secretary of the Army for Civil Works

May 30, 2013

Introduction

The Disaster Relief Appropriations Act of 2013 was passed by Congress and signed into law by the President on January 29, 2013 as Public Law 113-2 (Act). The legislation provides supplemental appropriations to address damages caused by Hurricane Sandy and to reduce future flood risk in ways that will support the long-term sustainability of the coastal ecosystem and communities, and reduce the economic costs and risks associated with large-scale flood and storm events. Hurricane Sandy was a catastrophic storm that struck the Atlantic coastline in late October 2012, resulting in loss of life, severe damage to the coastline, widespread power outages, and damage to infrastructure, businesses and private residences. The storm also resulted in degraded coastal features, which increase the risks and vulnerability from future storms. Expected changes in sea level rise, an increased probability of extreme weather events, and other impacts of climate change are likely to increase those risks even further.

Damages were experienced as far south as Florida, as far north as New England, and as far west as the Great Lakes. Particularly hard hit were areas in the greater New York City metropolitan area, including the Long Island, New York, New Jersey and Connecticut shorelines. The Act requires the U.S. Army Corps of Engineers (Corps) to provide Congress two interim reports. This is the second of those reports.

Scope of the Second Interim Report

The Act describes the purpose of the second interim report:

> ***"Provided further, that an interim report identifying any previously authorized but unconstructed Corps project and any project under study by the Corps for reducing flooding and storm damage risks in the affected area, including updated construction cost estimates, that are, or would be, consistent with the comprehensive study shall be submitted to the appropriate congressional committees by May 1, 2013"***

This report includes two lists of Corps projects located within the North Atlantic Division of the Corps based on criteria set forth above, as well as a construction cost estimate for each project. These cost estimates reflect the most recent information available and are subject to change. As called for in the Act, the Corps is currently developing a strategy for the comprehensive study, which will address the flood risks of vulnerable coastal populations in areas that were affected by Hurricane Sandy within the boundaries of the North Atlantic Division. The projects included in the two lists of this report may or may not be consistent with the comprehensive study. Since the study is just beginning, its findings are not yet available.

The work that the Corps undertakes with the funding provided in the Act will be guided by the policies of Executive Order 13632 Establishing the Hurricane Sandy Rebuilding Task Force. More specifically, in performing this work the Corps will strive to:

- Identify and work to remove obstacles to resilient rebuilding in a manner that addresses existing and future risks and vulnerabilities and promotes the long-term sustainability of communities and ecosystems;

- Plan for the rebuilding of critical infrastructure damaged by Hurricane Sandy in a manner that accounts for current vulnerabilities to extreme weather events and increases community and regional resilience in responding to future impacts;

- Support the strengthening of the economy; and

- Understand current vulnerabilities and future risks from extreme weather events, and identify resources and authorities that can contribute to strengthening community and regional resilience as critical infrastructure is rebuilt and ecosystem functions are restored.

Resilience Strategy

Natural systems and processes are inextricably linked with and can contribute to the resilience of physical infrastructure, community well-being, and coastal economies. The Corps will be working in the comprehensive study with its Federal and non-Federal partners and the public to identify potential strategies to reduce the vulnerabilities of coastal communities to large-scale flood and storm events in the future, in ways that also will support the long-term sustainability of the coastal ecosystem. In many cases, a combination of structural and non-structural risk reduction measures may be the best way to achieve these interrelated objectives. This would involve:

- Collaborating across scales of governance (i.e., local, State, Tribal, and Federal) and with non-governmental and private organizations in developing long-term strategies that promote public safety, protect and restore natural resources and functions of the coast, and enhance coastal resilience; and to ensure consistency with other plans to be developed, as appropriate;

- Improving resilience of our coastal areas by pursuing an approach that reflects the relationships between natural, social, and built systems. A systems approach to coastal risk reduction integrates the protection and restoration of natural coastal features, resilient coastal zone management, and green and grey infrastructure and non-structural measures.

- Examining current and proposed Corps projects for the purpose of improving the ways that they contribute to long term risk reduction and resilience, or otherwise modifying or discontinuing them as needed to appropriately address current and future conditions and needs; and

- Promoting increased recognition and awareness among decision makers, stakeholders, and the public of the current and future risks including residual risks, and their consequences.

More than 80 percent of the Construction funds provided under Chapter 4 of Title X of the Act was provided to reduce future flood risk in a way that will support the long-term sustainability of the coastal ecosystem and communities and reduce the economic costs and risks associated with large-scale flood and storm events in areas within the boundaries of the Corps' North Atlantic Division that were affected by Hurricane Sandy. The Act requires that the work performed with this funding will incorporate current science and engineering standards both in constructing previously authorized Corps projects designed to reduce flood and storm damages risks, and in modifying existing Corps projects that do not meet these standards. The Act also allows for the use of these funds to modify existing Corps projects to meet the goal of providing for sustainable reduction to flooding and storm damage risks. After providing notice to the Committees on Appropriations in the House and Senate, the Secretary of the Army may also use these funds to construct any project under study by the Corps for reducing flooding and storm damage risks in areas along the Atlantic Coast within the North Atlantic Division that were affected by Hurricane Sandy that the Secretary determines is technically feasible, economically justified, and environmentally acceptable.

To meet these interrelated statutory objectives, the Corps, along with its Federal partners, will undertake a broad, conceptual examination of the best ideas and approaches to reducing the vulnerability to major storms over time, in a way that is sustainable over the long-term, both for the natural coastal ecosystem and for communities, given expected changes in sea level rise, extreme weather events, and other impacts of climate change. In determining how to move forward in implementing specific measures using the provided Construction funding, the Corps will perform expedited limited re-evaluations of its projects, including those included in this report, which address resiliency, economics, risks, environmental compliance, and long-term sustainability. For example, in some cases the local community may need to adopt or improve a floodplain management plan. These plans would take into account current projections of sea level change, coastal storm severity, and frequency. Through this process, communities would incorporate strategies that reduce risk in the short-term while advancing planned adaptation to forecasted future conditions.

Following an assessment of how best to achieve these interrelated objectives generally, the Corps will work with its non-Federal partners and the public to determine how best to apply them to specific sites. The analysis will consider the presence and magnitude of existing reducible flood damage vulnerabilities, and the cost and benefits of the options for addressing those vulnerabilities in a sustainable way. Each project will include its own array of measures, which may include structural or non-structural features or both. The timing and sequencing of construction could vary based on site-specific factors, such as the complexity and scope of the recommended plan; the need to acquire real estate, easements, and right-of-ways; permitting timelines and environmental windows; and contracting schedules and the pace of contractor progress.

Summary of Projects Covered in this Report

This second interim report involves Corps projects within the North Atlantic Division, which covers the Atlantic coastline of the United States from Virginia to Maine (Figure 1. North

Atlantic Division Boundaries). This report lists previously authorized but unconstructed Corps projects, and projects under study by the Corps for reducing flooding and storm damage risks in the affected area. The term "affected area" refers to the project locations for reducing flooding and storm damage risks within the North Atlantic Division that were impacted by Hurricane Sandy.

These projects and studies, and associated cost estimates, are listed in Table 1 and Table 2 of this report respectively. Estimates are based on the most recent cost information available and are subject to change. The construction cost estimates in Table 1 include all of the planning, pre-construction engineering and design efforts, and the estimated physical construction cost, including engineering and design, surveys, environmental compliance, construction contract management, and supervision and administration. Neither Table 1 nor Table 2 includes projects funded and implemented under the Continuing Authorities Program. Repair and restoration costs for completed reaches of uncompleted projects are not shown here.

The term "authorized but unconstructed project" refers to previously authorized projects for which no physical construction has occurred as well as projects that contain elements where construction has not been completed. For projects involving sand placement, physical completion is the completion of the initial construction for all applicable reaches of an authorized project.

The term "project under study" refers to studies underway at the time of Hurricane Sandy (e.g., the reconnaissance or feasibility stages of a study) that received Corps funding over the three fiscal years prior to enactment of the Act. Additionally, there are two projects currently under reformulation in the Construction account, Fire Island Inlet to Montauk Point, New York and East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, New York. These two projects are included in both tables.

Figure 1. North Atlantic Division boundaries

TABLE 1:

North Atlantic Division Authorized but Unconstructed Projects	
Project	**Construction Cost Estimate[1]**
DELAWARE	
Delaware Bay Coastline, Broadkill Beach, DE & NJ	$13,000,000
NEW JERSEY	
Barnegat Inlet to Little Egg Harbor Inlet - (LBI)[2]	$50,000,000
Brigantine Inlet to Great Egg Harbor Inlet, NJ- (Absecon)[2]	$70,000,000
Joseph G. Minish Waterfront Park and Historic Area, NJ[2]	$26,000,000
Sandy Hook to Barnegat Inlet, NJ[2]	$75,000,000
Delaware Bay Coastline, Oakwood Beach, NJ	$7,000,000
Great Egg Harbor Inlet to Townsends Inlet	$68,000,000
Manasquan Inlet to Barnegat Inlet	$86,000,000
Passaic Main Stem, NJ (Passaic River and Newark Bay upstream to the Dundee Dam)	$300,000,000
Raritan Bay to Sandy Hook Bay, Port Monmouth, NJ	$110,000,000
Raritan Bay to Sandy Hook Bay, Union Beach, NJ	$125,000,000
South River, Raritan River Basin, NJ	$110,000,000
NEW YORK	
Atlantic Coast of New York City, Rockaway Inlet to Norton Point, NY (Coney Island)[2]	$30,000,000
East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY[2] (Under Reformulation Study)	$150,000,000
Fire Island Inlet to Montauk Point, NY[2] (Under Reformulation Study)	$700,000,000
Long Beach, NY	$200,000,000
Montauk Point, NY	$18,000,000
VIRGINIA	
Willoughby Spit and Vicinity, Norfolk, VA	$22,100,000

[1] Estimates are based on most recent designs and updated cost information available in project reports, and are subject to change.

[2]Projects partially constructed.

TABLE 2:

North Atlantic Division Projects Under Study		
Project	**Phase**	**Cost to complete study [1]**
DELAWARE		
Delaware Dredged Material Utilization, DE	Feasibility	$3,000,000
NEW JERSEY		
Alternative Long Term Nourishment Study, NJ	Feasibility	$500,000
Delaware River Comprehensive, NJ	Feasibility	$665,000
Delaware Dredged Material Utilization, NJ	Feasibility	$3,000,000
Hereford Inlet to Cape May Inlet, NJ	Feasibility	$300,000
Rahway River Basin, NJ	Feasibility	$2,000,000
Raritan Bay to Sandy Hook Bay, Highlands, NJ	Feasibility	$1,500,000
Raritan Bay to Sandy Hook Bay, Leonardo, NJ	Feasibility	$1,000,000
Shrewsbury River & Tributaries, NJ	Feasibility	$1,000,000
Wreck Pond, NJ	Reconnaissance	$2,500,000
NEW YORK		
Hashamomuck Cove, NY	Feasibility	$2,600,000
Jamaica Bay, Marine Park and Plumb Beach, NY	Feasibility	$500,000
Lake Montauk Harbor, NY	Feasibility	$1,000,000
North Shore of Long Island, Bayville, NY Hurricane and Storm Damage Reduction	Feasibility	$2,000,000
North Shore of Long Island, Asharoken, NY	Feasibility	$1,500,000
South Shore of Staten Island, NY	Feasibility	$1,500,000
East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY[2] (Under Reformulation Study)	Reformulation	[2]
Fire Island Inlet to Montauk Point, NY[2] (Under Reformulation Study)	Reformulation	[2]
RHODE ISLAND		
Pawcatuck River Study, RI	Reconnaissance	$1,500,000

[1] Estimates are based on most recent study cost information available and are subject to change.

[2] The reformulation study is being conducted with Construction funds.