Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 14316
MEPA Analyst: Nick Zavolas
Phone: 617-626-1030

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: **Windsor Reservoir Dam Reconstruction Project**		
Street: **Off Wahconah Falls Road**		
Municipality: **Windsor, Hinsdale, Dalton**	Watershed: **Housatonic**	
Universal Tranverse Mercator Coordinates: **Northing 4705720, Easting 655295 Zone 18**	Latitude: **42.4883755** Longitude: **-73.1099270**	
Estimated commencement date: 09/25/08	Estimated completion date: 12/31/09	
Approximate cost: **$5.264 Million**	Status of project design: **100** %complete	
Proponent: **Dalton Fire District Board of Water Commissioners**		
Street: **20 Flansburg Avenue**		
Municipality: **Dalton**	State: **MA**	Zip Code: **01226**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **David M. Lenart, P.E.**		
Firm/Agency: **Tighe & Bond, Inc.**	Street: **53 Southampton Road**	
Municipality: **Westfield**	State: **MA**	Zip Code: **01085**
Phone: (413) **572-3235**	Fax: **(413) 562-5317**	E-mail: **dmlenart@tighebond.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(8))	☒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): 2008 Massachusetts Energy & Environment Bond Bill - $2,500,000

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

List Local or Federal Permits and Approvals:
Massachusetts Endangered Species Act (NHESP), Section 404 Authorization (US Army Corps of Engineers), Individual 401 WQC (MADEP), Chapter 91 Determination (MADEP), Chapter 253 Jurisdictional Determination (MADCR)

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
LAND			
Total site acreage	275		
New acres of land altered		0.275	
Acres of impervious area	0.05	0.13	0.17
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		16,000 sf (*see note*)	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	2,200	5,000	7,200
Number of housing units	0	0	0
Maximum height (in feet)	60.5	0	60.5
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

State Permits & Approvals

- ☐ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☒ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☒ Other Permits (*including Legislative Approvals*) – Specify:

MESA authorization

Note: *Approximately 8,500 sf of new "other wetland alteration" is associated with the proposed mitigation that includes improvements at May Brook.*

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 **A Conservation Restriction that applies the property is held by MassWildlife. A copy is provided in Section 6.**

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 - **Estimated Habitat and Priority Habitat of Rare Species**) ☐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.*)

The intent of this project is to abate a threat to public safety and to restore the Windsor Reservoir impoundment, a public drinking water supply, by reconstructing the Windsor Dam in compliance with current Massachusetts Dam Safety Regulations (302 CMR 10.00). The Windsor Dam is a stone masonry arch dam located in the Town of Windsor and is owned and operated by the Dalton Fire District (District) through its Board of Water Commissioners. The reservoir itself lies within the Towns of Windsor and Hinsdale, Massachusetts. Land surrounding the reservoir and dam is forested and three mapped perennial streams feed into the reservoir: May Brook from the north, and Windsor Brook and Cady Brook from the south. The impoundment discharges to Wahconah Falls Brook at the site of the dam.

Per a 2005 Dam Safety Order issued by the Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety, the reservoir was drawn down due to unsafe conditions found at the dam, deeming it unsafe, after two major rainfall events in October of that year. The unsafe conditions noted included structural damage to the stone masonry spillway and stone masonry/earthen abutment by high volume flows over the spillway. The conditions noted after the rain events resulted in the District's and MADCR's engineers to consider the structural integrity of the Windsor Dam to be compromised and a threat to public health and safety (correspondence with MADCR is provided in Section 6). MADCR subsequently issued an Emergency Order on April 25 2008, a copy of which is provided in Section 6. To eliminate this hazard, the Town has proposed to demolish a major portion of the existing dam and reconstruct the dam to provide a structure that meets current Massachusetts Dam Safety Standards (302 CMR 10.00). The reconstructed dam has been designed to recreate the existing impoundment with no change in spillway elevation. Upon completion of the reconstruction, the Windsor Reservoir will be restored so that it can resume its function as a backup public drinking water supply for the District.

Windsor Reservoir has a normal storage capacity of approximately 900 acre-feet and has historically provided domestic potable water for the District. In 2003, the District began relying solely on water supply from the City of Pittsfield (Cleveland Reservoir located in Hinsdale, MA) due to the need for a major upgrade to the District's existing treatment facility. However, in the event that the Pittsfield water supply source should be interrupted for any reason, the treatment facility could still be placed in service to provide water from Windsor Reservoir to the District users. No other alternative or backup water supply sources are available for the District. After rehabilitation of the dam, Windsor Reservoir will once again serve as a backup public drinking water source for the District.

Prior to the commencement of construction activities, approximately 2,500 square feet of clearing and grubbing will occur on the embankments adjacent to the downstream face of the dam to allow for access to the structure for construction and future maintenance. The District anticipates that access improvements to the south of the dam will also be required. These improvements will consist of grading an existing gravel road within its current footprint. Access from the north may require the placement of metal plates over a culvert crossing on Wahconah Falls Road to prevent damage to the existing culvert from heavy construction equipment. A coffer dam will be installed in the Windsor Reservoir basin, approximately 50 feet upstream of the dam in order to maintain a dry work area during construction. The coffer dam will most likely be constructed of sandbags, jersey barriers, and/or other similar construction materials which will also hold sediments in the basin back during

sediment removal directly upstream of the existing dam before demolition can occur. Sediments in this area have accumulated to a depth of approximately 20 feet and the total volume of dredged material is expected to be approximately 2,100 cubic yards. Material to be dredged was sampled in accordance with 314 CMR 9.07(2)(b)(6). A copy of a memorandum summarizing the analytical results, as well as a copy of the lab report, are provided in Section 7. The dredged material will be transported to Holiday Farm's compost operation in the Town of Dalton in water-tight trucks for dewatering and disposal.

Demolition of the dam will include the existing spillway, left training wall, and gate house. Demolition will not include the northern training wall, sluiceway or low-level outlet. Details of the demolition and reconstruction of the dam will be left to the discretion of the contractor awarded the project. Flows will be maintained through temporary bypass piping and diverted to the existing inlet for the low-level outlet which is located on the north side of the dam. This outlet will be maintained during the demolition and reconstruction and has been incorporated into the design of the reconstructed dam. Areas downstream from the dam will be protected from siltation and debris by means of erosion control barriers placed downstream of the work. Materials from the existing dam will be salvaged and reused for reconstruction to the extent practicable. Since surface water flows through the impoundment will likely be directed through the low-level outlet on the north side of the dam during demolition activities, construction will most likely begin on the south side of the dam. Once the south side is complete, the bypass piping will be maintained through the low-level outlet as work continues on the north side. Once all construction activities are complete, areas around the dam will be stabilized with rocks, rip-rap and appropriate seeding. A new security fence will also be installed around both abutments.

The District has outlined their proposed mitigation relative to wetlands and waterways in the *Preliminary Mitigation Plan (August 2008)* provided in Section 8. This mitigation plan has been developed with the input of MADEP, USACE, and MassWildlife in order to address environmental and regulatory concerns for this emergency project. Proposed mitigation for this project consists of the following:

- ***May Brook Dam Removal:*** There is a structure on May Brook, a perennial tributary to Windsor Reservoir, that is an impediment to fish passage during all but the highest flows. The District proposes to remove the structure and restore approximately 200 linear feet of stream bank (approximately 100 linear feet of stream overall).
- ***Downstream Flow Conditions:*** Improvements to downstream flow conditions will be implemented by maintaining a base flow volume via the mid-level outlet.
- ***Downstream Riparian Corridor:*** Portions of the riparian corridor along Wahconah Falls Brook have been restricted due to historical agricultural and other land use activities. The District will work with property owners to implement measures to enhance these areas.

In addition to the measures listed above, the following measures have also been incorporated into the project:

- ***Flow Dissipaters:*** The proposed spillway design includes flow dissipaters to reduce the impact of water over the spillway on downstream resources. The inclusion of these features is an improvement over the existing conditions, which provide no flow dissipation.
- ***Vegetated Wildlife Corridors:*** vegetated corridors for wood turtle movement will be installed and maintained around the southern embankment.
- ***Access:*** Vehicular access will be limited in the area of the dam to avoid disturbance to wildlife and the surrounding habitat.

The following alternatives were considered during the design of this project.

1. No Action
2. Dam Removal
3. Improvements to the Existing Dam
4. Complete Reconstruction of the Dam as Proposed (preferred alternative)

A detailed description of each of the four alternatives considered for the proposed project is provided in Section 9.