

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: 14435
 MEPA Analyst: Bill GAGE
 Phone: 617-626-1025

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Restoration of Manchaug Pond to a natural Great Pond		
Street: Torrey Road		
Municipality: Sutton	Watershed: Blackstone	
Universal Transverse Mercator Coordinates: 271217E; 4663526N – Zone 19	Latitude: 42.09048 N	Longitude: -71.76630 W
Estimated commencement date: July 2010	Estimated completion date: September 2010	
Approximate cost: \$320,000	Status of project design:	5 %complete
Proponent: Manchaug Reservoir Corporation		
Street: c/o Interface, Inc. 2859 Paces Ferry Road, Suite 2000		
Municipality: Atlanta	State: GA	Zip Code: 30339
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Wendy Porter, Vice President and Director of Environmental Management		
Firm/Agency: Manchaug Reservoir Corp	Street: 2859 Paces Ferry Road, Suite 2000	
Municipality: Atlanta	State: GA	Zip Code: 30339
Phone: 770-437-6847	Fax: 770-319-6270	E-mail: wendy.porter@interfaceglobal.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(B)) Yes No
 - a Special Review Procedure? (see 301CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): None

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes(Specify) No

List Local or Federal Permits and Approvals: Order of Conditions from Sutton and Douglas Conservation Commissions, Water Quality Certification and Chapter 91 Permit from MADEP, Chapter 253 Permit from Office of Dam Safety, Section 404 Permit from Army Corps of Engineers

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- Land
- Water
- Energy
- ACEC

- Rare Species
- Wastewater
- Air
- Regulations

- Wetlands, Waterways, & Tidelands
- Transportation
- Solid & Hazardous Waste
- Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: Section 404 ACOE permit, Chapter 253 ODS Permit, Local Highway Opening Permit
Total site acreage	350			
New acres of land altered		0.5 (temporary)		
Acres of impervious area	0	-0.25 (road removal)	0	
Square feet of new bordering vegetated wetlands alteration		50 acres (net gain)		
Square feet of new other wetland alteration		30 acres (loss of land under waterway)		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
TRANSPORTATION				
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

Project Site and Description: Manchaug Pond is an artificially enlarged Great Pond located in the Towns of Sutton and Douglas, Worcester County. See Figure 1: Site Locus and Figure 2: Manchaug Pond Aerial Plan. Manchaug Pond Dam is located in the Town of Sutton on an unnamed tributary to the Mumford River in the Blackstone Watershed and impounds the artificially enlarged portions of Manchaug Pond. See Figure 3: Extent of Natural Great Pond. Manchaug Pond Dam was originally constructed in 1836 to provide storage and flow regulation for process water used by a number of mills located downstream. With the closure of the InterfaceFABRIC mill in Douglas, there are no mills using process water. Therefore the dam no longer serves its original intended purpose. Manchaug Reservoir Corporation (“MRC”) owns and operates Manchaug Pond Dam. Since the dam no longer serves its original purpose, MRC wants to divest itself of any and all responsibility and liability for the ownership and operation of the dam. This project proposes to breach/remove the Manchaug Pond Dam and restore Manchaug Pond to its natural Great Pond boundaries. This selected option accomplishes not only the primary objective of the project but also removes a significant threat to property and life and provides significant permanent environmental benefits. The planned Scope of Work for the EIR is attached.

The dam is a stepped, rubble-filled, stone-masonry gravity structure with mortared joints on the upstream face, which formed the original dam, and an earthen embankment constructed on the downstream side, which was added in 1960. The crest of the dam is paved with asphalt and supports Torrey Road, a local road, along its length. The dam is approximately 330 feet long, with a maximum height above the downstream toe of approximately 28 feet, a crest width of approximately 36 feet, and a maximum storage capacity of 6,500 acre-feet. The drainage area for the Manchaug Pond Dam watershed is approximately 6.8 square miles and is located in the Towns of Sutton, Douglas, and Oxford, Massachusetts. The drainage area has a length of about 3.2 miles and an average width of 2.1 miles. The basin consists of both open fields and forested areas and is sparsely populated with the majority of the population concentrated along the shores of the pond.

The Massachusetts Office of Dam Safety (“ODS”) has exclusive regulatory control over dams and dam safety throughout the Commonwealth. Pursuant to ODS regulations (302 CR 10.00), dams are classified by size and hazard potential as described in 302 CMR 10.06. Due to its size, location and features, the Manchaug Dam is a “Large”, “High Hazard” Dam. The Dam is “Large” because its storage capacity is greater than 1,000 acre-feet (302 CMR 10.06(2)). As described in 302 CMR 10.06(3), a “High Hazard” dam means “failure will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s).” Earthen dams such as the Manchaug Dam are prone to catastrophic failure if the water held behind the Dam is allowed to overtop the Dam.

ODS regulations governing spillways require a spillway system to have a capacity to pass a flow resulting from a design storm. For Large, High Hazard existing dams, the spillway design flood design storm is designated as ½ Probable Maximum Flood (“PMF”) (302 CMR 10.14(6)(a)). In other words, the ODS regulations require an evaluation of whether a dam’s spillway can release enough water to avoid overtopping the dam under a designated rainfall event given the initial height of the water behind the dam. If a Large, High Hazard dam cannot accommodate a ½ PMF event without overtopping, it is deemed unsafe pursuant to the ODS regulations as described in 302 CMR 10.03. MRC retained two different, qualified engineering firms to evaluate the spillway capacity of the dam. Both firms determined that the spillway

capacity did not comply with current ODS regulations and recommended limiting the maximum water level in the reservoir to a level that is approximately 3 feet below historical peak water levels. In accordance with ODS regulations, MRC followed the recommendations of the registered professional engineers who inspected the dam, and limited the peak water level. Concurrently, MRC sought an Order of Conditions from the Sutton Conservation Commission for the reduced peak water levels. Subsequently, the MADEP issued a unilateral order requiring MRC to operate the dam at the unsafe water levels. This order is under appeal. MRC cannot operate the Manchaug Pond Dam in a manner that does not comply with dam safety regulations.

The project proposes to breach/remove the Manchaug Pond Dam and return Manchaug Pond to its natural Great Pond Boundaries (See Figure 3). Breaching/removal of the dam would result in the loss of the artificially-enlarged portion of the historical Great Pond that will result in the improvement of the natural capacity of the wetland resource area. As such, the project qualifies as a Limited Project under the Wetland Protection Act regulations (310 CMR 10.53(4)). Direct beneficial impacts resulting from dam removal would include the restoration of ecological continuity in the riverine and riparian corridor, restoration of the historical Great Pond, elimination of regular maintenance and regulatory compliance requirements for the dam, and elimination of the hazards and liability associated with failure of the dam. Indirect beneficial impacts would include restoration of the natural hydrologic regime in the unnamed stream downstream of the dam and restoration of historical, native habitats in and adjacent to the historical Great Pond. Regulatory setback requirements may restrict active management and/or development in dewatered areas following removal of the dam and restoration of the Great Pond. This will result in the establishment of a riparian buffer along the margins of the restored Great Pond, which currently are largely absent due to encroachment of development along much of the impoundment. See Figure 4: Manchaug Pond NHESP Map and Figure 5: Mass DEP Wetlands Map. Any reductions in groundwater elevations and increased setbacks from the edge of the historical Great Pond (see Figure 6: Natural and Great Pond Delineation Map) following dam removal could potentially improve the function of septic leach fields. Direct adverse impacts would include the loss of lacustrine habitat in the artificially-enlarged portion of the Great Pond and impacts to regulated resources (e.g. bank), the loss of the road bed for Torrey Road over the crest of the dam, and changes in opportunities for recreational use. Because the impoundment overlies a historical Great Pond, current recreational users would likely persist following removal of the dam and restoration of the historical Great Pond. Indirect adverse impacts would include permanent lowering of the water levels relative to the existing impoundment, the loss of ability to manage flows through operation of the dam outlet works in the unnamed stream downstream of the dam and in the Mumford River, potential impacts to downstream aquatic communities and water dependent uses, the need for alternative transportation routes from the removal of Torrey Road, reduced water levels in shallow wells, and altered perceptions of the impoundment by abutters and other recreational users. While removal of Manchaug Pond Dam would initially result in multiple direct and indirect adverse impacts, it would ultimately result in permanent and sustainable direct and indirect beneficial impacts. In particular, removal of the dam would remove the life and safety hazard associated with dam failure and ongoing requirements to operate and maintain a structure that no longer serves its initially-intended purpose.

Alternative Analysis: MRC evaluated two alternatives to the proposed project: divestment of the dam to the parties that currently benefit from it and modification of the spillway to meet current dam safety requirements. MRC has been soliciting new owners for the dam since the shutdown of the last downstream mill in 2003. Specifically, MRC has solicited ownership interest from parties that currently benefit from the enlarged Great Pond and Torrey Road including, but not limited to the Town of Douglas, the Town of Sutton, the Whitins Reservoir Watershed District, and the Manchaug Pond Association. None of these entities have expressed a willingness to assume ownership and operation of the dam, and thus this alternative is not viable. MRC evaluated the possibility of expanding the spillway to meet current dam safety regulations. This alternative does not achieve MRC's desired goal of divesting all responsibility and liability for ownership and operation of the dam, and thus is not considered an acceptable alternative. Thus, the only viable alternative to MRC is to breach/remove the dam and restore the natural Great Pond.

Mitigation Measures: Given that this project is a pro-active habitat restoration that seeks to improve natural resource capacity, no mitigation is proposed. The restoration will require temporary alterations to Bank, Bordering Vegetated Wetlands, Land Subject to Flooding, and Riverfront Area, but will result in a net benefit for all these resources and a significant gain in Bordering Vegetated Wetlands. Please note issues like time-of-year restrictions, best management construction practices, and optimizing work-in-the-dry will be employed and likely conditioned.