

Project Summary

The National Center for Freight and Infrastructure Research and Education

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Beneficial Use of Dredge Materials Summit (Louisville, KY March 14-15, 2013)

Problem:

Dredged material management options for commercial ports, particularly those involving confined disposal facilities or other long term or permanent placement, are diminishing. Many existing Great Lakes disposal facilities serving these ports are at or near capacity and high costs plus limited new site availability make prospects for new or expanded capacity increasingly unlikely. According to a February, 2012 analysis by the U.S. Army Corps of Engineers, at least six of the Great Lakes largest cargo-handling ports – Duluth/Superior, Calumet Harbor, Saginaw, Toledo, Lorain and Cleveland – are in “critical” status, meaning that dredged material management issues could “severely restrict channel availability within 5 years.” Another six ports – Green Bay, Sheboygan, Port Washington, Milwaukee, Rouge River and Ashtabula – have “pressing” needs that could restrict channel availability in ten years.

Implications of these restrictions to freight movement in the North American mid-continent are serious. Some 175 million to 200 million tons of primarily bulk commodities – including iron ore, coal, stone, petroleum products, chemicals and grain – are moved annually on the Great Lakes St. Lawrence Seaway system. Great Lakes marine transportation supports some of North America’s most important core industries including steel manufacturing, automotive, construction and agriculture. For many Great Lakes bulk cargo movements, sheer volume precludes shifts to other surface transportation modes.

Given the declining placement capacity, “disposal” of non-toxic dredged material into existing disposal facilities is no longer feasible as an ongoing management practice. Reuse or recycling of material suitable for beneficial use has emerged as the most practical approach to sustainable dredged material management in the region. One factor favoring increased beneficial use is the improving physical quality of the material; however this message needs to be shared with potential users who historically have not utilized this material in the past. Major partners in the freight coalition are state departments of transportation.

Goals:

The goals of this proposal are to conduct a forum which would provide the introduction and discussion of the following beneficial use of dredged material information and potential uses in state transportation projects:

- Describe the current crisis (especially in the Great Lakes) of dredged material placement and disposal options
- Describe currently available, forward looking technology to assess and enhance suitability of dredged material for beneficial reuse
- Provide examples of successful beneficial reuse of dredged materials most relevant for state transportation project applications
- Discuss the applicable state and federal policy issues affecting both regulatory issues surrounding, and social acceptance of, beneficial reuse of dredged material
- Resources available to promote and implement beneficial reuse

- Provide the opportunity for state transportation department feedback on how dredged material could be used in state DOT projects and what types of testing would be required for approval
- Initiate efforts for draft memorandums of understanding to facilitate the beneficial use of dredged material by the appropriate departments

Summit Description:

A project steering committee would be formed to determine the specific Summit agenda, personnel invitee lists and Summit deliverables.

The forum for this project would be a two-day (March 14 PM – March 15th AM) meeting held in Louisville, KY following the Mid America Freight Coalition meeting being held at the same location earlier that week. Specific attendees would be invited which would include members from:

- Major port authorities and harbor commissions
- Leading dredged material management experts from the Corps of Engineers' Engineering Research and Development Center
- CFIRE program leaders and research affiliates
- State Department of Transportation Materials and Environmental section members
- Federal, state and local regulatory agencies (EPA, state departments of natural resources, etc.)
- Private sector marine transportation agencies (MARAD, Lake Carriers Association, barge operators, etc.).

Project Outcomes:

- Published Summit presentations, summary of proceedings with reference tools and bibliography on CFIRE's web site.
- Progress towards draft memorandums of understanding facilitating beneficial use of dredged material.

Specific Project Tasks:

- Advance planning and facilitation, including the convening in a series of conference calls an advisory committee with representation of above participants.
- Coordination of Summit to immediately follow with the 2013 Mid America Freight Coalition Meeting in Louisville, KY.
- Summit facilitation.
- Post-Summit summary & presentations, references, etc. submitted for CFIRE web page.