Navigation Program Overview for RSM-EWN Workshop

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Operations and Regulatory Division

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Corps Navigation Mission

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.
USACE Navigation Assets

COASTAL NAVIGATION
1067 Navigation Projects
19 lock chambers
13,000 miles of channels
929 navigation structures
844 bridges

INLAND NAVIGATION
27 Inland River Systems
207 lock chambers @ 171 lock sites
12,000 miles of inland river channels

Coastal navigation projects include 1067 navigation projects, with 19 lock chambers, 13,000 miles of channels, 929 navigation structures, and 844 bridges. Inland navigation assets consist of 27 inland river systems with 207 lock chambers at 171 lock sites, covering 12,000 miles of inland river channels.
Navigation Topics

1. National Goals/Objectives
2. Funding
3. Watershed Budget Initiative
4. Engineering with Nature
5. FY12/13 focus
6. Coastal Working Group and Navigation
FY13 National Goals/Objectives

A. Reduce the Deficit

B. Create Jobs and Restore the Economy

C. Improve Resiliency and Safety of Infrastructure

D. Restore and Protect the Environment

E. Maintain Global Competitiveness

F. Increase Energy Independence

G. Improve Quality of Life

1 President’s 2011 State of the Union Address
2 2011 National Security Strategy
### 2. President’s Budgets

($million)

<table>
<thead>
<tr>
<th>Pres Bud</th>
<th>Coastal</th>
<th>Inland</th>
<th>Nav</th>
<th>CW total</th>
<th>Nav Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY13</td>
<td>$967</td>
<td>$780</td>
<td>$1747</td>
<td>$4731</td>
<td>37</td>
</tr>
<tr>
<td>FY12</td>
<td>$832</td>
<td>$744</td>
<td>$1575</td>
<td>$4631</td>
<td>34</td>
</tr>
<tr>
<td>FY11</td>
<td>$873</td>
<td>$779</td>
<td>$1652</td>
<td>$4939</td>
<td>33</td>
</tr>
<tr>
<td>FY10</td>
<td>$971</td>
<td>$796</td>
<td>$1767</td>
<td>$5125</td>
<td>35</td>
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<tr>
<td>FY09</td>
<td>$969</td>
<td>$931</td>
<td>$1900</td>
<td>$4741</td>
<td>40</td>
</tr>
<tr>
<td>FY08</td>
<td>$957</td>
<td>$1052</td>
<td>$2009</td>
<td>$4900</td>
<td>41</td>
</tr>
</tbody>
</table>
2. Navigation Funding

Investigations: 1%, Constr: 21%, O&M: 78%

Anemic Capital Investments

<table>
<thead>
<tr>
<th></th>
<th>Feasibility</th>
<th>PED</th>
<th>Const</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Inland</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
2. FY13 O&M Budget
Coastal Navigation

<table>
<thead>
<tr>
<th>Category</th>
<th>Inventory</th>
<th>Commerce</th>
<th>FY13 O&amp;M Projects</th>
<th>FY13 O&amp;M Funds</th>
<th>FY12 O&amp;M Proj.</th>
<th>FY12 O&amp;M Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>59</td>
<td>90%</td>
<td>56</td>
<td>66%</td>
<td>54</td>
<td>62%</td>
</tr>
<tr>
<td>Moderate</td>
<td>100</td>
<td>9%</td>
<td>52</td>
<td>19%</td>
<td>61</td>
<td>25%</td>
</tr>
<tr>
<td>Low</td>
<td>908</td>
<td>1%</td>
<td>63</td>
<td>5%</td>
<td>41</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>1067</td>
<td>100%</td>
<td>171</td>
<td>100%</td>
<td>156</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Prior to FY12 we adjusted to budget decreases by minor reductions at almost all nav projects.
- The low use category was proposed as a program for 50% reduction in the FY12 budget development; This was a 50% dollar reduction, not a 50% projects reduction
- ‘Other’ includes Nav R&D, Project Condition Surveys, Remaining Items, etc.
2. FY12 Additional Funds

• Additional Navigation Funding Pots $245 M
  – Investigations $ 16.5 M
  – Construction $ 74.1 M
  – MR&T $ 5.0 M
  – O&M $149.0 M
  • Nav Maintenance $ 34M
  • Deep Draft Nav $ 55M
  • Inland Waterways $ 30M
  • Small, Remote & Subsistence $ 30M
3. FY14 Budget Development

- Watershed Initiative
- Each MSC submits one
- Reviewed this fall – HQ, ASA, OMB(?)
- Possible use in developing FY15 budget
- Can visualize for inland, but coastal? RSM…
Integrated Watershed Management

Moving towards Risk-Informed Integrated Life-Cycle Portfolio Management

And more, Coastal Nav, Water Supply and Quality…
Watershed Initiatives

- LRD  Great Lakes Watershed  Nav
- MVD  Kaskaskia and Ouachita  Nav
- NAD  North Atlantic Coast  Nav
- NWD  Puget Sound  Nav
- POD  Cook Inlet Watershed  Nav
- SAD  North Carolina Basin  Nav
- SPD  Santa Ana Watershed  No Nav
- SWD  Texas Gulf Coast  Nav
4. Engineering with Nature

- Working with Nature (PIANC)
- Regional Sediment Management
- Beneficial Uses of Dredged Material
RSM Products/Efforts

- RSM efforts at 22 Districts, 2 MSC and IWR
- Optimize use of sediments at navigation projects in 9 Districts
- Online sediment budget calculator
- 3D lidar calculation tools
- Coastal Modeling System nodal point calculator
- All for $3M!
Mouth of Columbia River
RSM success

[Map showing coastal areas and navigation channels]
St. Augustine Inlet, FL and Vicinity
Combining multiple projects

Erosion
Shoaling (maintenance)
Borrow (beach nourishment)
inlet bypassing
beneficial use
beach nourishment

$5-7M mob/demob savings
Reduced dredging/environmental impact
Combined permit
Emergency sand sources
Manage Stakeholder Expectations

- Building trust based relationships takes time (years)
- Stakeholders getting to collaboration takes time
- Demonstration projects – be willing to try
- Be transparent
- Deliver on commitments
- Communicate, communicate, communicate
5. FY12/13 Focus

• Collaboration - constrained funding necessitates it
  – Within USACE – Nav, Coastal Storm Damage Reduction, Aquatic Ecosystem Restoration
  – Cross agency – USACE and DoT
  – Stakeholder centric

• Dredged material as a resource

• Improve process to accept contributed funds
6. Coastal Working Group & Nav

- Coastal structures
  - Operational Condition Assessment
  - Operational Risk Assessment
- Modeling
  - Focus on high and moderate use projects
  - Smaller $ efforts/No Congressional Adds
- Engineering with Nature
  - Understand natural processes and what navigation resources (dredged material) can bring to the effort;
  - Dredge less
Framework for Success

• A pattern has emerged:
• Stakeholder active participation is essential
• USACE facilitates discussions but listens more than they talk
• Active participation by all 3 Corps offices is critical
• Rooting for your success!
Closing

What do we do?
Provide Navigation infrastructure that is Reliable, Efficient and Resilient.

Why is it important?
This infrastructure enables American goods to compete in the Global marketplace

QUESTIONS?