



## Long Island Sound Dredged Material Management Plan

**U.S. ARMY CORPS OF ENGINEERS**

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The U.S. Army Corps of Engineers (USACE) has prepared a Draft Dredged Material Management Plan (DMMP) and Draft Programmatic Environmental Impact Statement (PEIS) for Long Island Sound. The Governors of Connecticut and New York, requested that the Corps of Engineers prepare a Long Island Sound wide DMMP in a letter, dated February 8, 2005 to the Chief of Engineers. The need for a DMMP was also identified by the U.S. Environmental Protection Agency (EPA) in their June 3, 2005 Rule that designated two of the Sound's historic open-water placement sites, the Central Long Island Sound and Western Long Island Sound Sites (CLDS and WLDS) for continued use. The EPA's rule had restrictions that required the preparation of a DMMP to examine dredged material management alternatives, with the goal of reducing or eliminating open-water placement of dredged material in the waters of Long Island Sound wherever practicable. The Rule also required that the DMMP develop procedures and standards for evaluating practicable alternatives to open water placement to advance that goal.

USACE is responsible for maintaining 52 Federal Navigation Projects (FNP) in Long Island Sound (LIS) and adjacent waters that include dredged general navigation features (channels, anchorages, and turning basins) requiring periodic maintenance dredging. These include 31 projects in Connecticut, 17 in New York and four in Rhode Island. Dredging is necessary for the continued maintenance, and occasional improvement of these harbors to maintain safe navigation. Other Federal agencies, including the U.S. Navy, U.S. Coast Guard, and the Maritime Administration, operate facilities around Long Island Sound requiring navigational access.

In conducting the DMMP investigation the Corps worked with representatives of NY Department of State, NY Department of Environmental Conservation, CT Department of Energy and Environmental Protection, CT Department of Transportation, RI Coastal Resource Management Council, both Region 1 and 2 of EPA and the National Oceanic and Atmospheric Administration. These organizations assisted in the development of scopes of work for study efforts and in reviewing and providing comments on reports documenting the various investigations.

The DMMP is not a decision document, but makes specific recommendations for further interagency involvement in dredged material management, dredging data management, study of the impacts of open water placement, and supporting and advancing opportunities for beneficial use. Standards were developed and followed for determining future dredging needs over a 30-year period, and for identifying potential placement and management alternatives for that dredged material. Procedures were recommended for regional collaboration among Federal and State agencies to evaluate future project proposals, make recommendations on beneficial use proposals, and pursue implementation of those proposals. In addition the extent to which ongoing processes, initiatives and studies could be integrated into the overall effort of dredged material management in LIS was also identified. In summary, the several recommendations are as follows:

- The LIS Regional Dredging Team (RDT) established for this DMMP should be continued to be used by its member agencies to put forth, discuss and examine means of funding and implementing alternatives to open water placement with a focus on beneficial use.
- As Federal projects are funded for future study, design and construction the DMMP should be consulted as to the likely Federal Base Plan and alternatives that should be evaluated to manage the dredged material from those projects. Each project should examine placement alternatives with specificity to determine which method should be recommended considering engineering feasibility, cost-effectiveness, any non-economic benefits, the willingness and capability of non-Federal sponsors to meet their responsibilities, and other aspects of practicability.
- A means of collecting, reporting on and maintaining information on all dredging and dredged material placement activities in LIS should be implemented to serve as a regional tracking system for dredged material, and provide examples of real-world application of placement alternatives.
- Federal and state agencies should target data collection and studies to better address the question of the long-term impacts and acceptability of past and continued open water placement of dredged materials in LIS. Closer inspection may yield a better understanding of the health of the Sound and impacts at the active and historic placement sites.

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The states should make efforts to examine the opportunities for beneficial use identified in this study, discuss and evaluate those projects, prioritize them according to the states willingness and capability to approve and implement, and work with the USACE to determine what opportunities for Federal participation may exist. The states and the USACE should consider opportunities for beneficial use of parent materials removed in future major improvement dredging projects.

Significant information was developed as part of the DMMP investigation. The reports that document this information are located on the Corps web page. Some of the reports that may be of interest to stakeholders include:

**Dredging Needs Report:** A survey was conducted of facilities that are dependent on dredging for continued usage, including: deep-draft shipping terminals; marinas and yacht clubs; boat repair and construction facilities; commercial fishing facilities; and government facilities (U.S. Coast Guard, U.S. Navy, municipal wharves, and port authorities). The Corps also used historical information from permit records in New England and New York to estimate potential dredging needs from facilities that did not respond to the survey. All of this information, combined with the projected dredging needs of the Corps' New York and New England Districts, allowed for the assessment of dredging needs for various time periods through 2035.

**Inventory Report on Upland Placement, Beneficial Use, and Dredged Material Dewatering Sites:** An inventory was undertaken of potential alternative upland disposal sites, beneficial use opportunities and potential sediment dewatering and re-handling sites that would be necessary to accommodate upland placement. The sites were screened into sites that were more likely usable by larger Corps dredging projects and by smaller non-Corps navigational interests. The sites surviving initial screening were characterized to determine the feasibility of these sites for receipt of dredged material, the extent and cost of site preparation required, if any, to make the sites available for such use, the potential regulatory requirements for site use, the potential impacts to critical resources that would result from use of these sites, and costs associated with site use.

**Characterization of Smaller Upland, Beneficial Use and Sediment Dewatering Sites:** This investigation determined the potential capacity of the smaller sites that did not survive initial screening. This effort was done analytically and established a range of capacity for different placement elevations. This information will assist non-Corps dredge managers in identifying the potential of these sites in their alternative analysis for dredge material management.

**Federal, State and Local Programs and Regulations:** This effort reviewed current environmental regulations for land, water, and air protection to determine if they limit or prevent use of potential management alternatives. The report identifies recommendations for proposed revisions to regulatory statutes or State and Federal legislative actions to provide consistency between the States & allow favorable alternatives to be implemented, especially beneficial uses. The report identifies programs that could assist navigation facilities in funding beneficial use or alternative disposal options.

**Technical Working Group:** A Technical Working Group (TWG) was established to include DMMP Team members and representative Points of Contacts for other organizations (Federal and State agencies and established Non-Government Organizations) having an interest in LIS dredged material management. The TWG assisted in the development of the screening criteria for various management alternatives using a multi-criteria decision analysis process.

**Screening and Ranking of Placement Alternatives:** The screening criteria developed with the assistance of the Working Group stakeholders were combined in a ranking system to screen the most likely acceptable alternatives for each harbor and dredging center in the LIS study area. The ten highest ranking alternatives were carried forward for final consideration. Where the list of the ten highest ranking alternatives for a particular harbor or dredging center lacked a range of beneficial use alternatives additional management options were added to the final list for consideration.

**Transportation Cost Matrix:** This effort updated the Dredged Material Transportation Cost Matrix from the LIS EIS to current price levels and to include an expanded array of non-in-water disposal sites and alternatives. The matrix provides cost estimates for various sized projects using different types of dredging plants and will assist the non-Federal dredge managers in assessing their dredged material management alternatives. Cost estimates were added to the screening rankings for the final array of alternatives to determine the plans likely to warrant some level of Federal participation.

**Where to Go for Information:** The Corps will be posting announcements and completed reports on our project web site. <http://www.nae.usace.army.mil/Missions/ProjectsTopics/LongIslandSoundDMMP.aspx> Copies of the completed reports developed to date can also be found on the Corps web page. Written comments should be received in Concord, MA on or before October 16, 2015. Address written comments to: Meghan Quinn, LIS DMMP/PEIS Project Manager, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751.