



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

Tel: (617) 626-1000

Fax: (617) 626-1181

<http://www.mass.gov/envir>

April 24, 2009

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

PROJECT NAME : Lake Ripple Dredging Project
PROJECT MUNICIPALITY : Grafton
PROJECT WATERSHED : Quinsigamond River
EEA NUMBER : 14386
PROJECT PROPONENT : Town of Grafton
DATE NOTICED IN MONITOR : March 25, 2009

Pursuant to the Massachusetts Environmental Policy Act (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).

Project Description

The project as described in the Environmental Notification Form (ENF) consists of hydraulic dredging of 9.1 acres of the 63-acre Lake Ripple, which is an impoundment of the Quinsigamond River. The project is intended to reduce aquatic vegetation and related eutrophication problems, thereby improving water quality and warm water fishery habitat in the lake. The project also involves alteration of 5.8 acres of land adjacent to the lake, which will be used for a containment basin and dewatering activities. Upon completion of the project, this area will be restored as a wet meadow with the dredged material remaining in place. Total wetlands impacts associated with the project are estimated in the ENF at 9.7 acres, which includes the 9.1-acre dredging area and a 0.6-acre flocculation basin.

MEPA History

The project previously underwent MEPA review (EEA# 9782) and a Final Record of Decision (FROD), issued on May 25, 1994, granted a waiver from the requirement for a mandatory EIR. The project at that time exceeded the 10 acre mandatory EIR threshold for wetlands impacts (301 CMR 11.03(3)(a)(1)(b)). The Town of Grafton (the proponent) obtained permits and funding and completed the first phase of the dredging in 1999. However, due to a lack of funds, the project was not completed. The Town has recently acquired funding for the second phase of the dredging project and has filed a new ENF due to a lapse of time pursuant to 301 CMR 11.10(3). The project as proposed in the ENF does not exceed the threshold for a mandatory EIR.

Permits and Jurisdiction

The proposed project is undergoing environmental review because it requires an agency action and because it exceeds the following MEPA review thresholds; Section 11.03(3)(b)(f) because it will result in alteration of one-half or more acres of wetlands (Land Under Water); and Section 11.03(3)(b)(3) because it involves dredging of 10,000 cubic yards (cy) or more of material (approximately 41,000 cy of sediment material will be dredged).

The project will receive funding from the Department of Conservation and Recreation. The project requires a 401 Water Quality Certification from the Massachusetts Department of Environmental Protection (MassDEP). The project requires an Order of Conditions from the Grafton Conservation Commission (and, on appeal only, a Superseding Order from MassDEP).

The project will receive funding from an agency of the Commonwealth. Therefore, MEPA jurisdiction is broad and applies to all aspects of the project that are within the subject matter of any required or potentially required state permits that may cause Damage to the Environment as defined in the MEPA regulations.

ENF Review

The ENF includes a detailed description of the project with maps and plans, as well as a dredged materials sampling and analysis plan and a summary of test results. The project involves hydraulic dredging of the lake. Water levels in the lake will be maintained during excavation. The dredged material will be pumped to a containment area, treated to remove sediments, and returned to the lake. The dredged slurry material will undergo gravity dewatering using an open-settling containment basin in an area west of the lake. Dewatered material will be used as a grading and planting medium in the containment basin and the area will be restored as a wet meadow following completion of the project.

The Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP), in its comment letter, indicates that the project site is not mapped as Priority or Estimated Habitat and the NHESP database does not contain any state-listed species records in the immediate vicinity of the site. However, as noted in the ENF, the site had been previously mapped for state-listed species (the bridle shiner and triangle floater mussel) and the Town

incorporated measures to minimize turbidity impacts to protect aquatic species based on prior consultations with NHESP. According to the ENF, these measures to protect aquatic species will be retained as part of the project. The project includes a 15-foot buffer to the shoreline to protect fisheries spawning areas and a turbidity curtain around the hydraulic dredge to reduce the potential for turbidity in the lake or in downstream habitat.

As further detailed in the comment letter from NHESP, the Quinsigamond River (of which Lake Ripple is an impoundment) supports a variety of fish species and is stocked annually with trout, which are highly susceptible to changes in water quality and/or quantity. The Town should consult with the Division of Fisheries and Wildlife to identify any additional measures that may be necessary to avoid impacts to stocked trout.

While the proposed dredging has the potential to improve water quality and fisheries habitat, it is important that sources of sediment and nutrient input to the lake be addressed in order to assure long-term benefits and minimize the need for future dredging. NHESP notes that regrowth of aquatic plant material is highly likely and that dredging would not have a significant long-term effect on the growth of milfoil and fanwort. I encourage the proponent to evaluate the long-term effectiveness of dredging, including a comparison of the pre-1999 and current bathymetry of the previously dredged area and rate of infill, as recommended by NHESP.

The proponent should follow the guidelines outlined in the 2004 *Eutrophication and Aquatic Plant Management in Massachusetts Final Generic Environmental Impact Report (GEIR)* and other measures as recommended by MassDEP and NHESP. The GEIR recommends that an investment in dredging should be protected by an active watershed management program. The proponent should consider implementing the following measures:

- Install catch basins with oil and grease traps;
- Establish a parking lot sweeping program for industries adjacent to the lake;
- Use only sodium-free deicing salts;
- Restrict the use of herbicides, pesticides, and fertilizers on public properties adjacent to the lake; and
- Public outreach to homeowners adjacent to the lake with regard to eliminating use of phosphate detergents, food grinders and fertilizers, and proper maintenance of septic systems in areas inaccessible to sewers.

The project involves activities with a 100-year floodplain. I refer the proponent to the comment letter from the Department of Conservation and Recreation (DCR) Flood Hazard Management Program for guidance on applicable regulations and other requirements pertaining to development within the 100-year floodplain.


Conclusion

The ENF has sufficiently defined the nature and general elements of the project, and has proposed measures to avoid and minimize or mitigate environmental impacts. I am satisfied that any outstanding issues can be addressed through the state funding and permitting process. Based on review of the ENF and comments received, and in consultation with state agencies, I have

determined that no further MEPA review is required. The project may proceed to state permitting.

April 24, 2009

DATE


for Ian A. Bowles, Secretary

Comments Received:

4/13/09 Department of Conservation and Recreation
4/14/09 Department of Environmental Protection, Central Regional Office
4/14/09 Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program

IAB/AE/ae