



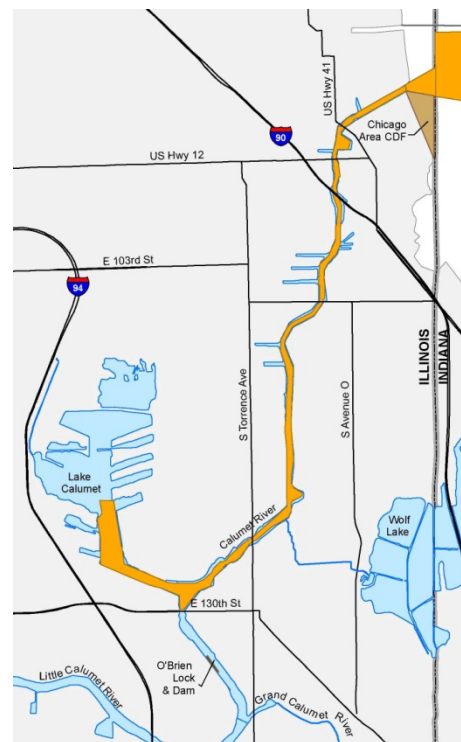
# Regional Sediment Management Program

## LRC Calumet River Sediment Erodibility Testing



### Description

Calumet Harbor and River is a deep draft Federal harbor located on Lake Michigan on the far south side of Chicago. Sediment accumulating in the Federal channel requires ongoing maintenance dredging and disposal. Due to contaminants in the material, river sediment is placed in the Chicago Area Confined Disposal Facility (CDF). The CDF is nearing its capacity and the Chicago District is evaluating ways to reduce the volume of sediment accumulating in the channel. A sediment transport model for Calumet River is part of this effort. Sediment erodibility data will be collected for the model. This data will also be incorporated into a larger, generalized database being developed by ERDC.



### Issue/Challenges

Erodibility testing of sediment is critical to the development of the sediment transport model. Compiling erosion potential data will also aid in the classification of cohesive sediment erosion potential as a function of easily measured sediment bulk properties.

### Successes Lessons Learned

This data collection is an intensive and costly effort. The generalized database will allow future efforts in the Great Lakes and other regions to minimize data collection and will provide significant cost savings.

### Expected Products

- Technical Note: Enhanced Sediment Database and Analysis Tool
- Technical Note: Fine Grained Sediment Management Practices – Lessons Learned
- Presentation at annual Regional Sediment Management Workshop

### Potential Users

USACE ERDC, USACE Chicago District, area stakeholders

### Projected Benefits

The model will allow the Chicago District and stakeholders to evaluate ways to reduce sedimentation in the channel. The data will also be included in an effort to generalize sediment erodibility, providing cost savings in the development of future models.

### Leveraging Opportunities

This effort will contribute to the Calumet River Great Lakes Tributary Modeling (GLTM) Program effort and to the generalized classification of fine grained sediment.

### Points of Contact

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### Participating Partners

City of Chicago, Illinois EPA, the Metropolitan Water Reclamation District of Greater Chicago, Region V of the USEPA, Illinois State Water Survey, Illinois Department of Transportation, Illinois International Port District, and USGS.