DEPARTMENT OF THE ARMY

COMPLETE STATEMENT OF

LIEUTENANT GENERAL THOMAS P. BOSTICK
CHIEF OF ENGINEERS
U.S. ARMY CORPS OF ENGINEERS

BEFORE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

UNITED STATES HOUSE OF REPRESENTATIVES

ON

PROGRESS REPORT: HURRICANE SANDY RECOVERY ONE YEAR LATER

NOVEMBER 14, 2013

Mr. Chairman and Members of the committee, I am Lieutenant General Thomas P. Bostick, Commanding General and Chief of Engineers, U.S. Army Corps of Engineers. Thank you for the opportunity to testify today on the U.S. Army Corps of Engineers (Corps) continued work on the recovery from Hurricane Sandy.

INCIDENT

Hurricane Sandy struck the Atlantic coastline in late October 2012 resulting in loss of life, severe damage to the coastline, power outages, and damage to infrastructure, businesses and private residences. The storm affected communities as far south as Florida, as far north as Maine, and as far west as Ohio. The north Atlantic coastline bore the brunt of the storm's energy and damages, with the New York City metropolitan area, Long Island, and the New Jersey Shore among those particularly hard hit.

RESPONSE ACTIVITIES

The support from the federal government during the response to Sandy was unparalleled, and the Corps was part of the larger team that provided technical assistance and rapid response activities across the impacted areas. In the days and weeks following the storm, the Corps mobilized more than 800 experts from around the Nation to respond to and support 68 Federal Emergency Management Agency (FEMA) mission assignments totaling more than $350 million in New York, New Jersey, Massachusetts, Delaware, Ohio, Pennsylvania, Connecticut, West Virginia, and Rhode Island.

The Corps worked closely with the local, state, Tribal, and federal stakeholders and partners to remove almost 500 million gallons of salt water from flooded infrastructure, install more than 200 generators at facilities such as hospitals and police stations, remove millions of cubic yards of debris (900,000 in New York City alone), refurbish 115 transitional housing units, provide more than nine million liters of bottled water, and begin measures to repair damaged Corps projects along the coast. The Corps worked closely with the U.S. Coast Guard (USCG) to assess the impacts on our commercial navigation projects, and the affected ports were cleared and returned to operation.

The success of these efforts was a result of a dedicated and determined interagency team–including the Corps, the Navy, the USCG, the Department of Transportation, state and local governments, the New York City Metropolitan Transportation Authority, and many others.

RECOVERY EFFORTS

Congress passed and the President signed into law the Disaster Relief Appropriations Act of 2013 on January 29, 2013, Public Law 113-2 (P.L. 113-2). The Act appropriated

$5.35 billion for the Corps to address damages caused by Hurricane Sandy and 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 in areas along the Atlantic Coast within the boundaries of the North Atlantic Division of the Corps that were affected by Hurricane Sandy. That amount includes approximately $3.46 billion for Construction, $1.01 billion for Flood Control and Coastal Emergencies (FCCE), $821 million for Operation and Maintenance (O&M), $50 million for Investigations, and $10 million for Expenses. The Corps has made significant progress in the year since Hurricane Sandy and in the time since P.L. 113-2 was enacted.

The Corps Hurricane Sandy recovery program is structured with three components: a Near-Term component that supports emergency operations and repair and restoration of previously constructed Corps projects along the coastline with FCCE funding and dredging of Federal navigation channels and repair of Corps operated structures with O&M funding; an Investigations component that expedites completion of ongoing studies at full federal expense and also funds the North Atlantic Coast Comprehensive Study (Comprehensive Study); and a Construction component to rehabilitate, repair and/or construct projects to reduce future flood and storm damage risk in a smarter and more sustainable way. We continue to make progress on all these efforts.

NEAR-TERM

Beach repair and restoration of existing projects along the Atlantic coast began in February 2013 and is scheduled to conclude by the fall of 2014. To date, the Corps has placed approximately 12 million cubic yards of sand to repair dunes and berms and work continues to ensure that these projects are restored to their original design conditions. In addition, investigations are underway as part of the North Atlantic Coast Comprehensive Study to determine what modifications may be needed in the future to further enhance the resilience and long-term sustainability of these risk reduction measures. Thus far, the Corps has obligated over $390 million of FCCE funding and projects are being completed on schedule. Of the total 33 FCCE projects, seven are completely restored, 22 have awarded construction contracts and four are in design or pre-award stage. The O&M repair of navigation channels and structures damaged in the storm, from Maine to Florida and inland to the Great Lakes, began in February 2013 and most projects are scheduled for completion by Spring 2015. At the end of Fiscal Year 2013, over $160 million of the O&M funding was obligated and 35 projects have been completed with another 28 in construction.

INVESTIGATIONS

A portion of the Investigations funding is being used to expedite and complete flood and storm damage reduction studies for 17 areas that were underway when Sandy occurred. Up to $20 million of the Investigations allocation is funding the North Atlantic

Coast Comprehensive Study to assess the flood risks of vulnerable coastal populations in areas affected by Hurricane Sandy within the North Atlantic Division's boundaries. The Comprehensive Study team has developed a draft framework that currently is under review. The Study team will also develop various tools to assist with future planning efforts including economic depth-damage estimations, community resilience surveys, and regional sediment budgets.

A Performance Evaluation Study was conducted using Investigations funds. This report evaluated the effectiveness of completed Corps projects during Hurricane Sandy and included summary recommendations for further improvements.

CONSTRUCTION

The third component of the program uses appropriated Construction funding to implement projects that (1) previously were authorized but not constructed at the time of Hurricane Sandy's landfall, (2) projects identified for implementation following the Investigation process, and (3) projects that fall within the Continuing Authorities Program. Planning, design and expedited reevaluations are underway for the 18 authorized but not yet constructed projects and construction is anticipated to begin in early 2014. Construction work on roughly half of these flood risk reduction projects is expected to be completed by mid-2015. Of the identified Continuing Authority Projects, Massachusetts, Connecticut, New York, New Jersey, Delaware, Maryland and Virginia are currently scheduled to receive beach erosion and coastal storm damage risk reduction projects. We expect 70% of this work to be completed by 2016.

INTERAGENCY COLLABORATION

The Corps routinely collaborates and coordinates with federal, state, local and Tribal partners to construct Corps projects and studies. The Corps is leading a unique collaboration with partners and stakeholders with the Comprehensive Study bringing together experts in coastal planning, engineering and science representing more than 90 governmental, academic, and non-governmental entities to develop a risk reduction framework for the 31,000 miles of coastline within the North Atlantic Division that were affected by Sandy. Entities represented on the team include Department of Homeland Security/FEMA, Department of the Interior/U.S. Geological Survey and Fish and Wildlife Services, Environmental Protection Agency, U.S. Department of Housing and Urban Development, Department of Commerce/National Oceanic and Atmospheric Administration, New Jersey Department of Environmental Protection, New York Department of Environmental Conservation, Ducks Unlimited, The Conservation Fund, and many, many more.

CHALLENGES FACED BY AFFECTED COMMUNITIES

In the year since Hurricane Sandy, we have seen and heard from residents in impacted communities on some of the challenges with completing this risk reduction work. Most appreciate what the Corps and other federal, state and local teams have been able to accomplish during the response and recovery efforts.

Residents in some coastal communities have expressed concern that coastal storm damage risk reduction features such as dunes may negatively impact their property value due to the loss of ocean views. Additionally, there is a misconception that granting easements to private property to allow the construction of coastal storm damage risk reduction features could lead to the future construction of public boardwalks, bathrooms, or other amenities, which could further impact property value. The Corps and non-federal sponsors continue to communicate with the local communities on the purpose of the dunes and berms, which is to absorb wave energy and reduce the risk of wave overtopping that could damage property and infrastructure situated behind them; and to clear up misconceptions about the use of the real estate, which explicitly is for construction and maintenance of the storm damage risk reduction features. In addition, the local sponsors are preparing floodplain management plans for each project that will be provided to various zoning and regulatory agencies for their use to reduce the impacts of future floods and storms. These plans should help guide those agencies in preventing unwise future development in areas with high flood risks.

Tourists and seasonal residents who use beaches for recreation also may experience short-term impacts related to the Corps construction work. We are mindful of their concerns and strive to reduce the impacts to recreation by working with partners and contractors to close only small portions of beaches at a time for restoration work. The Corps is committed to providing sustainable, resilient risk reduction as quickly and safely as possible.

RESIDUAL RISK

There will always be a residual risk for Americans who live in coastal regions. Over the long term, expected changes in sea-level rise, extreme weather, and other impacts due to climate change are likely to increase the risks facing these areas. Please keep in mind that regardless of how many storm damage risk reduction features are put in place—no matter how high, wide or strong they are constructed--there will always be those risks. We continue to communicate that to residents along the coast, so that they fully understand this residual risk.

Collaborative efforts on all levels continue to explore and implement solutions that reduce risk from coastal storms, such as appropriate land use planning, non-structural solutions (including elevating buildings and selective buy-outs) and well-communicated evacuation planning. Consistent with P.L. 113-2, the Corps' efforts are incorporating current science and engineering standards to construct new projects and modify

existing projects to provide a sustainable flood and storm damage risk reduction system that is technically feasible, economically justified and environmentally acceptable.

CONCLUSION

Mr. Chairman, Members of the Committee, this concludes my testimony. I am happy to answer any questions you or other Members of the Committee may have.