Proposed Sediment Cleanup Plan for East Chicago Waterways Public Meeting

June 25,2015

Fernando Treviño, ECWMD

Diana Mally, U.S. EPA

Jim Wescott, Tetra Tech

Agenda

- Welcome - Fernando Treviño, ECWMD
- Past Work Summary – Diana Mally, U.S. EPA
- Project and Cleanup Options Review – Jim Wescott, Tetra Tech
- Community Comments

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Past Project Work

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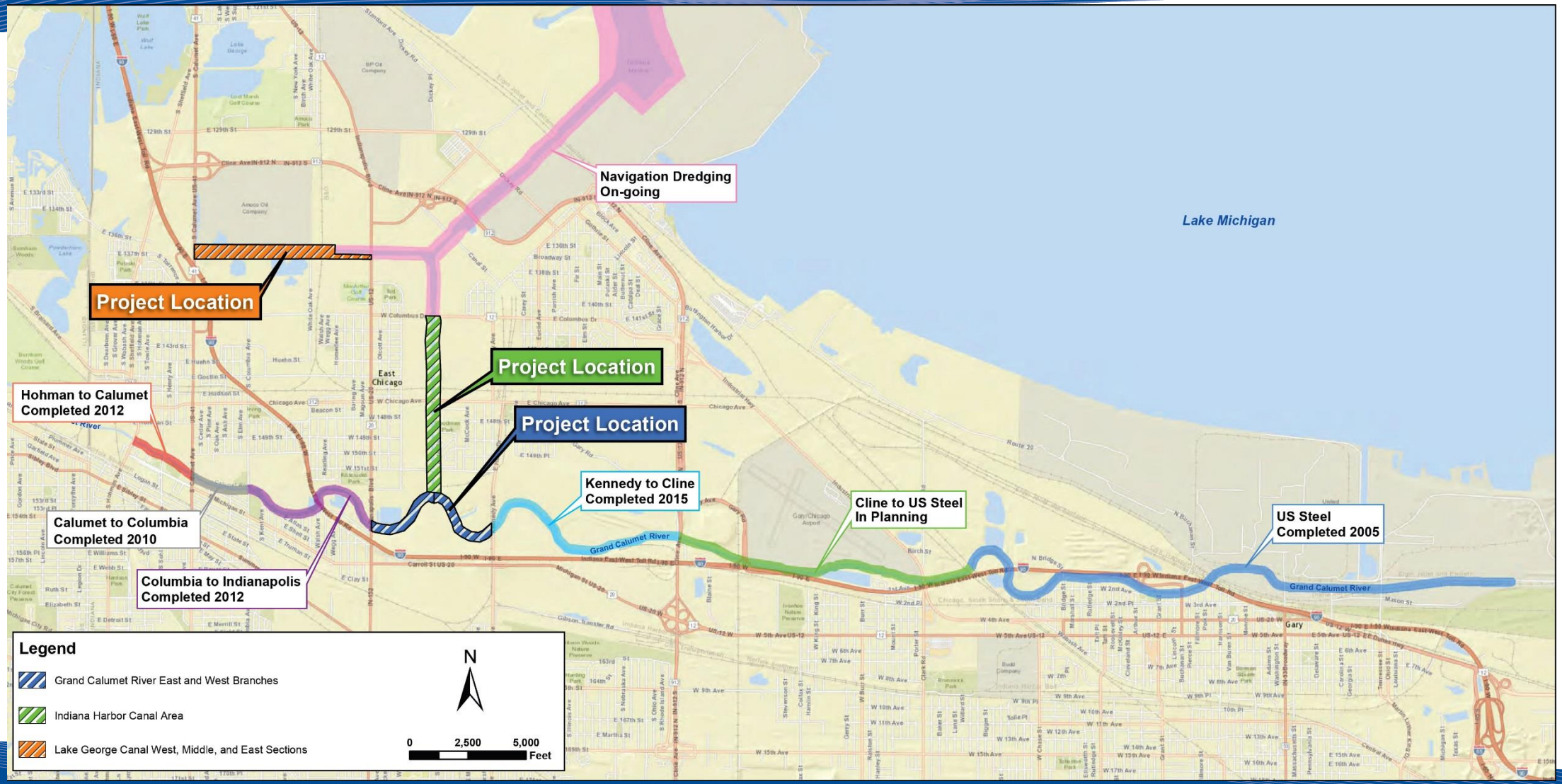


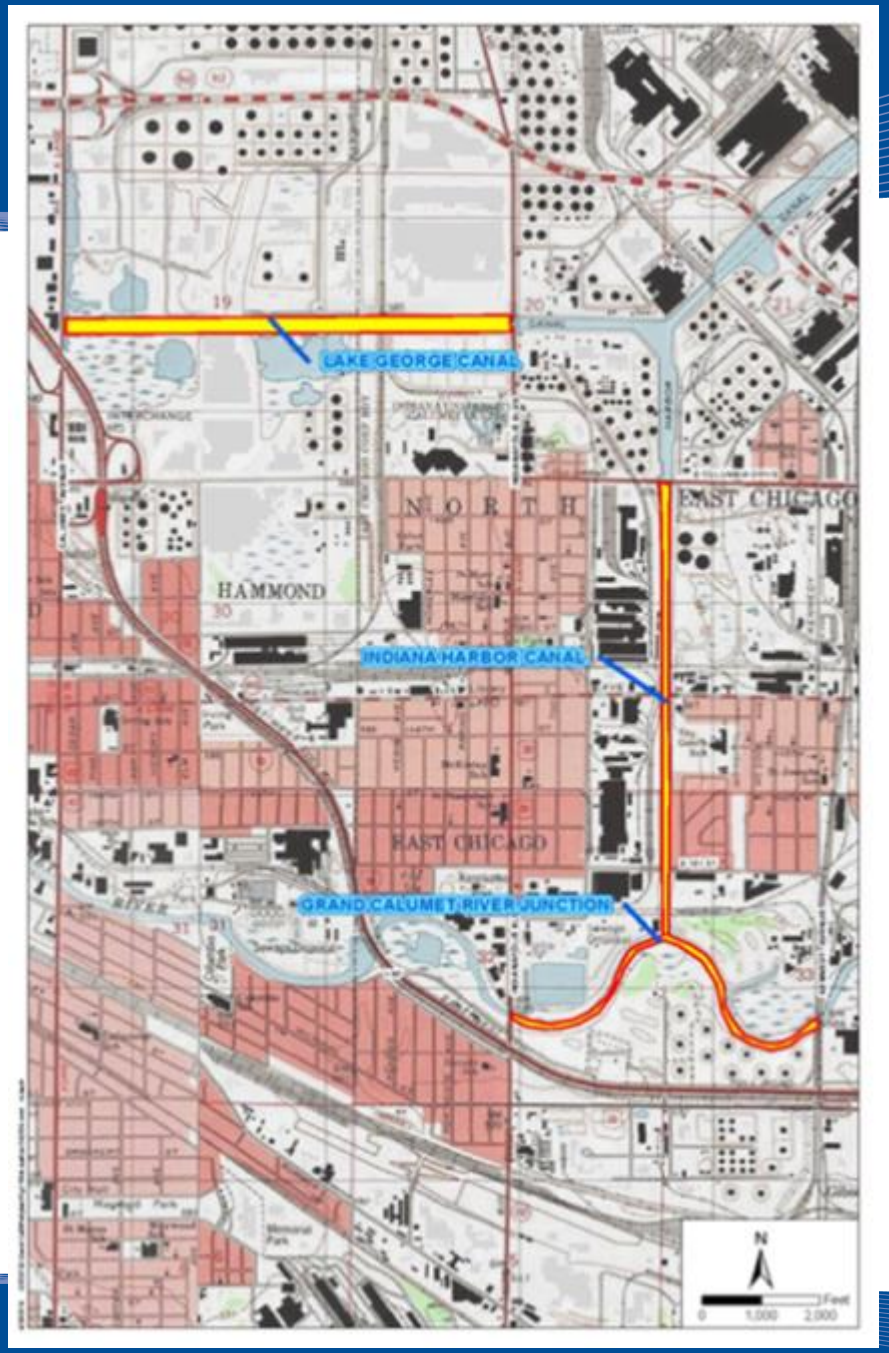
Grand Calumet River/Indiana Harbor Canal Feasibility Study

East Chicago Waterway Management District

Jim Wescott

June 25, 2015

Current Project Area – GCR/IHC



Project Summary

- Sampling & Remedial Investigation
- Feasibility Study
- Preliminary Design
- Final Design
- Phased Construction

RI/FS Tasks

Remedial Investigation

- Sediment Sampling
- Pore Water Sampling
- Source Control Evaluation

Feasibility Study

- Bathymetric and Topographic Surveys
- Geotechnical Sampling
- Clean Up Goals Development
- Remedial Alternative Screening and Evaluation
- Clean Up Alternatives

Proposed Cleanup Alternatives

- ***Alternative 1: No Action***
- **Alternative 2: Removal of Contaminated Sediment**
  - Sediment would be dredged hydraulically
  - Floating equipment would be used to remove and transport sediment through a pipeline to a drying area
  - Sediment would then be transferred to an off-site landfill
- **Alternative 3: Containment**
  - Several types of capping materials would be used, depending on the conditions of the area, to capture and impede the movement of contaminants
    - Containment cap
      - Could include materials like clean sand and clay or an activated carbon layer covered by a protective layer of gravel
      - Prevents erosion
    - Multi-layer reactive cap
      - A containment cap that also includes a layer of reactive material
- **Alternative 4: Removal with Containment**
  - A combination of dredging and disposal of impacted sediment and containment of the remaining sediment
    - Removal as described in Alternative 2 would occur in areas where contaminant concentrations are too high or a steep slope would prevent a containment system to be installed
    - A containment cap or multilayer reactive cap as described in Alternative 3

Selection Considerations

- Cost
- Permits
- Site Access
- Utilities and other Debris
- Sediment Characteristics
- Long-Term Effectiveness
- Potential for Recontamination
- Future End Use
- Stakeholder and Community Acceptance

Grand Calumet River –Preferred Alternatives

- West Branch – Alternative 4: Containment with Removal
- East Branch – Alternative 3: Containment

Indiana Harbor Canal

- **Alternative 4: Containment with Removal**

Lake George Canal

- East Section – Alternative 2: Removal
- Middle Section – Alternative 3: Containment
- West Section – Alternative 2: Removal

Typical Remedial Tasks

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Time Frame and Costs

- Begin Dredging 2016
- Complete remedial action 2018 – 2020
- Cost Ranges from $61 Mil to $66 Mil
- Schedule heavily dependent on non-federal and federal funding
- Construction could be broken into smaller pieces to facilitate funding and stakeholder priorities

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Questions?

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For More Information

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Copies of the Remedial Investigation/Feasibility Study and other documents about the project can be viewed at the following locations:

ECWMD
4444 Railroad Avenue
East Chicago

East Chicago Public Library
2401 Columbia Drive
East Chicago

Websites: www.in.gov/ecwmd/ www.greatlakesmud.org

Community Comments

- Cleanup Options Comments
- Future Use Ideas