Cleveland Harbor Dredged Material Management

Requirements, Capacity Issues, and Placement Alternatives

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Cleveland Harbor

- 5.8 miles of federal channel on the Cuyahoga and 1 mile of federal channel on the Old River
- Authorized depths are 28 feet in the outer harbor and 23 feet in the river
Dredging Requirements

- Historically, approx. 330,000 CY (fed and non-fed) were dredged annually to maintain channels.
- Since 2006, quantities were reduced to approx. 250,000 CY due to limited CDF capacities.
- Sediment backlog is increasing.
- Smaller channel dimensions reduce navigation safety.
USACE Policy

• Federal policy for the development of Confined Disposal Facilities (CDF’s) changed in 1996
  – 100% funded to maximum of 75% funded
  – Smaller project size to larger 20-year CDF solutions
    • Larger Project with Larger Cost Share

• USACE requires the bulk of the local share in the early years
  – (payments are not made in equal annual installments)

• Burden on the local community to meet the federal cost share mandates
The “Plan”

Total Area = 155 Acres
Cost of Confined Disposal Facility

► TOTAL ESTIMATED COST OF CDF = $302,670,800

- **Federal Share**: $168,858,693 (52%)
- **Local Share**: $157,605,007 (48%)
What’s Needed For a New CDF?

- An updated Letter of Intent from the Local Sponsor confirming their support of the Locally Preferred Plan - Plan 4A at E. 55th St. Site

- A Self-Certification of Financial Capability from the Local Sponsor acknowledging local cost sharing obligations and stating that funds will be available
  - CCCPA has $8M Budget
  - No State assistance
The Problem

- Existing lakefront CDFs run out of capacity in 2014
- Non-federal financial capability for a new CDF will be delayed at least 2 Years
- Earliest date a New CDF can be ready is 2017
- Focus now on Interim Dredged Management Options for 2+ Years to fill the gap
- We have to start now on solutions

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Project Year</th>
<th>Federal Sediment Placed in CDF</th>
<th>Non-Federal Sediment Placed in CDF</th>
<th>Total Cubic Yards Placed in CDF</th>
<th>Location</th>
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<tr>
<td>2008</td>
<td>1</td>
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<td>2017</td>
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<td><strong>Total Sediment Placement</strong></td>
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<td><strong>659,000</strong></td>
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<td><strong>Annual Average</strong></td>
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<td><strong>32,950</strong></td>
<td><strong>301,000</strong></td>
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Notes: 1) An interim management site(s) could be available prior to 2015; 2) A new long-term management facility or CDF would provide 20 years of capacity (2017 - 2036); 3) Increased dredging rates from 2017-2024 address the build-up of a sediment backlog.
DREDGED MATERIAL MANAGEMENT STATUS

- **Critical** – Dredged Material Management issues could severely restrict channel availability within 5 years.
- **Pressing** – Dredged Material Management issues could severely restrict channel availability within 10 years.
- **No pressing issues** within next 10 years; continue to work on long range planning such as DMMPs.

ANNUAL DREDGING REQUIREMENT (CY)

- **800K**
- **100K – 250K**
- **50K – 95K**
- **<50K**
Capacity Projections

Cleveland Harbor Dredging and Disposal Capability Assessment

Notes/Assumptions:
1. Since 2006, limited CDF capacities have reduced annual dredging and disposal quantities to 225,000 cy Federal and 25,000 cy non-Federal.
2. Current estimates indicate there will be less than 250,000 cy of space available in the existing CDFs in 2014 and 2015.
3. Total backlog of sediment in 2009 was approximately 1.5 million cy: 800,000 cy in the River Channels and 700,000 cy in the Outer Harbor. Figure shows estimated growth in backlog due to decreased dredging rates.
U.S. Army Corps of Engineers tells Cleveland-Cuyahoga County Port Authority to pay its share of new dike or risk closing Cleveland Harbor

By James F. McCarty, The Plain Dealer

November 18, 2009, 6:23PM

The U.S. Army Corps of Engineers issued tough orders Wednesday to the Cleveland-Cuyahoga County Port Authority’s board of directors: come up with $158 million or else.

Cleveland’s commercial harbor could close in
Should the port authority be saved or dismantled? Critics say other public entities could do the job better

By James F. McCarty, The Plain Dealer

January 11, 2010, 8:00AM
Sediment Management Alternatives

- Brownfields Restoration (ex. CVIC)
- Mine Reclamation
- Backfill excavations
- Wetland/habitat restoration (sediment suitability?)
- Landfill Cover