

The Commonwealth of Massachusetts

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August 21, 2009

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Cape Cod Canal East Mooring Basin Dredging

PROJECT MUNICIPALITY : Sandwich
PROJECT WATERSHED : South Coastal

EEA NUMBER : 14456

PROJECT PROPONENT : Great Lakes Dredge and Dock

DATE NOTICED IN MONITOR : July 22, 2009

Pursuant to the Massachusetts Environmental Policy Act (M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the project includes the dredging of sand from the Cape Cod Canal East Mooring Basin (EMB) in Sandwich. The EMB is approximately 2,500' long by 350' wide, and the watersheet is approximately 20 acres in area. The project involves the dredging of EMB sands located between -25' Mean Lower Low Water (MLLW) and -32'(+2') MLLW. Approximately 75,600 cubic yards (cys) of sandy material will be removed from the EMB. The Proponent has proposed to utilize this dredged material in the construction of a 3-foot thick cap atop the Boston Inner Harbor Confined Aqueous Disposal (CAD) cells. The clean sand cap is proposed to be placed atop material within the CAD cells designated unsuitable for unconfined open water disposal.

Estimated project impacts include approximately 431,832 square feet (sf) of temporary impact to Land Under Water within the EMB footprint. It is also likely that the EMB includes Land Containing Shellfish, despite shellfishing activities being prohibited in the Cape Cod Canal for water quality purposes. The Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) has identified portions of the project site as being within *Priority* and *Estimated Habitat* according to the most recent Natural Heritage Atlas (13th edition).

The work is proposed in support of the United States Army Corps of Engineers (ACOE) Boston Harbor Federal Navigation Project and the ACOE Cape Cod Canal Federal Navigation Project (CCCFNP), but is being pursued and funded by the Proponent, Great Lakes Dredge and Dock (GLDD). The stated purpose of the project is to both obtain a source of clean sand for capping CAD cells in Boston Inner Harbor and restore the EMB to previously dredged depths. A primary goal of the ACOE is to maintain federal waterways and provide for safe navigation. The project will allow vessels to use the EMB with fewer draft or tidal restrictions and will fulfill existing ACOE obligations to cap CAD cells in Boston Inner Harbor.

The CCCFNP is maintained by the ACOE and includes the 17.4-mile long canal, the EMB, the Western Mooring Basin (WMB), and other recreational and navigational features. The CCCFNP is federally authorized to varying depths; the Canal channel and WMB are authorized to -32' MLW and the EMB is authorized to -25' MLW. However, the EMB has historically been dredged to -32'(+2') MLW as recently as 1990. In a project separate from that under review in this ENF, the ACOE is undertaking a concurrent dredging project in the CCCFNP. This project includes the maintenance dredging of areas that have shoaled within the Canal channel to a depth of -32' MLLW and in the EMB between the depths of -18' MLLW and -25' MLLW. The CCCFNP dredging project is slated to remove approximately 22,800 cys of material; 8,000 cys from the Canal proper and 14,800 cys from the EMB. Recent correspondence between GLDD and ACOE indicates that all of the material removed from the CCCFNP will also be used for capping material at the Boston Inner Harbor CAD cells.

A critical challenge facing this project is the conflicting end uses of the sandy material dredged from the EMB (and from the CCCFNP). While capping the Boston Inner Harbor CAD cells is a beneficial reuse of this material, using sand from the EMB for this purpose removes this material from its local littoral system. I acknowledge the ongoing concerns expressed by the Town of Sandwich regarding the impact the Canal jetties have had on sediment transport to nearby beaches. Local disposal of EMB dredge material at Town beaches could provide a host of benefits, such as restoration of eroded habitat and recreational areas, decreased potential for flooding, and maintenance of sediment within the local littoral system. Unfortunately, there are a number of outstanding independent tasks that create challenges to local disposal, including the completion of a Section 204 study to identify local beach nourishment sites, completion of permitting for local disposal sites, and the lack of readily available funding. Therefore, the Proponent has proposed a project that will meet a known project goal, and is fully permitted and funded, as well as allowing for cost-savings and a reduction in environmental impacts by combining the project with the already approved CCCFNP. These are also valid goals with identifiable environmental benefits, and I am therefore declining to require further MEPA review

in the form of an EIR. However, as outlined below, additional analysis of local disposal alternatives will be required as part of the State permitting process.

Jurisdiction

The project is undergoing MEPA review pursuant to Sections 11.03(3)(b)(1)(f) and 11.03(3)(b)(3) of the MEPA regulations because the project requires a State Agency Action and will result in the alteration of ½ or more acres of Land Under Water and dredging of 10,000 cys or more of material. The project will require a Chapter 91 Dredge Permit (c.91 Permit) and Section 401 Water Quality Certificate (401 WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Section 404 Permit from the U.S. Army Corps of Engineers (U.S. ACOE). The project may be subject to Coastal Zone Management (CZM) federal consistency review. The project will also require an Order of Conditions from the Sandwich Conservation Commission.

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required state permits and which may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction exists over wetlands and waterways.

Wetlands, Waterways and Tidelands

Impacts to wetland resource areas will be limited to Land Under Ocean and most likely, Land Containing Shellfish. These resource areas occupy the 9.91-acre dredging area within the EMB. The ENF has characterized these impacts as temporary in nature, as no net loss of resource area is anticipated and the same wetland resource areas will exist in the same location with similar characteristics in a post-dredge state. By performing the maintenance dredging associated with the CCCFNP at the same time as the EMB dredging, temporary impacts to these wetland resource areas will be consolidated.

MassDEP has indicated that the project would be classified as "improvement" dredging as defined in the Waterways Regulations at 310 CMR 9.02 due to the increase from the prior authorized dredge depth of -25' MLLW to the proposed -32' MLLW depth. MassDEP has stated that while the Wetlands and Waterways Regulations have different performance standards for maintenance and improvement dredging, for this proposal, it is unlikely that either determination would substantially change the final outcome as an approvable project. The Proponent should clearly demonstrate compliance with the improvement dredging performance standards within their c.91 Permit application. Furthermore, I note the concerns raised by CZM regarding the proposed increases in permitted dredging depths within the EMB. I encourage the Proponent respond to these concerns related to potential water circulation changes and potential increases in dredging frequency as part of their c.91 Permit application and/or 401 WQC application.

Pursuant to 301 CMR 13.02, I am declining to require an additional Public Benefit Review for the project. Furthermore, as a water-dependent project, it is presumed that this project will provide adequate public benefit in accordance with 301 CMR 13.04. I am satisfied that the project's impacts to tideland resources can be adequately addressed during the permitting process.

The Proponent intends to use a split-hull hopper dredge to hydraulically dredge the sands from the project area. Through the use of suction, the material will be brought on-board, sand separated out, and water discharged back into the canal below the vessel. Once loaded, the hopper dredge will sail to Boston Harbor to begin placement of the cell caps. The ENF estimates approximately 20 trips between the CCCFNP and the Boston Inner Harbor CAD Cells to complete the EMB dredging and capping activities. The ENF states that turbidity-related impacts will be localized and temporary in nature. The Proponent should implement Best Management Practices (BMPs) to limit turbidity during dredge operations. To reduce potential impacts to aquatic wildlife, dredging activities within the EMB will not commence prior to November 1, 2009, as required by the concurrent CCCFNP dredging. The CCCFNP also has existing permit conditions that prohibit dredging operations between June 1 and October 31. Time of Year (TOY) restrictions associated with the CAD cell disposal areas are outlined later in this Certificate.

The ENF included an alternatives analysis that contemplated the potential environmental impacts associated with a Dredge Alternative and a No-Dredge Alternative. The No-Dredge Alternative did not exclude activities within the Canal and EMB associated with the CCCFNP. The Dredge Alternative would enable the Proponent to meet both project goals; maintaining navigation within the EMB and a source of capping material for the Boston Inner Harbor CAD Cells. This alternatives analysis should be expanded during the 401 WQC application process. Specifically, I expect that the Proponent, in accordance with 314 CMR 9.00, will provide a robust analysis of alternative disposal locations including options for local placement of the sand. This alternatives analysis should evaluate alternative disposal locations (e.g., near shore, Cape Cod Bay Disposal Site, Town of Sandwich Beaches, etc.) for their ability to avoid, minimize, and mitigate damage the environment. The Proponent may present additional supporting information regarding permitting, funding or other challenges related to the feasibility of these alternatives in the 401 WOC. If disposal of material will occur at the CAD cells, I expect that GLDD, the ACOE, and the Town of Sandwich will continue to evaluate the possibility of providing any excess material from the EMB and CCCFNP dredging for local beach nourishment purposes, pending compliance with permitting and funding requirements.

As part of the 401 WQC issued for the CCCFNP in 2008, MassDEP requested to be updated on the status of the ACOE Section 204 Study. This study is being prepared in response to the Town of Sandwich's interest in beneficially reusing the material from Canal dredging projects for use on their Town Beaches. Federal laws and regulations provide authority to the ACOE to place suitable material from navigation projects on adjacent beaches if the work is deemed to be in the public interest and upon payment by a non-Federal entity their cost share of the increased project cost. Based upon information provided in comment letters on the ENF and upon consultation with the ACOE, the Section 204 Study to facilitate beneficial reuse of

materials from the CCCFNP is underway, but has yet to be completed. Furthermore, funding for the cost share of beach nourishment has yet to materialize.

I am aware of the lengthy history of planning processes that have attempted to address the exportation of dredge materials from the Canal outside the littoral system. Previous Canal dredging projects have disposed of materials at the Cape Cod Bay Disposal Site, or in one instance, at the nearby Town Beach in Sandwich. I strongly encourage the Proponent, the ACOE, State Agencies and the Towns of Sandwich, Bourne and Falmouth to collectively work together to continue to develop not only a long-term sediment management plan for the ongoing maintenance of the CCCFNP and the EMB, but also to identify and secure funding sources for beach nourishment, complete the outstanding MEPA Final EIR for the Sandwich town-wide beach nourishment and inlet stabilization projects (EEA No. 11926), and permit potential receiving beaches for dredge material. CZM staff is available to assist in initiating coordination of the associated joint permitting and funding issues that need to be addressed to ensure future dredged material will be utilized to provide maximum benefit for local landform and habitat protection. In addition, the ACOE should complete its ongoing Section 204 Study, as MassDEP has indicated that the Study must be completed prior to any future maintenance dredging of the EMB.

CAD Cells Disposal Area

The CAD cells to be capped are associated with the Boston Harbor Federal Navigation Project, also known as the Boston Harbor Inner Harbor Maintenance Dredging Project (BHIHMDP). According to the ENF, the sand from the EMB project will be used to cap the "Mystic River" CAD Cell, the "Supplemental Capacity Mystic River (SCMR)" CAD Cell, 'Starter Cell", "Main Ship Channel Cell" and/or additional BHIHMDP CAD Cells. GLDD estimates that approximately 90,000 cys of material will be required to fulfill their contractual obligations to cap the Boston Inner Harbor CAD cells. The Proponent has conducted field sampling, as well as geotechnical and chemical analyses, to ensure that the EMB sands meet the WQC criteria and to ensure sufficient quantity of material. As requested by MassDEP, the Proponent should include the testing results for the material to be dredged in the c.91 Permit and 401 WQC applications. The ENF states that all dredging, disposal, and capping operations of the BHIHMDP will be completed in accordance with the applicable permits and authorizations, as outlined in the current Section 401 WQC.

Underwater Archaeological Resources

The Board of Underwater Archaeological Resources (BUAR) has noted that while there is no historical record of any underwater archaeological resources in the project area, the BUAR cannot conclude that there are in fact no such resources within the project boundaries. Should heretofore-unknown submerged cultural resources be encountered during the course of the project, the BUAR expects that the Proponent will take steps to limit adverse effects and notify the BUAR in accordance with the *Policy Guidance for the Discovery of Unanticipated Archaeological Resources*.

Habitat

The project site is located within *Priority* and *Estimated Habitat* as indicated in the 13th Edition of the MA Natural Heritage Atlas. Therefore this project requires review through a direct filing with NHESP for compliance with the Massachusetts Endangered Species Act (MESA 321 CMR 10.00). The ENF notes that the project site is mapped as habitat for Least Tern (*Sternula antillarum*) and Common Tern (*Sterna Hirundo*). While a preliminary review by NHESP indicates that the proposed activity likely would not result in a prohibited take, a formal determination in writing will be issued subsequent to the completion of a MESA checklist (321 CMR 10.20). This determination can be sought as part of a streamlined Notice of Intent/MESA filing as permitted in accordance with the Massachusetts Wetlands Protection Act regulations.

The Division of Marine Fisheries (*MarineFisheries*) has identified the proposed disposal sites in the Mystic River as winter flounder (*Pseudopleuronectes americanus*) passage, migration and spawning habitat. Additionally, *MarineFisheries* consider the disposal areas in the Mystic River as diadramous fish passage, migration and spawning habitat. Based upon these collective fisheries habitat concerns, *MarineFisheries* has recommended that no disposal of dredge material be permitted at the Mystic River CAD cells from February 15th through July 15th of any year.

I note the concerns raised by the Town of Sandwich with regard to shellfish resources within the EMB. Based upon information shared at the MEPA site consultation session, shellfishing in these waters is presently prohibited. However, this area appears to be potential habitat for shellfish and the proposed dredging methodology provides minimal opportunity to remove shellfish from the dredge material following excavation from the EMB. Therefore, I encourage the Proponent to work with the Town of Sandwich to provide appropriate shellfish habitat mitigation as part of the Notice of Intent process.

Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required at this time. The project may proceed to State permitting.

August 21, 2009

Date

Comments received:

08/07/2009 Board of Underwater Archaeological Resources

08/07/2009 Cape Cod Commission

08/10/2009 Natural Heritage and Endangered Species Program

08/11/2009 Office of Coastal Zone Management

08/11/2009 Massachusetts Department of Environmental Protection – SERO

08/11/2009 Town of Sandwich

08/11/2009 Division of Marine Fisheries

IAB/HSJ/hsj