

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

Environmental Notification Form

For Office Use Only

EEA#: 16249

MEPA Analyst: Purvi Patel

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: Watson Road Dam Removal		
Street Address: 110 Watson Road		
Municipality: Hinsdale	Watershed: Housatonic	
Universal Transverse Mercator Coordinates:	Latitude: 42.449383 N Longitude: 73.116138 W	
Estimated commencement date: Summer 2020	Estimated completion date: Fall 2020	
Project Type: Partial Dam Removal	Status of project design: 100 %complete	
Proponent: Kimberley Wendling, property owner		
Street Address: 180 Watson Road		
Municipality: Hinsdale	State: MA	Zip Code: 01235
Name of Contact Person: Kimberley Wendling		
Firm/Agency: N/A	Street Address: 180 Watson Road	
Municipality: Hinsdale	State: MA	Zip Code: 01235
Phone: 413-655-8388	Fax: N/A	E-mail: kmolly77@aol.com

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

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)) 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
(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
301 CMR 11.03 (3) (a) 4 – alteration of a dam that causes a decrease of impoundment capacity

Which State Agency Permits will the project require?
MassDCR Chapter 253 Dam Safety Permit & Hinsdale Conservation Commission/MassDEP Order of Conditions

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: **N/A**

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	119.2		
New acres of land altered		8.58	
Acres of impervious area	0	0	0
Square feet of new bordering vegetated wetlands alteration <i>*New BVW will be created through conversion of LUWW.</i>		98 SF (temporary) 357,924 SF (created)	
Square feet of new other wetland alteration <i>*Plan set shows direct alteration within immediate vicinity of construction activities. See Mitigation Assessment Report for more detail</i>		1,074 SF LUWW (temporary) 357,924 SF LUWW conversion to BVW (permanent) 4,272 SF RA (0-100; permanent) 7,383 SF RA (0-100; temporary) 1,475 SF (100-200; temporary)	
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 (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	0	0	0
WASTEWATER			
Water Use (Gallons per day)	0	0	0
Water withdrawal (GPD)	0	0	0
Wastewater generation/treatment (GPD)	0	0	0
Length of water mains (miles)	0	0	0
Length of sewer mains (miles)	0	0	0
<p>Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No</p>			
<p>Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No</p>			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

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

Watson Road Dam is located north of Old Stagecoach Road in Hinsdale, Massachusetts, on a tributary to the East Branch Housatonic River in Berkshire County. The dam sits at the south end of an unnamed pond. The land around the pond and the majority of its watershed is forested.

Watson Road Dam is an earth fill dam with a vertical rubble masonry wall on its downstream face. It has a structural height of 9 feet and a hydraulic height of 6 feet. The dam crest has a length of 100 feet and an average width of 40 feet. The impoundment is estimated to have a normal pool storage of 42 acre-feet and a maximum pool storage of 81 acre-feet. The structural height is set by a berm on the upstream side of the crest which is reportedly the result of beaver activity over a period of many years.

The original spillway and upstream end of the tailrace culvert are now near the center of the crest and are not hydraulically connected to the pond. An original low-level outlet pipe reportedly remains, although it is assumed to be inoperable. Instead, discharge runs through a breach in the beaver dam across the dam crest near the right end of the dam. The flow channel appears relatively stable although there is some ponding near the center of the crest.

Phase I Dam Inspections were performed at the dam in August 2009, August 2016, and June 2017. The results of the Inspections indicated the dam was in “Poor” condition due to the following deficiencies:

- **trees on the dam crest and within 20 feet of the downstream toe,**
- **no functional engineered spillway,**
- **no functional low level outlet,**
- **discharge observed flowing across the dam crest and down behind the downstream rubble wall,**
- **a berm constructed by beavers along the upstream dam crest,**
- **missing or misaligned stones in the downstream masonry,**
- **seepage observed at the downstream toe, and**
- **thick vegetation covering the dam crest.**

The dam is classified by the Department of Conservation and Recreation’s (MADCR) Office of Dam Safety as an “Intermediate” size structure and has a “Significant” hazard classification. The MADCR Office of Dam Safety requires owners of dams in “Poor” condition to address identified deficiencies.

The dam has reportedly been in more or less the current condition for a number of years. Because the dam does not seem to be dramatically worsening, it was not given an “unsafe” rating.

Existing conditions are depicted on the plan included as Attachment B.

Describe the proposed project and its programmatic and physical elements:

NOTE: The project description should summarize both the project’s direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these

requirements into the future.

Purpose and Need

The list of deficiencies noted in the project description, including beaver activity, poor condition of the dam crest and downstream masonry wall, and large trees on the dam crest, abutments, and near the downstream toe all contribute to long-term stability risk for the dam.

Several project alternatives were considered. A full alternatives assessment is provided as *Attachment G*. Partial dam removal was the chosen alternative. The project objectives are to permanently lower the dam crest in order to make the dam a non-jurisdictional structure and restore habitat connectivity. Lowering of the dam crest will eliminate concerns associated with potential dam failure. A new trapezoidal-shaped outlet will be constructed to allow runoff entering the pond to freely drain through the outlet without significantly increasing downstream flood elevations.

Proposed Action

The project area within the limits of work, in the immediate vicinity of the dam, consists of approximately 0.4 acre. This includes areas upstream and downstream of the existing dam which will be graded and armored with riprap, as well as the adjacent upland area used for staging and stockpiling, as shown in *Attachment H*. As a result of the permanent lowering of the dam crest elevation, the normal water surface elevation will be lowered from 1514.6 feet to 1511 feet (NAVD88); the surface area of the existing impoundment will be reduced from 13.17 acres to 5.03 acres. This will result in the conversion of land under water to bordering vegetated wetland. The proposed action (preferred alternative) consists of the following activities, which are shown on the proposed conditions site plan in *Attachment H*:

- Remove and dispose of trees, stumps, and root systems from the existing earthen embankment and abutments. Voids will be backfilled with compacted low permeability fill and seeded. Approximately one dozen trees will be removed.
- Demolish existing stone masonry walls present at the downstream face of the existing dam embankment. Acceptable stone (as determined by the engineer) may be reused as riprap protection.
- Demolish other existing site improvements within the limit of disturbance, including historical spillway concrete, masonry, and piping features, conduits, and other features indicated on the plans.
- Excavate existing dam embankment to grades shown on the plans. Over excavate material approximately 18 inches for installation of riprap protection layer. Dispose of clean excess material in an acceptable upland area or at an approved off-site facility.
- Grade proposed outlet channel to those shown on the plans.
- Install 18 inch thick riprap apron within areas indicated on the plans. Approximately 59 cubic yards of riprap will be placed.
- Loam and seed upland areas of the embankment, staging areas, access routes, and other areas disturbed by construction activities. Restore wetland area disturbed by construction activities. The newly exposed area of the impoundment will be allowed to restore vegetation with the existing seedbank available in the exposed sediments.

Direct and Indirect Impacts

The following environmental resource areas are located in the project area or within proximity to the project area, with associated project impacts:

Wetlands – Fuss & O'Neill, Inc. performed wetland boundary delineations within the proposed work areas. State jurisdictional wetland resource areas were delineated in accordance with the Massachusetts Wetlands Protection Act (310 CMR 10.00 et seq.). Federal jurisdiction wetlands were delineated in accordance with U.S. Army Corps of Engineers Wetlands

Delineation Manual (Technical Report Y-87-1) and Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (ERDC/EL TR-09-19) pursuant to Section 404 of the Federal Clean Water Act (33 U.S.C. 1344). The delineations were conducted by Kristin Connell of Fuss & O'Neill, Inc. on August 3, 2016. The surveyed wetland boundaries are shown on the existing conditions site plan in *Attachment B*.

There are a total of 98 square feet of Bordering Vegetated Wetlands (BVW) within the project area, which will be temporarily impacted by the construction access road. The temporary access road will be made of timber, HDPE matting, or similarly approved methods; the area will be restored following project completion and removal of the mats.

There will be 1,024 square feet of temporary Land Under Waterbodies & Waterways (LUWW) impact due to placement of the upstream coffer dam and downstream check dam. These measures will be removed following the end of construction activities. There will be a permanent drawdown of the impoundment, which will result in a reduction of LUWW of 357,924 square feet. Based on historical aerial photographs, field observations, and field-measured impoundment depth, this area is anticipated to revert back to BVW. The area will be allowed to revegetate from the existing seedbank in the exposed sediments.

Total land alteration within the Riverfront Area (RA) will be 13,130 square feet. Of that, 4,272 square feet will be permanent impact as a result of grading, tree removal, and backfilling of voids. Other impacts will be temporary in nature and include erosion and sedimentation controls, staging, stockpiling, and construction access.

Impacts to LUWW cannot be avoided as they are directly related to the permanent lowering of the dam crest elevation. However, this will result in conversion to BVW.

Water Supply – The project area is not located within a MassDEP water supply area.

State-listed Species - The project area is not located within a Massachusetts Natural Heritage and Endangered Species Program Priority Habitat or Estimated Habitat Area.

Outstanding Resource Waters (ORW) – The project area is not located within an ORW area.

Construction Period Description and Impacts

Prior to starting any work on the site, the contractor shall install erosion and sediment control measures as shown on *Attachment H*. These measures include, but are not limited to, silt fence, straw bale barriers, construction access, coffer dam, check dam, and a dewatering area. The contractor shall implement additional measures as required to prevent stormwater runoff, dust, sediment, and debris from exiting the site. All erosion and sediment control measures shall be inspected and maintained throughout the duration of construction.

Once erosion and sediment control measures are in place, the contractor will commence site clearing and grubbing. It is anticipated that the contractor will utilize an excavator and dump truck to complete site clearing. Soil material removed during grading may be disposed at an upland location on the property or removed and disposed at an off-site facility. Tree removal will be completed utilizing chain saws to down trees, and an excavator to remove tree stumps. Vegetation may be removed using a brush hog. All vegetation will be placed in the upland or removed from the site for proper disposal. The contractor will shape and backfill and seed all stump holes created by tree removal and not located in an area where riprap will be placed.

After completion of site clearing, the contractor shall begin grading to lower the elevation of the dam. All non-native dam material will be removed. Material may be stockpiled temporarily in the designated location until the contractor is ready for removal. Riprap will be placed to

protect the new channel from erosion. The area will be backfilled as necessary with native material and regraded to restore the area of dam removal and match existing contours.

Areas disturbed by construction activities will be seeded with an appropriate seed mix. The area of the newly exposed pond bottom will be allowed to revegetate through the natural seed bank in the sediments. Vegetative success will be evaluated one year after project completion and supplemental seeding or planting will be conducted as necessary.

Flow in the existing stream will be maintained throughout construction using a pump and settling basin combination. The location of the settling basin may change over the duration of construction, as necessary.

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:

NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

A “no action” alternative has not been considered as part of this assessment; this structure is under a Dam Safety Order issued by MADCR, and a plan must be implemented to address the deficiencies summarized above.

Repair of the existing dam was evaluated. However, it was determined to be more expensive than partial or complete dam removal and would result in long-term operation and maintenance costs. Additionally, it would continue the risk of a significant hazard dam and would not provide the ecological benefits that partial or complete dam removal offer.

Full removal of the existing dam was evaluated. While this would eliminate hazards to downstream areas that could result from dam failure, full removal would result in significantly increased peak discharges to the area downstream of the dam. This would adversely impact downstream properties.

Partial removal of the existing dam was evaluated and became the chosen alternative. Partial removal provides ecological benefits, minimizes change in peak flow discharges, and significantly reduces on-going costs associated with the dam. The partial removal will partially restore the riverine system, thereby reducing stream fragmentation (the proposed outlet channel is open with no restrictions), and benefitting fisheries. In addition, the proposed project will positively impact flood control by attenuating some amount of flood flow to protect downstream infrastructure.

A more in-depth Alternatives Assessment Report is included as Attachment G.

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

Temporary project impacts will be minimized through construction-period Best Management Practices for water control and water and sedimentation. Permanent mitigation measures involve engineered design of the proposed channel and vegetation monitoring to assess revegetation in the vicinity of the former impoundment. Areas disturbed by construction activities will be planted with appropriate native seed mix. The newly exposed sediment around the edge of the impoundment will be allowed to naturally re-vegetate with the seed bank that exists within the