DEPARTMENT OF THE ARMY

COMPLETE STATEMENT

OF

THE HONORABLE JO-ELLEN DARCY
ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

AND

LIEUTENANT GENERAL THOMAS BOSTICK CHIEF OF ENGINEERS

BEFORE

THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ON

THE 2016 WATER RESOURCES DEVELOPMENT ACT – POLICIES AND PROJECTS

MARCH 16, 2016

Mr. Chairman and distinguished members of the Committee, we are honored to be testifying before you today to discuss the policy issues and projects that we believe the Committee should consider in the next Water Resources Development Act (WRDA). Water resources infrastructure across the Nation enables the low-cost shipment of goods through our coastal ports and on the inland waterways, reduces the flood risk to communities, restores aquatic ecosystems, provides drinking water, generates renewable electricity, and offers water-based recreation opportunities to the public.

The President is committed to investing in a 21st Century Infrastructure for America – including its water infrastructure –to strengthen the Nation's economy and resilience, provide for the public safety, and restore the environment. We look forward to working with you on a Water Resources Development Act for 2016.

The last WRDA bill included significant reforms. We urge the Committee to continue this progress in the next WRDA bill. Over the past century, Federal, State, local, and tribal governments have made enormous investments in new water infrastructure, including locks and dams, levees, and other improvements. However, we must also continue our dialogue regarding responsible, economic, and sustainable ways to fund the operation and maintenance of our aging water infrastructure so that it can safely and reliably serve current and future generations. There will continue to be worthwhile investments in new projects; additionally, the challenges of the 21st century include maintaining the key features of our existing infrastructure, and restoring aquatic ecosystem functions.

We are executing our program in a complex, resource-constrained environment, requiring greater collaboration and trust with our customers, partners, stakeholders, and the public. Federal spending is limited, so we must re-think how we finance investments in existing and new water resources infrastructure. While we should make investments to enable existing projects to continue delivering benefits, we cannot afford to invest in infrastructure that no longer meets the Nation's needs or has become too costly compared to the national economic, environmental, and other public benefits it provides.

State, local, and tribal governments are taking on greater roles in water resources investments. We continue to work on innovative finance models and partnerships with the private sector, as a way to address some of the needs. Our goal is to improve the overall approach to water infrastructure investment, by engaging with state and local governments and private sector investors, and expanding the market for public private partnerships, which would better leverage Federal dollars.

Creating a 21st Century water resources infrastructure requires more than making tough investment decisions. We are working to improve our processes for planning, constructing, operating and maintaining, and rebuilding this infrastructure where appropriate, and will continue to make progress in this regard.

WRRDA 2014 helped advance some of these objectives in areas such as SMART planning. But, more can be done. For example, we appreciate the recent increase in the diesel fuel tax to help finance the share of inland waterways capital investments that are the responsibility of the users under current law. This increase was supported by the Congress, the users, and the Administration and was an important step forward. However, in the long-term, there will be a gap in financing if we want to maintain the level of service on the principal inland waterways. This Administration has put forward a proposal to address this issue, intended as an opening to work with the Congress and the users on how we can best meet the challenge. We welcome dialogue and look forward to working together with you on a solution.

We need to continue to look at the Harbor Maintenance Trust Fund, and potential alternative ways to better support our nation's waterborne commerce and the communities, businesses, and consumers that depend on it. Similarly, we encourage dialogue on other reforms that provide the Corps with better tools to improve how the Nation develops, manages, and maintains our water resources.

We also will need to reassess our basic assumptions about the roles of the Federal government, the states, local government, and the private sector for some of this infrastructure.

Together with State, local, and tribal communities, the Administration is working to develop and implement structural and nonstructural approaches to water resources challenges to improve their resilience to the impacts of climate change. The Federal government needs to continue to provide technical and planning assistance to help prepare, adapt, and protect communities from the impacts of climate change.

Similarly, we would welcome dialogue on other important reforms so that we can work together to improve how we develop and manage our water resources. As we did in 2014, we should work to find a common ground that both the Congress and the Administration can come together to support.

The Corps has a strong working relationship with tribal communities. Since 1996 the Corps has developed and implemented an Indian Affairs Program from the ground up. We have Tribal Liaisons at Corps Headquarters, and at all 38 district and 8 division offices with Civil Works missions. We have trained over 1,500 federal agency staff in tribal consultation process.

In recent years we have made significant progress working with Columbia River Basin Tribes on salmon and habitat issues, with Puget Sound Tribes on flood risk management and habitat restoration issues, and with the Mandan-Hidatsa-Arikara Nation regarding the transfer of over 30,000 acres of Garrison Project lands to the Department of the Interior to be held in trust for the tribe. We look forward to working with you to continue to improve the way we support and work with tribal communities.

The Section 7001 Annual Report

Recently, the Army submitted the 2016 Report to Congress on Future Water Resources Development (Annual Report) in response to section 7001 of WRRDA 2014, Reports of the Chief of Engineers (Chief's Reports), and Post Authorization Change Reports (PACRs). In preparing this year's report, we revisited the projects that were listed in the 2015 7001 report appendix and, in response to feedback from this Committee, included projects that met the new criteria for the 2016 report. This year, we evaluated proposals strictly based on the five statutory criteria. In order to provide more transparency, we increased our outreach to non-Federal interests, and sought to clarify for both our districts and local sponsors the process and the criteria under which proposals would be evaluated. In the report, we accounted for all Chief's Reports completed since the enactment of WRRDA 2014, and added 31 proposals following a one-time re-evaluation of proposals submitted in 2014 that were included in last year's Appendix in light of our revised process. A total of 61 proposals were received for the 7001 Annual Report this year: 25 were for new feasibility studies, 34 were for modifications to existing projects or changes to legislation, and two were proposals for a study modification. Of these proposals, 30 met the criteria and are listed in the Annual Report Table. The 31 proposals that did not meet the criteria are in the appendix. The two primary reasons proposals are included in the Appendix are that either the proposal did not fit within the identified Corps core mission areas or authority already exists to perform the requested work. Where authority already exists, inclusion in the Appendix to the 2016 Annual Report does not preclude the Army from carrying out either a study or construction.

I will now provide a brief overview of the 13 proposed projects that have completed Executive Branch review since the passage of WRRDA 2014. The Army has previously provided the results of those reviews along with the following project information to the Congress. These proposed projects fall within the main mission areas of the Corps (commercial navigation, flood and storm damage reduction, and aquatic ecosystem restoration). There are ten other projects that have reports by the Chief of Engineers but are still under Executive Branch review as well as one Chief's Report for a project disposition. Also, there are four pending PACRs under Executive Branch review.

Commercial Navigation

Brazos Island Harbor, Brownsville, Texas

On February 23, 2016, a report was transmitted to Congress on navigation improvements within the Brazos Island Harbor. The plan would increase the nominal depth of the Federal channel to -52 feet mean lower low water (MLLW) for portions of the inner channel and -54 feet MLLW for the entrance channel.

Based upon the October 2015 price levels, the total initial project cost for this project is \$207.5 million with the Federal share totaling \$117.7 million and the non-Federal share totaling \$89.8 million.

Calcasieu Lock, Louisiana

On August 20, 2015, a report was transmitted to Congress on navigation improvements in the vicinity of Lake Charles, Louisiana. The plan consists of a sluice gate structure and dredging a new bypass channel to a depth of 12-feet MLLW. The channel transitions to a depth of 6-feet MLLW at the structure.

Based upon the October 2015 price levels, the total initial project cost for this project is \$16.9 million. This cost would be shared equally between the Federal government and the Inland Waterways Trust Fund.

Charleston Harbor, Charleston, South Carolina

On January 13, 2016, a report was transmitted to Congress on navigation improvements within Charleston Harbor. The locally preferred plan that is being recommended will deepen the entrance channel to 54-feet across the 800-foot width, while reducing the existing stepped 1,000-foot top channel width to 944-feet. The entrance channel will be extended approximately three miles seaward from the existing location to a depth contour of -54-foot MLLW; deepen the inner harbor from an existing project depth of -45 feet to -52 feet MLLW from the Entrance Channel to the confluence of the Wando and Cooper Rivers, about two miles up the Wando River to the Wando Welch container facility and about three miles up to the Cooper River to the New Navy Base Terminal, and to a project depth of -48 feet MLLW over the five mile reach leading from the New Navy Base Terminal to the North Charleston container facility (over expanded bottom widths from 400 to 1,800 feet); and enlarge the existing turning basins to a 1,800-foot diameter at the Wando Welch and New Navy Base terminals to accommodate Post Panamax Generation 2 and 3 container ships and widen selected reaches.

Based upon the October 2015 price levels, the total initial project cost for this project is \$496 million with the Federal share totaling \$228.2 million and the non-Federal share totaling \$267.8 million.

Port Everglades, Broward County, Florida

On January 29, 2016, a report was transmitted to Congress on navigation improvements for Port Everglades in Broward County, Florida. The locally preferred plan that is being recommended would increase the nominal depth of the Federal channel to -48 feet MLLW, widen the outer entrance channel to a width of 800-feet, and widen the Southport Access Channel, the main turning basin and the Turning Notch.

Based upon the October 2015 price levels, the total initial project cost for this project is \$329 million with the Federal share totaling \$224.5 million and the non-Federal share totaling \$104.5 million.

Portsmouth Harbor and Piscataqua River, New Hampshire and Maine

On June 18, 2015, a report was transmitted to Congress on navigation improvements for Portsmouth Harbor, and Piscataqua River in New Hampshire and Maine. The plan would increase the width of the turning basin from 800-feet to 1,200-feet.

Based upon the October 2015 price levels, the total initial project cost for this project is \$22 million with the Federal share totaling \$16.5 million and the non-Federal share totaling \$5.5 million.

Flood and Storm Damage Reduction

Bogue Banks, Carteret County, North Carolina

On February 16, 2016, a report was transmitted to Congress on hurricane and storm damage reduction along the Atlantic Ocean shoreline Bogue Banks, Carteret County, North Carolina. The plan consists of constructing 22.7 miles of main beach fill berm, approximately 50-feet wide, with a consistent profile across the entire length, along with dune expansion of approximately 5.9 miles of the project shoreline. The amount of dune expansion would vary from elevation 15 feet to 20 feet.

Based upon the October 2015 price levels, the total initial project cost for this project is \$38.7 million with the Federal share totaling \$25.1 million and the non-Federal share totaling \$13.6 million. The total cost over the 50-year project life, including periodic nourishment, is \$118.8 million, with a Federal share of \$59.4 million and non-Federal share of \$59.4 million.

Edisto Beach, Colleton County, South Carolina

On February 16, 2016, a report was transmitted to Congress on hurricane and storm damage reduction along the Atlantic Ocean shoreline of Edisto Beach, South Carolina. The plan consists of constructing a dune to an elevation of 15-feet with a top width of 15-feet extending 16,530 feet along the beach. This dune would be fronted by a berm at an elevation of 7-feet and 75-feet wide, extending south 7,740 feet from the northern extent of the project area and then tapering to 50-feet in width over the remaining length and taper to the existing profile. The dune would transition to 14-feet in elevation and extend around the southern end of the island for 5,290 feet. There would also be constructed 1,130 feet of total groin lengthening across 23 existing groins.

Based upon the October 2015 price levels, the total initial project cost for this project is \$21.9 million with the Federal share totaling \$14.2 million and the non-Federal share totaling \$7.7 million. The total cost over the 50-year project life, including periodic nourishment, is \$34.5 million, with a Federal share of \$17.3 million and non-Federal share of \$17.3 million.

Flagler County, Florida

On February 16, 2016, a report was transmitted to Congress on hurricane and storm damage reduction along the Atlantic Ocean shoreline of Flagler County, Florida. The plan would include construction of the dune along 2.6 miles of shoreline to an elevation 19 feet to match the elevation of the existing dune. From the seaward end of the dune extension, a 1 vertical on 3 horizontal dune slope would extend to the design berm elevation of 11 feet to match the existing berm elevation.

Based upon the October 2015 price levels, the total initial project cost for this project is \$14.5 million with the Federal share totaling \$9.4 million and the non-Federal share totaling \$5.1 million. The total cost over the 50-year project life, including periodic nourishment, is \$31.2 million, with a Federal share of \$15.6 million and non-Federal share of \$15.6 million.

Hereford Inlet to Cape May Inlet, New Jersey

On February 1, 2016, a report was transmitted to Congress on hurricane and storm damage reduction along the Atlantic Ocean shoreline from Hereford Inlet to Cape May Inlet, New Jersey. The plan would include construction of the dune along 4.5 miles of shoreline to an elevation of 16 feet with a 25-foot wide dune crest on a 75-foot wide berm that at an elevation of 6.5 feet.

Based upon the October 2015 price levels, the total initial project cost for this project is \$22.3 million with the Federal share totaling \$14.5 million and the non-Federal share totaling \$7.8 million. The total cost over the 50-year project life, including periodic nourishment, is \$85.3 million, with a Federal share of \$42.6 million and non-Federal share of \$42.6 million.

Leon Creek Watershed, San Antonio, Texas

On January 15, 2016, a report was transmitted to Congress on flood risk management for the Leon Creek Watershed, San Antonio, Texas. The plan consists of a levee extending 3,700 linear feet from high ground on the southeast side of Port San Antonio to S.W. Military Drive at a maximum height of 21-feet and a 12-foot top width with 3.5-feet on 1-foot slopes, in channel modification that extend approximately 2,850 linear feet with a 60-foot bottom width, and permanent evacuation of four single family residential structures and 32 townhouses susceptible to damage by a flood with a 4-percent annual exceedance probability.

Based upon the October 2015 price levels, the total initial project cost for this project is \$29.1 million with the Federal share totaling \$18.9 million and the non-Federal share totaling \$10.2 million.

Manhattan, Kansas

On December 3, 2015, a report was transmitted to Congress on flood risk management for the City of Manhattan, Kansas. The plan consists of modifying the existing project by raising 14,600 feet of levee on the Big Blue River and Kansas River on average 1.5 – feet but by as much as 3-feet, adding under seepage control measures including 29 relief wells with over 4,900 feet of collector system, 2,500 linear feet of under seepage control berms, replacing five existing drainage structures, adding a closure structure at Hayes Drive and relocating various utility crossings.

Based upon the October 2015 price levels, the total initial project cost for this project is \$24.3 million with the Federal share totaling \$15.8 million and the non-Federal share totaling \$8.5 million.

Aquatic Ecosystem Restoration

<u>Central Everglades Planning Project, Comprehensive Everglades Restoration Plan,</u> Central and Southern Florida

On September 3, 2015, a report was transmitted to Congress on ecosystem restoration improvements for the Central Everglades Project located in Martin, Lee, Palm Beach, Broward, Miami Dade and Monroe Counties, Florida. The purpose of the Central Everglades Planning Project is to improve the quantity, quality, timing and distribution of water flows to the Northern Estuaries, central Everglades and Everglades National Park, and Florida Bay while increasing water supply for municipal, industrial and agricultural users. The Central Everglades Planning Project developed from six components (or portions thereof) of the Comprehensive Everglades Restoration Plan: Everglades Agricultural AREA Storage Reservoirs; Water Conservation Area 3 Decompartmentalization and Sheetflow Enhancement; S-356 Pump Station Modifications; L-31 N Improvements for Seepage Management; System-wide Operational Changes – Everglades Rain-Driven Operations; and Flow to Northwest and Central Water Conservation Area 3A.

Based upon the October 2015 price levels, the total initial project cost for this project is \$1,958,164,000 with the Federal share totaling \$979,865,266 and the non-Federal share totaling \$978,298,734.

Flood and Storm Damage Reduction and Aquatic Ecosystem Restoration

Upper Des Plaines River & Tributaries, Illinois and Wisconsin

On January 29, 2016, a report was transmitted to Congress on flood risk management and ecosystem restoration for the Upper Des Plaines Watershed in Illinois and Wisconsin. The project would include the construction of a system of three

levee/floodwalls and two floodwater storage reservoirs near or adjacent to the main stem of the Des Plaines River. The flood risk management plan includes recreational features at three sites and implementation of non-structural flood risk management measures at up to 377 structures in nine communities in Lake and Cook County. The ecosystem restoration plan would restore 6,859 acres at seven sites across the watershed.

Based upon the October 2015 price levels, the total initial project cost for this project, as recommended in the Chief's Report, is \$309,098,000 with the Federal share totaling \$200,702,000 and the non-Federal share totaling \$108,396,000.

There are also ten other proposed projects with reports by the Chief of Engineers, which the Executive Branch is in the process of reviewing. These are:

- Little Diomede, Alaska
- Kansas Citys, Missouri and Kansas
- Mill Creek, Nashville, Tennessee
- West Shore Lake Pontchartrain, Louisiana
- Los Angeles River, Los Angeles, California
- Skokomish River Basin, Mason County, Washington
- Lower Willamette River, Oregon
- South San Francisco Bay Shoreline, Santa Clara County, California
- Upper Turkey Creek, Merriam, Kansas
- Princeville, North Carolina

Two additional Chief's Reports were not included in the report table of the 2016 Annual Report. The first, Orestimba Creek, California, was authorized in WRDDA 2014 and, therefore, does not meet the criteria of requiring authorization. It was transmitted to Congress on January 29, 2016. The second, the Chief's Report for a disposition study for Green River Locks and Dams 3, 4, 5 and 6 and Barren River Lock and Dam 1, Kentucky was signed on April 30, 2015 and remains under Executive Branch review. Because it is a disposition study, it does not meet the requirements for inclusion in this annual report and was not included in the report tables.

Mr. Chairman, I would now like to discuss PACRs. Section 902 of WRDA 1986 establishes a maximum total project cost for Civil Works projects. A further authorization is required to use Federal funds beyond this maximum authorized project cost. In these cases, the Corps of Engineers generally completes a PACR, which is provided to Congress if there is a recommendation for such a further authorization. There are four PACRs that have been approved by the Corps of Engineers and are under Executive Branch review.

These reports are:

- Blue River Basin, Kansas City, Missouri
- Turkey Creek Basin, Kansas City, Kansas and Kansas City, Missouri

- Ohio River Shoreline, Paducah, Kentucky
- Comprehensive Everglades Restoration Plan: Picayune Strand Restoration Project

Mr. Chairman, we look forward to working with you and appreciate this committee's support for investments in the Nation's water resources to strengthen the foundation for economic growth, protect communities, and protect and restore our environment. Mr. Chairman, this concludes our statement. We appreciate the opportunity to testify today and look forward to answering any questions you may have.