



US Army Corps
of Engineers®
New England District

Engineering/Planning
696 Virginia Road
Concord, MA 01742

PUBLIC NOTICE

Date: January 17, 2014

Comment Period Ends: February 21, 2014

In Reply, Refer to: Adam Burnett

Or by e-mail: Adam.W.Burnett@usace.army.mil

30-DAY PUBLIC NOTICE MILFORD POND MILFORD, MASSACHUSETTS AQUATIC ECOSYSTEM RESTORATION PROJECT

Interested parties are hereby notified that the U.S. Army Corps of Engineers, New England District plans an aquatic ecosystem restoration project to restore Milford Pond in Milford, Massachusetts. This work is being conducted under Section 206 of the Water Resources Development Act of 1996, P.L. 104-303, as amended. Section 206 provides programmatic authority for the U.S. Army Corps of Engineers (USACE) to carry out aquatic ecosystem restoration projects that improve environmental quality, are in the public interest, and are cost effective. The town of Milford, Massachusetts is the non-Federal sponsor of this project. Attachment 1 includes a list of pertinent laws, regulations, and directives considered in project planning. Figures 1 and 2 include maps of the project area and associated project activities.

Project Description: Milford Pond is a 120-acre pond located in the center of the town of Milford, Massachusetts (Figure 1). The pond is formed by the impoundment of the Charles River, with inflow from Huckleberry Brook, Louisa Lake, an intermittent stream, and 17 stormwater outfalls. The pond outlet water flows over a small masonry dam and continues as the main channel of the Charles River, which flows through the town of Milford and ultimately to Boston Harbor. The overall watershed is 5,440 acres (8.5 square miles) in size, and it extends beyond the municipal boundaries of the town of Milford into the towns of Hopkinton and Holliston. Milford Pond was historically a cedar swamp located in the headwaters of the Charles River. In the early 1900s, the cedar swamp was converted into a pond through the cutting of large cedar trees and construction of an impoundment across the Charles River approximately 100 feet downstream of Main Street. The present dam, reconstructed around 1938, consists of earthen embankments with a cast-in-place concrete primary spillway. This intermediate-sized dam, presently owned by the town of Milford, is approximately 200 feet in length, with a structural height of approximately eight feet.

Existing Ecological Problems: Since the late 1970s, Milford Pond has shown a decline in water quality, the proliferation of aquatic weed species, and a significant decrease in aquatic habitat value. Today, Milford Pond is shallow, with an average depth of less than two feet. Submerged and floating-leafed aquatic plants occupy most of the pond area. Emergent wetland occurs along the perimeter of Milford Pond, including a 400-foot wide band along the western shoreline south of Clark Island. In its current state, Milford Pond provides wildlife habitat for a variety of aquatic organisms living in emergent wetland and shallow pond habitats. However, the fishery habitat value of Milford Pond is greatly reduced by the shallow depths, dense weeds and the low dissolved oxygen in the water resulting from decaying aquatic vegetation. In time, wetland successional processes will result in the gradual filling of Milford Pond and its conversion to an emergent wetland community. This succession will result in further decreased areas of open water habitat, and continued loss of fish habitat. In addition, the gradual succession of Milford Pond will impact the habitat for four State-listed endangered and threatened bird species: common moorhen (*Gallinula chloropus*), least bittern (*Ixobrychus exilis*), pied-billed grebe (*Podilymbus podiceps*), and king rail (*Rallus elegans*) (Massachusetts Natural Heritage and Endangered Species Program). The pied-billed grebe, specifically, requires open water for feeding, as well as emergent marsh for nesting.

Proposed Restoration Plan: The proposed plan involves dredging approximately 200,000 cubic yards of organic rich sediment from the southern portion of the pond to a depth of 12 feet (Figure 2) and using the dredged sediment to restore emergent and forested wetlands in the northern portion of the impounded area. Dredging is proposed to extend from the outlet dam northerly, to a point slightly north of Clark Island encompassing an area of approximately 20 acres. The existing emergent vegetation areas along the westerly boundary of the dredge limits are proposed to remain unaltered except for the area immediately surrounding the Milford town swimming pool in the southeasterly corner of the pond. The proposed project creates diversity among open water, aquatic weed beds, floating vegetated islands, and emergent, shrub, and forested wetlands. The plan also avoids impacts to the Milford town water supply (Clark Island Well Fields) and critical habitat for Massachusetts-state-listed bird species that inhabit the pond and surrounding wetlands. Dredging will remove a portion of the accumulated, nutrient-rich sediments in the open-water area, thereby inhibiting excessive plant growth. The wetland restoration portion of the project will help to address phosphorous-related water quality problems in Milford Pond, in addition to enhancing fish and wildlife value.

In the proposed plan, sediments will be removed from the southern portion of the pond using a hydraulic pipeline dredge. The dredged sediment slurry will be pumped to the northern end of the pond, where a sediment retaining structure will be placed along the perimeter of the wetland restoration area to retain the dredged sediments. Dredged sediment will be pumped into the area behind the sediment retaining structure, allowing the sediment to accumulate to the height of the surrounding marsh. The area will hold approximately 200,000 cubic yards of material dredged from the southern portion of the pond. The final surface of the filled area is anticipated to encompass approximately 25 acres and will be shaped and revegetated to support a combination of emergent, shrub, and forested wetland habitats. In addition, portions of the newly constructed wetland area will be constructed with appropriate hydrology and soils for the eventual reestablishment of Atlantic white cedar (*Chamaecyparis thyoides*) to Milford Pond, a species that was historically present prior to the construction of the dam at the outflow.

A buffer zone will remain between the existing cattail-dominated wetland habitat and the proposed dredging limits. In addition, provisions to prevent the disturbance of the floating vegetated islands will be incorporated into the Plans and Specifications. The proposed work will be sequenced to avoid potential impacts during the breeding and pre-migration periods for the Massachusetts-state-listed species (April 1 through September 30).

Alternatives: Seven alternatives were analyzed in detail, including the No-Action alternative. The analysis included three alternatives for deepening either the entire 120-acre pond, or portions of it; involving hydraulic dredging of either 45 acres or 21 acres, to restore habitat for fish and other aquatic species and to improve the waterfowl habitat associated with the pond and adjoining wetlands. All of these dredging alternatives (with the exception of the proposed plan) involved pumping the dredged material to a disposal area north of Dilla Street. It has since been determined that using this disposal area north of Dilla Street would no longer be feasible. In addition, the use of the sediment for wetlands creation is expected to provide better overall habitat benefit for the pond, particularly because it creates the potential for the restoration of Atlantic white cedar to the pond. Therefore, those alternatives are not preferred, and the plan of using the dredged material to restore emergent wetlands is proposed.

Additional Information: Additional information may be obtained from the Engineering/Planning Division of the U.S. Army Corps of Engineers, Mr. Adam Burnett, the Project Manager, and/or Mr. Kenneth Levitt, of the Environmental Resources Section, at the return address shown. These individuals may also be reached by phone: for Mr. Burnett (978) 318-8547 or email at adam.w.burnett@usace.army.mil, and for Mr. Levitt at (978) 318-8114 or email at kenneth.m.levitt@usace.army.mil. Collect calls will be accepted weekdays between 9:00 a.m. and 3:00 p.m.

Coordination: The proposed work is being coordinated with the following Federal, state, and local agencies:

Federal:

U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

State:

Massachusetts Department of Environmental Protection (DEP)
Massachusetts Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program
Massachusetts Historical Commission

Local:

Town of Milford, Massachusetts
Milford Conservation Commission

Environmental Consequences: A revised Environmental Assessment (EA) is being prepared for this restoration project, and comments received in response to this Notice will be addressed in this document. Upon completion, the Environmental Assessment will be available at the Milford Town Hall at 52 Main St., Milford, MA, and at the Milford Town Library, 80 Spruce Street, Milford, MA or by contacting the U.S. Army Corps of Engineers, as noted above. A preliminary determination has been made that an Environmental Impact

Statement for the proposed project is not required under the provisions of the National Environmental Policy Act of 1969.

A completed EA, FONSI, and public notice for this project were originally issued in 2004 and 2005, when the proposed plan was to hydraulically dredge approximately 45 acres of the pond and pump the material to an upland disposal area north of Dilla Street. However, the use of the disposal area north of Dilla Street is no longer feasible. Therefore, the EA and FONSI are being revised to address the environmental consequences of the new plan pursuant to the National Environmental Policy Act of 1969 (NEPA).

Purpose and Need for Work: The ecosystem of Milford Pond has been degraded from excess sedimentation and nutrient loading which has been deposited in the pond via runoff from the urban and wooded watershed. These have created eutrophic conditions and impaired water quality. Areas of extremely dense emergent and floating leafed vegetation have continued to rapidly convert open water areas to choked aquatic habitat. Effects on the pond's ecosystem include degradation of fish habitat and a proliferation of cycles of aquatic vegetation growth and organic material buildup. The purpose of this project is as follows:

- Restore the open water aquatic ecosystem in the pond, while maintaining the existing vegetated wetlands
- Create additional emergent wetlands with the potential to restore the historic Atlantic white cedar swamp habitat
- Provide habitat for fisheries and water birds
- Increase recreational opportunities

Historic and Archaeological Resources: The proposed restoration project is not expected to impact any structures or sites of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966, as amended. The Massachusetts Historical Commission has concluded that the project as presently proposed is unlikely to affect any significant historic or archaeological resources.

Endangered Species: The U.S. Fish and Wildlife Service has not identified any Federally listed threatened and endangered species in the project area. The Massachusetts Natural Heritage and Endangered Species Program has identified the occurrence of four State-listed bird species in the vicinity of the project area. These species include the pied-billed grebe (*Podilymbus podiceps*) (Endangered), least bittern (*Ixobrychus exilis*) (Endangered), king rail (*Rallus elegans*) (Threatened), and the common moorhen (*Gallinula chloropus*) (Special Concern). These State-listed species all nest in freshwater marshes with emergent vegetation communities, including cattails. Habitat requirements for all four of the identified State-listed species include large contiguous cattail-dominant emergent marsh. Suitable habitat was found to be present around much of western littoral zones of the pond. This 41.5± acre habitat will be preserved by the proposed dredging program, except for a small, 2-acre area near the municipal swimming pool at the southern end of the pond, near the dam. In this area, the Town swimming pool and baseball field directly border the western shoreline and the eastern shoreline is composed of residential development with landscaped lawns to the waters edge. The human disturbance associated with these high use areas during the breeding seasons of these very secretive and elusive birds is likely to discourage any potential nesting. Therefore, no adverse impacts to State-listed birds are anticipated as a result from the conversion of this small portion of emergent marsh to open water habitats. The newly created wetland is

expected to create additional nesting habitat for these species. Therefore, the proposed action is not expected to adversely affect any of the above listed threatened or endangered species.

Federal Permit Requirements: A Water Quality Certificate will be acquired from the Massachusetts DEP pursuant to Section 401 of the Clean Water Act. A Section 404(b)(1) evaluation, pursuant to the Clean Water Act, will be provided as an attachment to the Environmental Assessment.

Comments: Any person who has an interest that may be affected by the proposed project may request a public hearing. The request must be submitted in writing to me within 30 days of the date of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

Please bring this notice to the attention of anyone you know to be interested in this project. Comments are invited from all interested parties and should be directed to me at: U.S. Army Corps of the Engineers, New England District, 696 Virginia Road, Concord, Massachusetts, 01742-2751, Attn: Engineering/Planning Division, within 30 days of this notice.

17 January 2014
Date

William J. Scully, P.E. Deputy District Engineer
Charles P. Samaris
Colonel, Corps of Engineers
District Engineer

Attachments

Attachment-1

PERTINENT LAWS, REGULATIONS AND DIRECTIVES

National Environmental Policy Act of 1969 (42U.S.C. 4321-4347)

Fish and Wildlife Coordination Act (16U.S.C. 661-666c)

National Historic Preservation Act of 1966 (16 U.S.C. 470)

Endangered Species Act of 1973 as amended (16 U.S.C. 668aa-668cc)

Clean Water Act, as amended (33 U.S.C. 1251 et. seq.)

Clean Air Act, as amended (42 U.S.C. 1221 et. seq.)

Federal Water Project Recreation Act, as amended (16 U.S.C. 4601-12 et. seq.)

Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4 et. seq.)

Executive Order 11988, Floodplain Management, 24 May 1977

Executive Order 1190, Protection of Wetlands, 24 May 1977

Executive Order 11593, Protection and Enhancement of the Cultural Environment

Fish and Wildlife Act of 1956 (16 U.S.C. 472a, et. seq.)

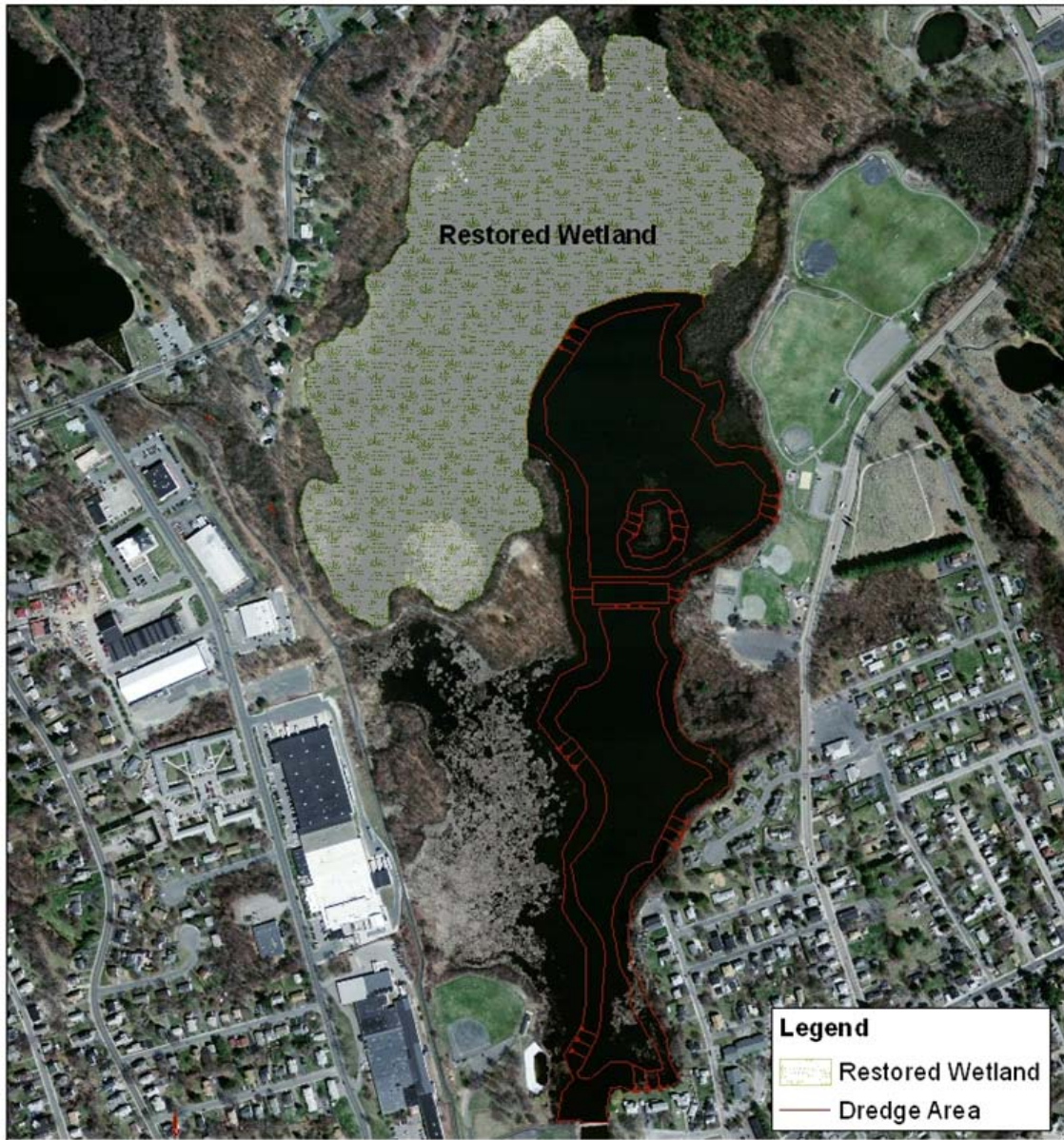


Figure 1. Milford Pond and Delineated Areas being considered for Dredging and Restoration.

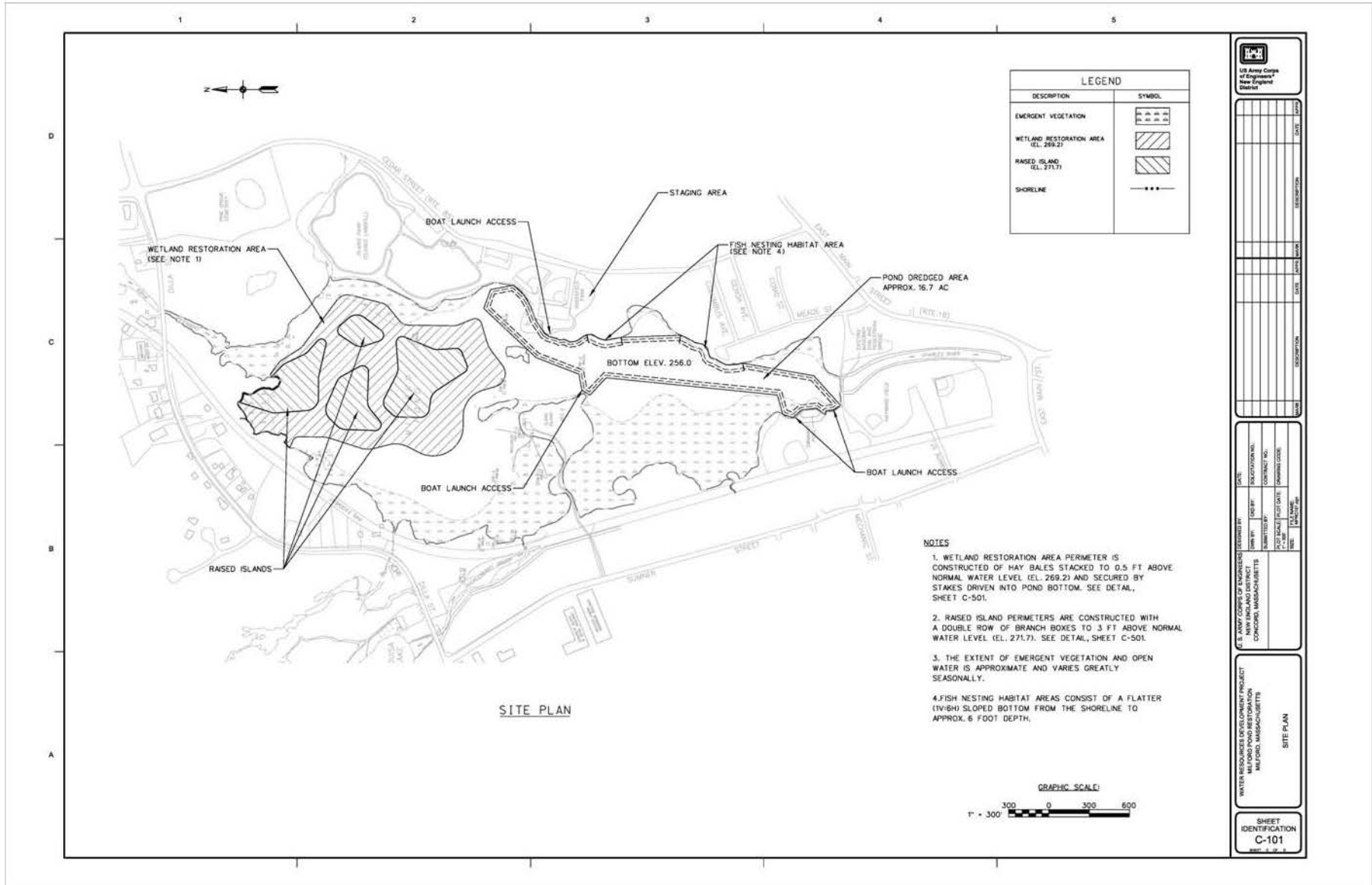


Figure 2. Proposed Dredging and Wetland Restoration Areas for Milford Pond.