

**Commonwealth of Massachusetts**  
 Executive Office of Energy and Environmental Affairs  
 Massachusetts Environmental Policy Act (MEPA) Office

**Environmental Notification Form**

*For Office Use Only*

EEA#: 15642

MEPA Analyst: Page Czepiga

*The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.*

Project Name: Merrill Pond Wildlife Management Area Dam Removal and Rehabilitation Projects		
Street Address: West Sutton Road		
Municipality: Sutton	Watershed: Blackstone	
Universal Transverse Mercator Coordinates: 175608.8m E; 876354.3m N	Latitude: 42.137235419	Longitude: -71.795044969
Estimated commencement date: July 2018	Estimated completion date: June 2023	
Project Type: Dam Removal / Dam Rehabilitation	Status of project design: Preliminary	
Proponent: Massachusetts Department of Fish & Game, Division of Fisheries & Wildlife (MassWildlife)		
Street Address: 251 Causeway Street, Suite 400		
Municipality: Boston	State: MA	Zip Code: 02114
Name of Contact Person: Tracy J. Adamski, AICP		
Firm/Agency: Tighe & Bond, Inc.	Street Address: 53 Southampton Road	
Municipality: Westfield	State: MA	Zip Code: 01085
Phone: (413) 572-3256	Fax: (413) 562-5317	E-mail: tjadamski@tighebond.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  Yes  No

- 301 CMR 11.03(3)(a)(4): structural alteration of an existing dam that causes any decrease in impoundment Capacity
- 301 CMR 11.03(3)(a)(1)(b): alteration of > 10 acres of any other wetlands (Land Under Water)

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

**ENF and Mandatory EIR**

- 301 CMR 11.03(3)(a)(4): structural alteration of an existing dam that causes any decrease in impoundment Capacity
- 301 CMR 11.03(3)(a)(1)(b): alteration of > 10 acres of any other wetlands (Land Under Water)

**ENF and Other MEPA Review if the Secretary So Requires**

- 301 CMR 11.03(3)(b)(1)(b): alteration of 500 or more linear feet of inland bank
- 301 CMR 11.03(3)(b)(1)(d): alteration of > 5,000 sf of bordering vegetated wetlands
- 301 CMR 11.03(3)(b)(1)(f): alteration of > ½ acres of any other wetlands (Land Under Water, Bordering Land Subject to Flooding, Riverfront Area)

Which State Agency Permits will the project require?

- Dam Safety Permit (MassODS)
- Chapter 85 Bridge Review (MassDOT)
- Section 401 Water Quality Certification (MassDEP)
- Wetlands Protection Act Order of Conditions (MassDEP, if superseded)

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:  
 The project is being undertaken by the landowner, the Massachusetts Department of Fish & Game, Division of Fisheries & Wildlife (MassWildlife).

Summary of Project Size & Environmental Impacts	Existing	Change	Total
<b>LAND</b>			
Total site acreage	235		
New acres of land altered		29.5*	
Acres of impervious area	0.0	0.2	0.2
Square feet of new bordering vegetated wetlands alteration		9,140	
Square feet of new other wetland alteration		81,830 sf (construction); 27.9 ac (dewatered impoundments)	
Acres of new non-water dependent use of tidelands or waterways		N/A	
<b>STRUCTURES</b>			
Gross square footage	N/A	N/A	N/A
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
<b>TRANSPORTATION</b>			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
<b>WASTEWATER</b>			
Water Use (Gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # ) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # ) <input checked="" type="checkbox"/> No			

\* Total change in Land Under Water for dam removals plus construction-related direct impacts.

## **GENERAL PROJECT INFORMATION – all proponents must fill out this section**

### **PROJECT DESCRIPTION:**

Describe the existing conditions and land uses on the project site:

The project area within the Merrill Pond Wildlife Management Area (WMA) includes an approximately 235 acre area of land in a roughly north-south orientation along West Sutton Road, encompassing a series of manmade impoundments on Singletary Brook, a perennial stream, and adjacent uplands. The area presently consists of open waterbodies of varying sizes, surrounded by vegetated wetlands and upland forested areas. Land use in the general vicinity along West Sutton Road, Hutchinson Road, Welsh Road, Eight Lots Road, and Town Farm Pond Road is primarily single-family residential, with some land in agricultural use. In addition to low-density residential and agricultural uses, there are several utility corridors that intersect with the project area. Two consist of maintained overhead electric transmission lines and high pressure underground gas lines.

Over the course of their existence, the impoundments within the Merrill Pond WMA have been used to power a grist and saw mill (Putnam Mill), for cranberry cultivation, as a warm-water fish hatchery, and as a recreational area. When MassWildlife began leasing the area in 1921, Arnold Pond Dam, Town Farm Dam, Schoolhouse Pond Dam, and Putnam Pond Dam were in existence, but underwent substantial rebuilding and alterations for use as part of the fish hatchery operations. By 1929, when MassWildlife purchased the Merrill Pond properties, Thompson Pond Dam and Welsh Pond Dam were under construction as part of the fish hatchery program. Merrill Pond fish hatchery operations ended in the 1970s, leading to the creation of the Merrill Pond WMA.

Currently, the Merrill Pond WMA is used by the public for hiking, wildlife viewing, and fishing. The water bodies are generally shallow, with many areas too shallow and vegetated for boating, with the exception of Adams Pond; and the portion of the WMA in the immediate vicinity of the ponds is too developed for hunting. The conditions of the seven dams in the project area of the Merrill Pond WMA have deteriorated, leading most to be found in poor-condition during past inspections following Office of Dam Safety condition rating guidelines. In addition, all of the dams but Arnold Pond Dam and Thompson Pond Dam are Significant-hazard dams as defined by Office of Dam Safety rating guidelines, meaning that their failure has the potential to cause loss of life and damage to homes, roadways, or cause the interruption of important facilities. Additional information is presented in the enclosed EENF narrative in Section 1.

Describe the proposed project and its programmatic and physical elements:

This project will include the following components (listed from downstream to upstream):

- The removal of Welsh Pond Dam, which carries West Sutton Road, a public road, on the crest. This component will require installation of a new culvert under the road since the existing culvert is severely undersized and its headwall has collapsed. Due to design constraints, including hydraulic constraints from downstream private infrastructure, several alternatives relating to the size of the replacement culvert are currently under consideration. This component addresses long-term safety related concerns at this location. The removal of Welsh Pond Dam will allow Welsh Pond to revert back to a wet meadow and provide stream continuity restoration benefits for Singletary Brook.
- The partial removal or repair of Putnam Pond Dam, which carries Hutchinson Road, a public road, on the crest. The dam does not maintain an impoundment throughout most of the year due to flow passing through the embankment in an unknown conduit, which is believed to be failing. However, the impoundment level is known to rise during periods of snowmelt and following significant rainfall. Removal or repair alternatives are currently under consideration to determine which approach best addresses the constraints at this location, including historical resources, overhead and downstream underground utilities, and downstream hydraulic constraints as well as improving roadway stability and safety. This project will improve the hydraulic infrastructure at this location to stabilize Hutchinson Road and address concerns related to downstream utilities.
- The removal of the Schoolhouse Pond Dam, which carries Eight Lots Road. This work may initially be accomplished through removal of stoplogs in the Schoolhouse Pond Dam outlet structure, resulting in conversion of this dam to a non-jurisdictional culvert. However, the culvert through the roadway is badly deteriorated and will require eventual replacement, which is being considered as a second phase of the project for the purposes of this ENF. The removal of Schoolhouse Pond Dam will address public safety issues, eliminate dam-related liability and

responsibilities at this location, allow Schoolhouse Pond to revert back to a wet meadow, and provide stream continuity restoration benefits for Singletary Brook.

- The rehabilitation of Adams Pond Dam, including raising the crest and widening the spillway, which will mitigate the safety concerns associated with the marginal condition of this structure while maintaining the recreational use of the impoundment and protecting Massachusetts State-Listed Endangered Species (Vasey's Pondweed) habitat. Public access to the impoundment may also be improved.
- The removal of the full vertical extent of a portion of Arnold Pond Dam, thereby mitigating the safety concerns associated with the poor condition of this structure as well as also providing continuity restoration benefits.

Additional information is presented in the enclosed ENF narrative in Section 2.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

As the proposed project is to remove or repair five dams, three of which are in Poor condition and four of which are Significant-hazard, within the Merrill Pond WMA, there were no alternative off-site locations considered.

Alternatives evaluated for the overall Merrill Pond WMA Project include:

- The No Action alternative, which will not meet project goals of addressing safety-related concerns at the significant-hazard, structurally deficient dams within the WMA.
- Complete dam removals for all sites, which would result in a loss of all impoundments on this project site, impacting recreational use and endangered species habitat on Adams Pond.
- Dam repair and rehabilitation for all sites, which would result in increased construction and maintenance costs and limit the stream restoration potential on parts of Singletary Brook.
- A combination of dam removal and repair/rehabilitation based on the unique conditions at each dam and impoundment (Preferred Alternative)

Alternative approaches to repair or removal of Putnam Pond Dam and Welsh Pond Dam were also considered, including locations and sizes of culverts and construction methods. Additional information is presented in the enclosed narrative in Section 3.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The proposed work addresses safety-related concerns at the multiple dams that run along Singletary Brook, all of which are deteriorating and several of which have significant structural, operational, and maintenance deficiencies under normal loading conditions. A combination of dam removal and dam repair/rehabilitation is proposed for the Merrill Pond WMA dams in order to accomplish the safety-related goals of the project while also providing for ecological restoration through stream restoration.

Road-stream crossings will be designed to meet the criteria established in the *Massachusetts River and Stream Crossing Standards (2011)* to the maximum extent practicable. To provide for continued use of the impoundment for recreation and a state-listed endangered species (Vasey's Pondweed) habitat, Adams Pond Dam will be rehabilitated to accommodate the appropriate Spillway Design Flood as defined by the Massachusetts Office of Dam Safety and will provide opportunity to lower the risks of dam failure at this location. Construction-period mitigation measures will include the use of erosion and sediment controls to address pollutant discharges from upland areas.

If the project is proposed to be constructed in phases, please describe each phase:

The project is proposed to occur downstream to upstream, beginning with Welsh Pond Dam, and continuing with Putnam Pond Dam, Schoolhouse Pond Dam, Adams Pond Dam, and Arnold Pond Dam.

#### **AREAS OF CRITICAL ENVIRONMENTAL CONCERN:**

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify \_\_\_\_\_)  
 No

If yes, does the ACEC have an approved Resource Management Plan? \_\_\_ Yes \_\_\_ No;  
If yes, describe how the project complies with this plan.