NATIONAL WATERWAYS CONFERENCE, WASHINGTON, D.C. MARCH 5-7, 2018

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HQ U.S. Army Corps of Engineers
Washington, D.C.
6 March 2018
U.S. PORTS AND INLAND WATERWAYS: VITAL TO OUR NATIONAL ECONOMY

2 Billion Tons of domestic and import/export cargo annually
USACE Navigation System

- U.S. Marine Transportation Industry Supports ~ $2 Trillion in Commerce Annually
- More than 48% of Consumer Goods Bought by Americans Pass Through Harbors Maintained by Corps.
- Over 1.3 Billion Short Tons of Foreign Goods Moved Through U.S. Ports/Waterways in 2015
- Over 900 Million Short Tons of Domestic Goods Moved Thru U.S. Ports/Waterways in 2015
- 15% of U.S. Domestic Freight Carried by Water
- 239 Lock Chambers at 193 sites
- 13,000 Miles of Coastal and Deep Draft Channels
- 12,000 Miles of Commercial Inland and Intracoastal Waterways
- 1,067 Coastal, Great Lakes and Inland Harbors
- 40 States are directly served by USACE Channels & Waterways
USACE Navigation Mission

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of national security needs, commerce, and recreation.
# OLMSTED/L&D 52

## Activity Description

1. **L&D 52 Wicket Hole Repair and Wicket Maintenance**
   - Start: 2/1/2018

2. **L&D 52 Operational Priority**
   - Start: 6/15/2018

3. **Olmsted Dam Functional Completion (ACHIEVED)**
   - Start: Dec-17

4. **Olmsted Wicket Lifter (OWL) Delivery**
   - Start: 2/15/2017

5. **OWL Function Testing and Commissioning**
   - Start: 6/15/2018

6. **Attempt Olmsted Operations if Catastrophic Failure at L&D 52**
   - Start: 7/15/2018

7. **USACE Operations Training and Wicket Testing (Low Water*)**
   - Start: 7/15/2018

8. **Olmsted Ribbon Cutting Ceremony**
   - Start: 8/6/2018

9. **Olmsted Operations begins (Upon Completion of Training)**
   - Start: 11/1/2018

## Risk Levels

- **LOW RISK**
- **MODERATE RISK**
- **HIGH RISK**

## Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Start Date</th>
<th>Finish Date</th>
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<tbody>
<tr>
<td>L&amp;D 52 Hole Repair and Maintenance</td>
<td>Feb-18</td>
<td>Nov-18</td>
</tr>
<tr>
<td>Continue to Operate L&amp;D 52 as First Priority During Low Flow Conditions</td>
<td>Aug-18</td>
<td>Nov-18</td>
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<tr>
<td>USACE Operations Training and Wicket Testing</td>
<td>Dec-18</td>
<td>Jan-19</td>
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<tr>
<td>Olmsted Functional if L&amp;D 52 Fails</td>
<td>Dec-17</td>
<td>Jan-18</td>
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<tr>
<td>USACE Operations Training and Wicket Testing</td>
<td>Jun-18</td>
<td>Jul-18</td>
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<tr>
<td>Start and Finish L&amp;D 52 Hole Repair and Maintenance</td>
<td>Dec-17</td>
<td>Jan-18</td>
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<tr>
<td>Olmsted Functional if L&amp;D 52 Fails</td>
<td>Dec-17</td>
<td>Jan-18</td>
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## Notes

- OWL T&C
- *Low Water*
OLMSTED LOCK AND DAM BOTTOM LINE

• Ahead of Schedule
  o 2018 (Project Operational) vs. 2022 (80% certainty)
  o 2022 (Project Complete) vs. 2026 (80% certainty)

• Under Budget
  o TEP (Total Estimated Price) = $2.771B vs. $3.1B (80% certainty)
  o Savings = $329M (FY19 Request = $35M “Funds to Completion”)

• Keys
  o Efficient funding (annual capability)
  o Advantageous river conditions (expanded work beyond the contractual low water season (15 Jun – 30 Nov)).
NAVIGATION CHALLENGES

- Decaying (aging) infrastructure

- Constrained Funding
  - Performance Risk
  - Challenges maintaining authorized/constructed channel dimensions and critical infrastructure

- Funding for low commercial use projects

- Increased cost of doing business

- Environmental Issues
  - Air and water quality requirements
  - Threatened, endangered, and invasive species
  - Dredging windows
# Navigation Budget by Account
($Millions)

<table>
<thead>
<tr>
<th>Pres Bud Fiscal Yr</th>
<th>Investigations</th>
<th>Construction</th>
<th>O&amp;M</th>
<th>MR&amp;T</th>
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<td>$1,411</td>
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</table>
“Assuring Performance and Reliability of Aging Water Infrastructure….”
24 x 365 x ~200 Sites = ~1,752,000 Operational Hours/Year
At 21,000 Hour Level, Locks are Unavailable Around ~ 1.2% of Time due to Mechanical Issues; So, Locks are AVAILABLE to Pass Commercial Traffic Almost 99% of the Time
National Dredging Program Trends
Total Dredging FY 2007-2016

Fiscal Year 2016 Total Dredging: 202 MCY @ $1,318 Million (~$6.51/CY)

Maintenance Work: 186 MCY (92%) @ $1,036 Million (79%)
Hurricane Sandy & Emergency: 11 MCY (5%) @ $191 Million (14%)
New Work: 6 MCY (3%) @ $91 Million (7%)
Growing dredging requirements and increasing cost present strategic risk.
SECTION 1122 OF WRDA 2016

BENEFICIAL USE OF DREDGED MATERIAL PILOT PROGRAM

- Section 1122 of WRDA 2016 directs the Corps of Engineers to establish a pilot program consisting of 10 projects for the beneficial use of dredged material.

  “…the Secretary shall carry out the pilot program in a manner that…”

  - **Maximizes the beneficial placement** of dredged material from Federal and non-Federal navigation channels;

  - **Incorporates**, to the maximum extent practicable, 2 or more Federal navigation, flood control, storm damage reduction, or environmental restoration projects;

  - Coordinates the mobilization of dredges and related equipment, including through the use of such efficiencies in contracting and environmental permitting as can be implemented under existing laws and regulations; Fosters Federal, State, and local collaboration;

  - **Implements best practices** to maximize the beneficial use of dredged sand and other sediments;

  - Ensures that the use of dredged material is consistent with all applicable environmental laws.

*WRDA 2016 is an authorizing document and does not provide appropriations*
SECTION 1122 OF WRDA 2016
PILOT SELECTION PROCESS TIMELINE

Federal Register Notice 30-day Submission Period Begins
(Feb 9, 2018)

Non-Fed Proponents Submit Pilot Project Proposals
(March 12, 2018)

USACE Regional Teams Evaluate Proposals
(April 2018)

HQUSACE Develops National Evaluation
(May 2018)

HQUSACE RECOMMEND 10 PROJECTS TO
Asst. Secretary of the Army (CW) (June 2018)*

*Note WRDA 2016 is an authorizing document and does not provide appropriations for the execution of the 10 selected projects. Implementing those projects will require separate appropriations by Congress and is not guaranteed.
HURRICANE HARVEY RELATED DAMAGES

- 9 Million Cubic Yards of shoaling in Coastal Texas
- At onset, no vessel movement in 1,000 Miles of Federal Channels (All of Coastal Texas) at onset
- Gulf Intracoastal Waterway closed for 30 days
- $15.2B impact on Texas Economy due to closures
- Ten Contract Dredges mobilized to perform urgent Dredging Operations
- Some restrictions remain in place

FY18 SUPPLEMENTAL

- Investigations: $135 million total (FRM) focused
- Construction: $15 B (FRM)
- O&M: $608 M repairs
- MR&T: $770 M ($370 M for Repairs)
- FCCE: $810 million
INFRASTRUCTURE INFORMATION

WATER RESOURCES INFRASTRUCTURE – LEGISLATIVE PRINCIPLES

ENCOURAGE NON-FEDERAL INVESTMENTS THROUGH LOW-COST WIFIA LOANS

- Implements existing authority* / new delivery model
  - Expands funding authorization to include flood risk mitigation, navigation, and water supply
  - Supplements (does not replace) traditional water resource infrastructure delivery model
  - Low-cost loans up to 49% of project costs
  - Incentivizes non-federal entity to assume control & risk/responsibility
  - Builds on highly successful ERM program
  - Authorized in WRRDA 2014

ENCOURAGE NON-FEDERAL INVESTMENTS THROUGH INCENTIVE GRANTS*

- Establishes new grant authority for USACE, USDOT, and USEPA up to 20% of project cost
  - Eligible projects include maritime/inland ports, flood control, water supply, hydropower, and water resource infrastructure
  - Incentivizes non-federal entity to assume control & risk/responsibility
  - Promotes project accountability
  - Requires new authorization

PROVIDE TIMELY DECISIONS ON INFRASTRUCTURE PROJECTS

- Improve efficiency of permitting while maintaining environmental protection
  - “One Agency, One Decision” streamlines the NEPA process
  - Eliminates redundancy and inefficiencies in Section 404/10/408 review processes
  - Reduces decision time
  - Streamlines mitigation banking processes
  - Expands authority for agencies to accept non-federal funding for environmental reviews

IMPROVE AND MODERNIZE THE USACE CIVIL WORKS PROGRAM

- Pursue statutory policy and process changes
  - Modernize revenue opportunities through fee collection and retention to enable Section 5014 pilot project
  - Streamline project delivery (contributed and advanced funds; deauthorizations; Section 902 cost limitations)
  - Acquire innovations (long-term contract authorities; non-federal O&M of hydropower)
  - Allow for third-party design, construction, and operations of inland navigation systems

WATER RESOURCES MISSIONS

USACE INFRASTRUCTURE INITIATIVE

Civil Works: Focus on Delivery

- Embrace and Operationalize Risk-Informed Decision Making
- Make, Justify and Document Decisions at the Most Appropriate Level
- Synchronize Headquarters Functions to Support MSC and District Project Delivery
- Integrate and Synchronize Agency Policy and Guidance
- Incorporate Social and Environmental Benefits into Project Formulation, Design and Implementation
CLOSING THOUGHTS

- USACE Funding Continues to be Constrained and Addressing the Nation’s Infrastructure Investment Gap must be a **Shared** Federal, State and Local Responsibility.

- The Corps Doesn’t Deliver Anything by Itself… Critical that We Not Lose Focus on Our **Partners, Stakeholders, and Our Commitments**

- Navigation **Investment** is Essential for the Nation’s Global Trade and International Competiveness

- America’s Marine Transportation System infrastructure **Must** be a **National Priority** in Order to Secure Adequate Levels of Investment

- Navigation **Investment** is Key to National Economy, Jobs, and Exports!
THANK YOU
### Inland Waterways

Our nation's inland waterways and rivers are the backbone of our freight network - they carry the equivalent of about 41 million truck trips each year. In many cases, the inland waterways system has not been updated since the 1800s, and more than half of the locks are over 50 years old. Barges are stopped for hours each day with unscheduled delays, preventing goods from getting to market and driving up costs. There is an average of 65 service interruptions a day throughout the system. Projects to repair and replace aging locks and dredge channels take decades to approve and complete, exacerbating the problem further.

<table>
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<tr>
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<th>Add’l Total Investmen t by 2020</th>
<th>Protects $B in Exports</th>
<th>Protects $B in GDP</th>
<th>Protects Jobs</th>
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Stakeholders and Partnering

- Leverage Efforts

- Understand and communicate Civil Works and Marine Transportation System Value to Nation

- Find consensus on Major Initiatives
  - Identify Funding to Reach Outcomes
  - Engage in Dialogue

- Be mutually supportive

- Shared Messages

- Involve & Engage End-Users

- Seek to Influence Decision-Makers
Infrastructure Information

**U.S. Army Corps of Engineers in Numbers**
- Replacement value of Civil Works infrastructure: $267 billion dollars
- 715 dams; 14,700 miles of levees; 400 miles of shoreline protection
- U.S. marine transportation industry supports $2 trillion dollars in commerce and creates employment for over 13 million people
- $197 million dollars in damages prevented in 2017
- Commercial deep draft channels operated and/or maintained: 13,000 miles
- 250 million outdoor recreation visits a year
- 75 hydropower plants produce 3% of US electric energy
- Navigation lock chambers: 239, at 193 sites

**Water Resources Infrastructure**
- Water Supply and Recreation
- Hydropower
- Navigation
- Regulatory
- Dams, Levees, and Flood Risk Management

**The Nation's Water Resources Needs Are Not Being Met**
- Competing Priorities
- Changing Needs
- Aging Infrastructure
- Constrained Budget
- Permitting Delays

**Traditional Infrastructure Project Delivery Methods Alone Will NOT Get the Job DONE**

**Key Challenges**
- Ports: $80 billion needed in the next 50 years to maintain the levee system
- Levees: 40% of vessels moving goods on the inland waterways experience delays
- Dams: Average age of over 90,000 dams in the country: 56 years
- Inland Waterways: Continuous dredging and larger navigation channels needed