# Third Annual Report Regarding Progress in Developing a Dredged Material Management Plan for the Long Island Sound Region

For the Period July 6, 2007 – July 5, 2008

U.S. Environmental Protection Agency, Region 1 October 2008



#### **INTRODUCTION**

This is the third annual report by the U.S. Environmental Protection Agency (EPA) on progress toward completion of a dredged material management plan (DMMP) for the Long Island Sound region, and related efforts to "reduce or eliminate" the need for open-water disposal of dredged material in Long Island Sound.

### BACKGROUND

#### EPA Regulatory Requirements

On June 3, 2005, EPA issued a final rule to designate two open-water dredged material disposal sites, Central Long Island Sound and Western Long Island Sound, for the placement of dredged material from harbors and navigation channels in the Long Island Sound vicinity in the states of Connecticut and New York [40 CFR Part 228.15(b)(4) and (b)(5)].

The use of these two sites is subject to restrictions that are described in the site designation rule and are intended to reduce or eliminate the disposal of dredged material in Long Island Sound. Use of the sites pursuant to these designations may be suspended or terminated in accordance with these restrictions.

One of these restrictions links continued use of the sites to the completion of a regional dredged material management plan (DMMP) for Long Island Sound. A DMMP is a comprehensive planning process and decision-making tool to address the management of dredged material for a specific harbor or navigation project, group of related projects, or geographic area. Additional detail on the DMMP is provided in the next section.

A related restriction requires EPA to conduct an annual review of progress toward completion of the DMMP. EPA is complying with this requirement by producing an annual report on or about the anniversary of the effective date of the site designations (July 5, 2005), and making the report available to the general public.

Another restriction is intended to ensure progress toward reducing or eliminating open-water disposal in Long Island Sound pending completion of the DMMP by requiring the formation of an interagency Long Island Sound Regional Dredging Team (RDT). The RDT reviews dredging projects to ensure that a thorough effort has been conducted to identify practicable alternatives to open-water disposal and ensure the use of those alternatives to the maximum extent practicable. In addition to information on the status of the DMMP, this EPA annual report includes information on RDT deliberations conducted in the preceding year, and on the quantity of dredged material and its final placement or disposal location. Additional detail on the form and function of the RDT is provided in a later section.

#### Dredged Material Management Plans

The U.S. Army Corps of Engineers (USACE) regulations require each of its district offices to develop a DMMP for all Federal Navigation Projects for which there is an indication of insufficient placement or disposal capacity to accommodate maintenance dredging for the next 20 years. A DMMP addresses a wide range of environmentally acceptable, cost-effective, and practicable alternatives for the management of dredged material, culminating with the selection of a base plan and a recommended plan that ensures that sufficient capacity for dredged material placement exists for a project or group of projects for the required 20-year planning period. The range of alternatives includes those that may provide environmental or commercial benefits through beneficial use of dredged material. The scope of a DMMP may also include private dredging projects that are geographically related to the federal project(s), which may require the sponsors of those projects to provide non-federal funds to support the additional work.

The DMMP process involves a phased approach. The first phase, a Preliminary Assessment, draws on existing information to: (1) determine the economic and engineering need for dredging according to existing and reasonably prospective navigation traffic; (2) identify the anticipated locations and volumes of dredged material to be generated within the study area; (3) examine existing dredged material disposal sites and management practices to determine if shortfalls in capacity or opportunities for better management exist; and (4) provide an estimate of the cost of completing the DMMP. The Preliminary Assessment determines whether a federal interest exists in participating in a feasibility-level DMMP study and also identifies potential non-federal sponsor(s) of the DMMP.

After the PA phase is completed, the DMMP is initiated. The first step is development of a Project Management Plan (PMP) that describes: (1) the scope of the DMMP; (2) the sequence of the studies; (3) a plan for acquisition management covering the various study tasks (labor, contracts, other agency contributions); (4) a plan for public involvement and participation; and (5) an estimated budget, organized by federal fiscal year budget cycle.

Following review and acceptance of the PMP by the cooperating federal and state agencies, feasibilitylevel study efforts would commence, subject to the availability of staff and funding. These studies generally focus on the following topics: (1) dredging needs; (2) management options; (3) capacities of placement sites; (4) environmental compliance requirements; (5) potential for beneficial use of dredged material; and (6) indicators of continued economic justification. The PMP is considered a "living document," subject to change based on new information and input from the public and other agencies.

The management structure for a typical DMMP comprises the following components:

- Project Manager: Individual responsible for day-to-day management of project.
- Project Delivery Team (PDT): The interagency working group that will assist with the development of the DMMP.
- Agency Technical Review Team: Required by the USACE to review the plan for technical merit and cost-effectiveness.
- Technical working groups: These may be formed to provide assistance to the Project Delivery Team, with representation from other federal and state agencies, and sometimes non-government organizations and private citizens.

For compliance with the National Environmental Policy Act (NEPA), the USACE prepares a Programmatic Environmental Impact Statement (PEIS) that evaluates the analyses and recommendations of the DMMP.

## LONG ISLAND SOUND DREDGED MATERIAL MANAGEMENT PLAN

#### Management Structure

The USACE is the lead agency for development of the Long Island Sound Dredged Material Management Plan (LIS DMMP). The New England District and New York District, with oversight by the North Atlantic Division, are developing the DMMP in cooperation with EPA Regions 1 and 2, the National Oceanic and Atmospheric Administration (NOAA), the New York State Department of State (NYS DOS), the New York State Department of Environmental Conservation (NYS DEC), the Connecticut Department of Environmental Protection (CT DEP), the Connecticut Department of Transportation (CT DOT) and the Rhode Island Coastal Resources Management Council (RI CRMC).

Management of the LIS DMMP was assigned to the USACE New England District, which has assigned a project manager. The participating agencies agreed to adopt the traditional management structure by establishing and assigning representatives to a LIS DMMP Project Delivery Team (PDT). Although not a standard component of the DMMP management structure, due to the large scope of the project and strong public interest, the agencies also formed a Steering Committee of higher level agency officials to facilitate communication, priority-setting, and the commitment of resources for the LIS DMMP.

During the reporting period, the Steering Committee held monthly teleconferences to provide direction to the PDT, resolve outstanding issues, and track progress on the DMMP. The PDT met twice during this reporting period, and many of its members also participated in the monthly Steering Committee calls. The meetings were held on August 27-29, 2007, in Newington, CT to finalize comments on the LIS DMMP PMP, and on April 29, 2008, in Newington, CT to discuss DMMP work efforts, including the Dredging Needs Survey and Upland Placement Inventory, project budget, and proposed schedule for future work tasks. The current rosters for the Steering Committee and PDT are attached as Appendices A and B.

#### Planning Process

The overarching goal of the LIS DMMP is to develop a comprehensive plan for dredged material management in Long Island Sound that ensures federal dredging needs are met, and that will lead, over time, to the reduction or elimination of open-water disposal in the Sound. The DMMP will try to meet this goal by using a broad–based, public process that protects the environment based on best scientific data and analysis, while meeting society's need for safe and economically viable navigation for water based commerce, transportation, national security, and other public purposes. Recognizing that there are numerous institutional, regulatory, social, and financial barriers to utilizing dredged material beneficially, one purpose of the DMMP is to document these barriers and recommend plans to overcome them.

For the Long Island Sound DMMP, it should be noted that the site designation restrictions apply to all federal projects, and non–federal projects generating more than 25,000 cubic yards of dredged material in the region. The LIS DMMP will identify potential environmentally acceptable, practicable management alternatives that can be utilized by various dredging proponents in their analysis of options to manage their dredging projects. The DMMP will provide its users with an array of

suitable/feasible options that they could use in their alternatives analyses that will meet or exceed their needs.

The Preliminary Assessment for the LIS DMMP was completed and approved by the USACE in June 2006. The Project Management Plan, which serves as the initial work plan for the LIS DMMP, was completed and approved by the USACE, in consultation with the PDT, in October 2007. As previously noted, the PMP is subject to change based on new information and input from the public and other agencies. The initiation of the actual DMMP studies is dependent on the appropriation of federal funding to the USACE by Congress.

As previously noted, the USACE will be preparing a Programmatic Environmental Impact Statement (PEIS) in conjunction with the LIS DMMP to ensure compliance with NEPA. The USACE published the Notice of Intent to develop a PEIS for the LIS DMMP in the Federal Register on August 31, 2007 (72 FR 50332). EPA, the USACE, and state agencies conducted a series of six public information and NEPA scoping meetings to kick off the LIS DMMP and PEIS process on November 26-29, 2007. The agencies held three meetings in each of the two states to present progress on the planning for the LIS DMMP and solicit public input on both the scope and process of the LIS DMMP and PEIS. Public comments will be considered in identifying and developing the activities and investigations to be performed in the LIS DMMP and PEIS effort. The presentations from the public meetings and other related documents are available on the USACE LIS DMMP Project website, which was established in August 2007 (http://www.nae.usace.army.mil/projects/ri/LISDMMP/LISDMMP.html).

On March 24, 2008, the USACE contracted for the first two LIS DMMP study efforts. The Dredging Needs Survey, which is to estimate how much dredging will occur and how much dredged material will be generated in the entire region over a 20-year planning horizon, was initiated in June 2008. The Upland Placement Inventory, which is to identify and catalog potential upland placement alternatives for the entire region over a 20-year planning horizon, as well as the inventory of possible shore-side transfer sites, was initiated in August 2008. Both studies will build upon information collected for the Environmental Impact Statement for the Designation of Dredged Material Disposal Sites in Central and Western Long Island Sound, April 2004.

#### **Funding**

The PDT estimates that it will cost \$12 million and take 5-6 years to complete the LIS DMMP. In February 2005, the governors of the two states sent a joint letter to the USACE requesting its assistance with the development of the DMMP and, in separate letters, asked members of their respective congressional delegations to seek appropriation of federal funds to initiate the DMMP. The USACE agreed to work with the states on the DMMP and requests for funds have been included in the President's budget for federal fiscal years (FY) 2007 and 2008. In FY07, \$1.7 million was included in the President's proposed budget, but this was eliminated by passage of a Continuing Resolution that was based on the FY06 federal budget.

On December 26, 2007, the President signed the 2008 Consolidated Appropriations Act, which included \$3.525 million for the LIS DMMP. In June 2008, the USACE contracted approximately \$300,000 of the \$3.525 million to conduct the first two studies.

## LONG ISLAND SOUND REGIONAL DREDGING TEAM

#### Purpose

As described above, the site designation rule contemplated that a Regional Dredging Team would be established to review dredging proponents' alternative's analysis to ensure that they conducted a comprehensive analysis for practicable alternatives to open-water disposal and recommend their use to the maximum extent practicable, to ensure progress toward reducing or eliminating open-water disposal in Long Island Sound pending completion of the DMMP. The following excerpt from the RDT guidance describes its primary function:

The RDT is charged with reviewing all permit applications and authorizations subject to the ... site designation rule restrictions and is not precluded from voluntarily providing advice to any other dredging project to help achieve the goal of reducing or eliminating the need for open water disposal in Long Island Sound. The RDT will work to identify all practicable alternatives to open water disposal and to advise regarding their use to the maximum extent practicable. Further, those identified practicable alternative use opportunities will be advanced through the appropriate state and federal authorities. All agencies will retain their respective final regulatory decision-making authority and regulatory time frames for project review.

In July 5, 2006, EPA, USACE, NOAA, and the states agreed to form an RDT and assigned representatives. The RDT began drafting a charter to describe the procedures the RDT would use to review the alternatives analyses developed by dredging project proponents, determine the adequacy of the analyses, and make recommendations on alternative dredged material placement options that should be considered by the USACE and other regulatory agencies. The RDT charter was approved by the Steering Committee in March 2007. The charter describes how the RDT will enhance communication and discussion among the participating agencies to facilitate the timely review and presentation of recommendations on the placement of dredged material from Long Island Sound dredging projects. Through the review process, the RDT will become aware of possible alternatives to open-water disposal that it can communicate to potential applicants as well as appropriate state and federal authorities.

#### Current Status

During this reporting period, the RDT met once, on August 28, 2007, in conjunction with the previously noted PDT meeting on August 27-29 in Newington, CT. The purpose of the meeting was to review a proposal by several consultants for private marinas and boat yards to combine upward of 20 permitted private dredging projects to share capping material required by their permits. The RDT members also participated in the public scoping meetings in NY and CT in November 26-29, 2007.

#### Dredged Material Disposal in Long Island Sound

It is the stated goal of the states of Connecticut and New York to reduce or eliminate the disposal of dredged material in Long Island Sound. To determine if this goal is being met will require measuring and tracking the amount of dredged material being disposed of or placed in the Sound and other

locations. Currently, most open-water disposal in the Sound occurs at one of the four dredged material disposal sites in the Sound: Western Long Island Sound (WLIS), Central Long Island Sound (CLIS), Cornfield Shoals (CSDS), and New London (NLDS).

Alternatives include: upland placement or disposal; beach nourishment (depositing sand on or near an eroding beach); habitat restoration (e.g., depositing dredged material in sub-tidal areas to raise elevation and restore or create wetlands); confined aquatic disposal (CAD) cells (depositing unsuitable dredge material in a pit excavated below the floor of the harbor or navigation channel, and covering with clean material); and confined disposal facilities (using dredged material to increase the size of or create islands, e.g., to expand port facilities). Some of these alternatives, including beach nourishment, habitat creation/restoration, and capping (for both upland and aquatic habitat remediation purposes, in certain circumstances) are considered beneficial to the environment (i.e., beneficial uses). The following excerpt from the RDT guidance describes this process:

The RDT will track and document the volume of dredged material approved for open water disposal as well as other alternative disposal methods, and submit this information for inclusion in the annual report on progress of the DMMP. This information will be part of the annual report on the progress of the DMMP to be issued by the EPA.

EPA is complying with this guidance by working with the RDT to compile dredged material disposal records on an annual basis, and reporting this data in an annual report for a one-year period ending July 5 each year. The data in the annual report will be compared with dredged material disposal data from all disposal activity in Long Island Sound averaged over the period from 1982-2004. This is the third annual report.

Disposal Site	Total Dredged Material Disposal	Avg. Annual Dredged Material Disposal			
NLDS	3,069,546	133,459			
CSDS	1,295,998	56,348			
CLIS	8,019,678	348,682			
WLIS	1,870,921	81,344			
Totals	14,256,143	619,833			

Dredged Material Disposal in Long Island Sound, 1982-2004 (in cubic yards [c.y.])

Overall, there was a total of 101,010 c.y. of dredged material generated in the Long Island Sound vicinity for the period July 6, 2007 – July 5, 2008, of which:

- 46,010 c.y. were disposed at open-water disposal sites in Long Island Sound;
- 50,000 c.y. were placed at an upland containment site; and
- 5,000 c.y. were used beneficially for beach nourishment.

Of the 46,010 c.y. disposed in the Sound:

- 24,575 c.y. went to CLIS (vs. historical annual average of 348,682 c.y.);
- 10,135 c.y. went to WLIS (vs. historical annual average of 81,344 c.y.);
- 0 c.y. went to NLDS (vs. historical annual average of 133,459 c.y.); and
- 11,300 c.y. went to CSDS (vs. a historical annual average of 56,348 c.y.).

All 46,010 c.y. disposed in the Sound came from private projects.

Disposal Site	Avg. Annual Dredged Material Disposal	2006	2007	2008	Change from Previous Reporting Period (2007) c.y.	Change compared to Avg. Annual Disposal (1982-2004) c.y.
NLDS	133,459	0	369,635	0	-369,635	-133,459
CSDS	56,348	0	9,470	11,300	1,830	-45,048
CLIS	348,682	208,410	64,970	24,575	-40,395	-324,107
WLIS	81,344	15,550	3,600	10,135	6,535	-71,209
Totals	619,833	223,960	447,675	46,010	-401,665	-573,823

Recent Dredged Material Disposal in Long Island Sound Compared with Historic Averages (in cubic yards [c.y.])

Compared with the average annual amount of dredged material disposed at the four open-water sites in the Sound from 1982-2004, which was 619,833 c.y. for the period July 6, 2007 – July 5, 2008, there was a total of 46,010 c.y., or about 7.4 percent of the historical annual average. For further details, see Appendix D.

While there is generally some variability from one year to the next in the amount of dredged material disposed of in the Sound, and there are many factors influencing this variability, reductions in the federal budget again may have been one of the largest factors in the lower amount of disposal over the past year. Regardless, it is too early to determine any kind of long-term trend. The amount of dredged material disposed in the Sound during the current reporting period of July 6, 2007 – July 5, 2008 was less than the amount disposed during the prior reporting period of July 6, 2006-July 5, 2007 (46,010 c.y. vs. 447,675 c.y. respectively); this appears to have resulted from variability in the size of projects rather than from any difference in analysis of alternatives.

EPA will continue to report on an annual basis about the LIS RDT deliberations as well as each dredging project that was completed in the preceding year, including the name of the applicant, the alternatives that were evaluated, the volume of dredged material, and its final placement or disposal location. For further information, please contact:

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# Appendix A

LONG ISLAND SOUND DREDGED MATERIAL MANAGEMENT PLAN STEERING COMMITTEE						
AGENCY	MEMBER	ALTERNATE				
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EPA Region I	Stephen Perkins, Director Office of Ecosystem Protection 617-918-1501 perkins.stephen@epa.gov	Lynne Hamjian, Chief Office of Ecosystem Protection Surface Water Branch 617-918-1601 <u>hamjian.lynne@epa.gov</u>				
EPA Region II	Kevin Bricke, Deputy Director Division of Environmental Planning and Protection 212-637-3736 bricke.kevin@epa.gov	Jeff Gratz, Chief Clean Water Regulatory Branch Division of Environmental Planning and Protection Telephone: 212-637-3873 email: gratz.jeff@epa.gov				
New York State Dept. of State	George Stafford, Deputy Secretary of State for Coastal Resources 518-473-2459 gstaffor@dos.state.ny.us	Fred Anders, Chief Natural Resource Management Bureau Division of Coastal Resources 518-473-2477 <u>fanders@dos.state.ny.us</u>				
New York State Dept. of Environmental Conservation	James Gilmore, Chief, Bureau of Marine Resources 518-402-8924 jgilmor@gw.dec.state.ny.us					
Connecticut Dept. of Environmental Protection	Betsey Wingfield, Chief Bureau of Water Management 860-424-3704 betsey.wingfield@po.state.ct.us	Brian Thompson, Director Office of Long Island Sound Programs (860) 424-3034 brian.thompson@po.state.ct.us				

# Appendix B

LONG ISLAND SOUND DREDGED MATERIAL MANAGEMENT PLAN PROJECT DELIVERY TEAM						
AGENCY	MEMBER	MEMBER				
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National Marine Fisheries Service	Diane Rusanowsky 203-882-2671 drusano@clam.mi.nmfs.gov					
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New York State Dept. of Environmental Conservation	John Ferguson 518-402-8829 jfergus@gw.state.ny.us					
Connecticut Dept. of Environmental Protection	George Wisker 860-424-3034 george.wisker@po.state.ct.us	Diane Duva 860-424-3271 <u>diane.duva@po.state.ct.us</u>				
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# Appendix C

LONG ISLAND SOUND REGIONAL DREDGING TEAM						
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# Appendix D

# Long Island Sound Annual Dredging Report - for the Dredging Year Ending 5 July 2008 Summary of All Dredging and Disposal Activities

		CONNECTICUT			NEW YORK				Total All	
Disposal Sites and Methods		Federal (Corps) Navigation Projects	Fed	her leral jects	Private Permit Activities	Federal (Corps) Navigatio Projects	Othe Fede Proje	ral	Private Permit Activities	TOTALA
Open Water Disposal			0	0	37,825	5	0	0	8,185	46,010
CL	.IS		0	0	24,575	5	0	0	0	24,575
WL	LIS		0	0	1,950	)	0	0	8,185	10,135
NL	.DS		0	0	C	)	0	0	0	C
CS	SDS		0	0	11,300	)	0	0	0	11,300
Confined Disposal			0	0	C	)	0	0	0	C
	D Cells		0	0	C	)	0	0	0	C
	land Intainment		0	0	C	)	0	0	50,000	50,000
Lar	ndfill		0	0	C	)	0	0	0	C
Beneficial Use			0	0	C		0	0	0	C
	AD Cap		0	0	C	)	0	0	0	C
	ach/Bar ourishment		0	0	C	)	0	0	5,000	5,000
	bitat eation/Enhance	0	0		0 0	0 0	0			C
	ownfield mediation	0	0		0 0	0 0	0			C
Treated Dredged Material			0	0	C	)	0	0	0	C
Up	land Disposal		0	0	C	)	0	0	0	C
Col	mmercial Use		0	0	C	)	0	0	0	C
TOTAL ALL DISPOSAL			0	0	37,825	5	0	0	63,185	101,010

Note: There was no Federal Navigation dredging activity in the Long Island Sound region during the reporting period.