US Navigation Program Overview

For the ERDC and Dutch Ecoshape meeting

Jim Walker
Navigation Program Manager
HQ, US Army Corps of Engineers

18 Jan 2011
Recreation areas
376 M Visitors/yr
Generate $15 B in
economic activity,
500,000 jobs

Commercial Inland
Waterways:
½ the cost of rail
1/10 the cost of
trucks

Shore protection
400 miles of
Destination for
75% of U.S.
Vacations

Stewardship of
11.7 Million Acres
Public Lands

3% of Nation’s
Electricity: $500 M
+ in power sales

11,000 miles of
Commercial Inland
Waterways:
1/10 the cost of trucks

8,500 Miles of
Levees

299 Deep Draft
Harbors

768 Shallow Draft
Harbors

12 Emergency
Responses

Environmental
Restoration

100,000 permits
Most in 14 days

US Army Corps of Engineers (USACE)
Civil Works Value to the Nation

US Army Corps of Engineers (USACE)
USACE Missions

Military
Support for the Soldier

Civil Works
FY2011: $4939 million

- Navigation (1658)
- Flood Damage Reduction (1543)
- Env Stewardship (890)
- Hydropower (207)
- Recreation (280)
- Regulatory (193)
- Emergency Response (43)
- Water Supply (4)
- Other (191)
Navigation Program

FUNDING
Fiscal Year 2011

- Coastal - $878M
- Inland – $780M

- Coastal Investigations (9)
- Coastal Construction (115)
- Coastal O&M (754)
- Inland Investigations (10)
- Inland Construction (190)
- Inland O&M (580)
USACE 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
Distribution between Construction and Maintenance for Coastal Navigation

<table>
<thead>
<tr>
<th>Category</th>
<th>Commerce</th>
<th>Inventory</th>
<th>Maintenance Dredging</th>
<th>Capital Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Use</td>
<td>90%</td>
<td>59</td>
<td>54</td>
<td>7</td>
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<tr>
<td>Moderate Use</td>
<td>9%</td>
<td>100</td>
<td>60</td>
<td>1</td>
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<tr>
<td>Low Use</td>
<td>1%</td>
<td>908</td>
<td>40</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>100%</td>
<td>1067</td>
<td>154</td>
<td>11</td>
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</table>
# Dredging

## Quantities and Cost

<table>
<thead>
<tr>
<th>FY</th>
<th>New Work MCY</th>
<th>New Work $M</th>
<th>Maint MCY</th>
<th>Maint $M</th>
<th>WFO MCY</th>
<th>WFO $M</th>
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<tbody>
<tr>
<td>2006</td>
<td>24.6</td>
<td>$296</td>
<td>138</td>
<td>$523</td>
<td>7.6</td>
<td>$43</td>
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<tr>
<td>2007</td>
<td>25.5</td>
<td>$266</td>
<td>157</td>
<td>$617</td>
<td>3.6</td>
<td>$27</td>
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<tr>
<td>2008</td>
<td>26.1</td>
<td>$262</td>
<td>159</td>
<td>$668</td>
<td>2.1</td>
<td>$6</td>
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<tr>
<td>2009</td>
<td>18.1</td>
<td>$334</td>
<td>174</td>
<td>$782</td>
<td>66.4</td>
<td>$71</td>
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<tr>
<td>2010</td>
<td>17.6</td>
<td>$265</td>
<td>264</td>
<td>$956</td>
<td>24.7</td>
<td>$19</td>
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<tr>
<td>2011*</td>
<td>13.7</td>
<td>$168</td>
<td>176</td>
<td>$750</td>
<td>26.5</td>
<td>$46</td>
</tr>
</tbody>
</table>

*Estimated
U.S. Ports: Vital to Trade and Our National Economy

53 harbors – coastal, inland, Great Lakes - handled over 10 million tons each in 2008...
Cubic Yards by Dredge Type

- Bucket
- Hopper
- Pipeline
- Combination
Distribution of Contract Value

2010 Dredging Contracts

<table>
<thead>
<tr>
<th>Total value, $million</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.01-0.49</td>
<td>5</td>
</tr>
<tr>
<td>$0.5-0.99</td>
<td>22</td>
</tr>
<tr>
<td>$1.0-2.49</td>
<td>11</td>
</tr>
<tr>
<td>$2.5-4.99</td>
<td>69</td>
</tr>
<tr>
<td>$5.0+</td>
<td>43</td>
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</table>
Beneficial Use of Dredged Material/Regional Sediment Management

• Corps policy: Determine the least costly, environmentally acceptable method of dredged material placement. This is the Federal Standard.

• Corps is willing to place the material at other locations, but someone must pay/or cost share the increased cost over the Federal Standard method.

• States seek to mandate Beneficial Use of Dredged Material at full Federal expense.

• Navigation program can not bear the full burden of increased dredging and placement cost – funding is decreasing.
Coastal Navigation Issues - Nationwide

- Constrained funding at all levels – Federal agencies, States, Ports
- Dredging Cost Increases
- Dredged material placement capacity issues
- Environmental ‘Windows’: Increasing restrictions on when dredging can be performed
- Perception of dredged material: ‘Spoil’ vs. ‘Resource’
Looking forward to our discussions