Toledo Harbor Sediment Management and Use Solutions

Great Lakes Dredging Team Annual Meeting
Maumee Bay State Park
May 17-18, 2012

Joe Cappel, Director of Cargo Development
Toledo-Lucas County Port Authority
The Ohio Lake Erie Commission was awarded a GLRI grant to create a sediment management strategy/plan for the Toledo Harbor that identifies and addresses:

- recommended short-term (1-5 years) options
- recommended long-term (30 year) options
- funding needs/sources/mechanisms
- timelines for implementation of recommended approaches
Toledo Harbor Dredging

Federal Channel spans RM 7 to LM 18 (25 miles, 400-500 ft. width)

Projected 1M CY Dredged Annually, includes federal and non-federal channels

30-year total of 30M CY
Toledo Harbor Sediment Management and Use Plan Status

- Solicited input on potential options and gathered value judgments from stakeholders on the importance of relative criteria to evaluate options
  - Completed Public Forum for Stakeholder Input (June 2011)
- Evaluation of short term (1-5 years) and long term (5-30 years) options
  - Compiled relevant data and information
  - Estimated dredge capacity needs
  - Completed conceptual cost estimates
Potential Sediment Management and Use Options

Upland
- Beneficial use (non-structural fill)
- Agricultural field improvements

Nearshore
- Wetland restoration and shoreline protection

In-Water
- Submerged habitat restoration unit

In-Water
- New confined disposal facility
- Emergent habitat restoration unit
- Open-lake placement with controls
- Open-lake placement without controls

Toledo Harbor Sediment Management and Use Solutions
Weighted Matrix Approach

• Identified major categories of technical criteria identified
  • Feasibility
  • Ecological Benefits
  • Environmental Impacts
  • Human Benefits
  • Economic Benefits
  • Implementation Cost
For each Technical Criteria category:

**Weighting Factors**
- Assigned by Task Force members
- 1-100, for each technical criteria category

**Technical Criteria**
- Assigned by Hull Technical Team
- 1-5, for multiple technical criteria for each option

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\text{Avg. Weighting Factor} \times \text{Avg. Technical Criteria Score} = \text{Score for Each Option}
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Toledo Harbor Sediment Management and Use Plan Status

• Presentation of Results
  – Public Forum on June 19th from 2-5pm
  – Location: TBD

• City of Toledo GLRI Application