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.: 14337
MEPA Analyst: Holly Johnson
Phone: 617-626-1023

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: **NORTH HOOSIC RIVER RESTORATION**		
Street: **191 River Road**		
Municipality: **Clarksburg**	Watershed: **Hudson**	
Universal Tranverse Mercator Coordinates: **-73.083054 42.714538**	Latitude: **42° 42' 52.33"N** Longitude: **-73° 4' 59.74"W**	
Estimated commencement date: **Summer 2009**	Estimated completion date: **Fall 2009**	
Approximate cost: **$ 625,000**	Status of project design: **95** %complete	
Proponent: **Riverways Program, Department of Fish and Game**		
Street: **251 Causeway St.**		
Municipality: **Boston**	State: **MA**	Zip Code: **02114**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Tim Purinton**		
Firm/Agency: **Riverways Program**	Street: **251 Causeway St.**	
Municipality: **Boston**	State: **MA**	Zip Code: **02114**
Phone: **617-626-1542**	Fax: **617-626-1505**	E-mail: **tim.purinton@state.ma.us**

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):
Massachusetts Riverways Program: $ 80,000

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

List Local or Federal Permits and Approvals: **USACE Section 404, WPA**

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03): (3)(a.)(4) **Structural alteration of an existing dam (jurisdictional) that decreases impoundment capacity**

☐ 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	4.5 acres		
New acres of land altered		2.03 acres	
Acres of impervious area	.25	0	0
Square feet of new bordering vegetated wetlands alteration		26,672 sq. ft.	
Square feet of new other wetland alteration		8,276 sq. ft. (Conversion of LUW to BVW)	
Acres of new non-water dependent use of tidelands or waterways		N/A	
STRUCTURES			
Gross square footage	0	0	0
Number of housing units	0	0	0
Maximum height (in feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	0	0	0
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A	N/A	N/A
GPD water withdrawal	N/A	N/A	N/A
GPD wastewater generation/ treatment	N/A	N/A	N/A

State Permits & Approvals

Permits To be Applied For:
☒ 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:

Mass Historical Review Chapter 253, Dam Safety

Length of water/sewer mains (in miles)	N/A	N/A	N/A	

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 **A portion of the site is located within Estimated Habitat of Rare Species, as illustrated in the most recent NHESP atlas, internal DFG coordination has been initiated, habitat restoration will improve the quality of aquatic habitat for species of concern and best management practices will be executed to minimize species disturbance. See Rare Species Section for more detail on species of concern and protective measures. The project will likely qualify as a Habitat Management Exemption.**

☐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 **Coordination with Massachusetts Historical Commission is ongoing.**

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.*)

Please refer to the attached final design report and plans for further detail than provided here.

Mass Riverways Program is working in partnership to restore the North Branch Hoosic River headwaters through the removal of the Briggsville Dam in Clarksburg, a 15-foot high and 145-foot long broad crest weir dam. Partners include:

- Hoosuck Chapter of Trout Unlimited
- Cascade School Supplies
- **Mass Division of Fisheries & Wildlife**
- USFWS
- USDA-NRCS
- Town of Clarksburg
- Mass Corporate Wetlands Restoration Partnership – Procter & Gamble (Gillette) and National Grid
- Hoosic River Watershed Association
- American Rivers

The North Branch Hoosic River watershed at the Briggsville Dam is comprised of 31.5 square miles. The watershed is bounded on the east by the Hoosic Range and extends into Vermont and the Green

Mountain National Forest. Historic USGS mapping from 1898 and 1954 indicates that the only significant landuse of the watershed has been small-scale agriculture and timber harvesting. A 1876 map entitled "Briggsville" identifies only one mill upstream of the dam, the Geo. Hall Turning Mill, located near the Cross Street Bridge. The vast majority of the watershed today consists of steep forested slopes.

Dam removal will improve coldwater habitat for resident and state-listed species. The project involves full dam removal and the restoration of in-stream and riparian habitats. Target species that will benefit from the project include the eastern brook trout, slimy sculpin, longnose sucker (state-listed) and other resident aquatic species. The restoration will provide species access to more than 30 miles of free-flowing, high quality headwater streams. A feasibility study completed in June 2007 identified dam removal as the preferred alternative and provided background analysis needed to complete the project. A final design is complete and attached to the ENF.

This habitat restoration project supports conservation plans including the state Comprehensive Wildlife Conservation Strategy (WCS) and recommendations of the Secretaries' Aquatic Habitat Restoration Task Force by restoring habitat for priority species. The project is also a Riverways Program designated *Priority Project*.

The project will 1) eliminate a barrier to aquatic and riparian species movement; 2) re-establish the river's natural flow regime; 3) improve water quality, sediment dynamics, and water temperature for coldwater species; and 4) restore the natural clean gravel and cobble streambed necessary for several species of interest.

The Conservation Strategy explains the adverse ecological impacts of dams:

> "Dams on small streams cause several impacts to aquatic habitats. First, they create habitat unsuitable for native fluvial species and preferred by native and non-native pond species. Second, they stop the flow and transfer of energy, sediments, and nutrients. Water retained in small stream impoundments warms with increased exposure to sunlight and nutrients trapped in the impoundments become available for macrophyte or algal growth. All of these impacts translate into altered water quality downstream of the impoundment. Third, dams create barriers to fish passage that result in isolated populations of fluvial fish less able to cope with environmental extremes. Finally, most dams have no provision for minimum flow and, other than leakage, provide no flow downstream in the summer months or other low flow periods. Low or no flow events then increase in frequency and magnitude and reduce the ability of the fish population to recover. All of these impacts will affect surrounding habitats as well." (p. 278)

Dam removal is a direct, on-the-ground action item that improves aquatic conditions and re-establishes river continuity

AQUATIC SPECIES IMPACTS

Fish samples collected in 1990, 2002, 2007 and 2008 by Mass Wildlife on the North Branch of the Hoosic River show a high abundance of longnose dace, blacknose dace, and creek chub, and presence of three native, coldwater-dependent fish -- the longnose sucker, brook trout, and slimy sculpin. The longnose sucker is listed as a state Species of Special Concern. Longnose suckers travel upstream to spawn from mid-April through July in moderate to fast stream currents and gravel substrates. Dams are a significant concern when they prevent successful migration to preferred spawning habitats.

The slimy sculpin is considered by Mass Wildlife as one of the species in greatest need of conservation in Massachusetts. The slimy sculpin is a bottom dweller that prefers cold, rocky streams and is considered a fluvial specialist. Dams can prevent successful migration to preferred spawning habitat. The slimy sculpin is also intolerant of disturbance and pollution, which is a key reason for being listed for increased conservation needs. Additionally, they are an important prey fish for brook trout, as well as other large game fish.

The Eastern brook trout is a native heritage species that inhabits the coldest cleanest waters of Massachusetts. The brook trout has spearheaded many conservation efforts in recent years due to a documented decline in its population. Dams limit successful migration to preferred spawning habitat, inundate habitat with sediment and stagnant flow, and significantly affect the brook trout's natural temperature regime and dissolved oxygen content.

Given the proactive nature of the restoration and the ecological as well as community benefits of dam removal (e.g. dam safety) **a waiver from filing an Environmental Impact Report is requested**.

ALTERNATIVES ANALYSIS

This restoration of North Branch of the Hoosic River is a proactive habitat restoration project that will improve ecological conditions and promote a more sustainable condition. Alternatives analyses typically seek to reduce impacts to resource areas with the assumption that there is some loss of functions and values. It is the intent of this restoration to work directly within the resource areas to improve conditions, therefore a typical alternative analysis – that seeks to minimize permanent resource damages is not directly applicable.

Alternative 1 (Preferred): Habitat Restoration: Dam Removal. Dam removal will restore the headwaters of the North Branch of the Hoosic River to a more natural condition and represents a unique opportunity to restore cold water and listed species habitat. In addition, by restoring natural riparian area, this project will improve ecological health and increase species diversity, including native trees, plants, and fish. In the attached technical report certain variations of dam removal including partial and full removal as well as types of specific grade control are discussed. Specific technical options are evaluated and the rationale for the preferred alternative (full dam removal) is described.

Alternative 2: No-Action Alternative. The No-Action alternative in this case would eliminate the cost of restoration and would allow partners to focus attention and resources on other projects. This initial cost savings may be the only positive aspect of no action. The No-Action alternative would mean the existing dam would remain and continue to pose a significant safety risk. Implementing the No-Action alternative would mean that there would be no alterations to the resource areas associated with channel and riparian restoration. In addition, if no action is taken, opportunities for environmental education and public interaction will be lost. Natural ecosystem restoration is the primary goal of this proposed project; the No-Action alternative would not serve the project purpose and partner goals.

PRESERVATION OF RESOURCE AREA INTERESTS

Dam removal will require temporary alterations to Bank, Land Under Water, Bordering Vegetated Wetlands, Land Subject to Flooding, and Riverfront Area, but will result in a net benefit for all these resources. Please refer to the final design technical report for further information on the preservation of resource area interests. Please note practices such as Time-of-Year restrictions, best management construction practices and optimizing work in the dry will be employed and likely conditioned through the permit process.

We anticipate the following outcomes:

- The restoration will provide species access to more than 30 miles of free-flowing, high quality headwater streams by eliminating a barrier to aquatic and riparian species movement. According to the Institute of Ecosystem Studies there are unique aquatic plants and animals that only use headwater streams at certain life stages or at specific times of the year.
  Approximately 0.25 miles of natural, clean, gravel and cobble streambed habitat will be restored at the dam removal site. By re-establish the river's natural flow regime sediment will be allowed to naturally transport without being impeded by the dam.
- Floodplain area at the site will be increased by around 20%. This will be achieved by lowering the bed profile to its former elevation above the dam. By allowing the river to naturally flood its banks vital

nutrient exchange will take place. Presently the 100-yr flood event impacts existing infrastructure (parking lot and nearby buildings) and cannot be absorbed by impervious surfaces.

- We expect that water temperatures will be reduced in the former impoundment area. This will occur as the subsurface flow takes place between the river and its floodplain. Cooler flows will also be maintained by the restored riparian canopy. A reduction in water temperature will preserve cold water habitat and improve conditions for target species (e.g. brook trout, slimy sculpin and longnosed sucker).

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)
___ Yes **X No**; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	**0**	**0**	**0**
Roadways, parking, and other paved areas	**0**	**0**	**0**
Other altered areas	**3.2**	**.1***	**3.1**
Undeveloped areas	**0**	**0**	**0**

*** Removal of dam**

B. Has any part of the project site been in active agricultural use in the last three years?
___ Yes **X No**; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes **X No**; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes **X No**; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? **Yes** _X_ No; if yes, does the project involve the release or modification of such restriction? ___ Yes ___ **No**; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes **X No**; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ **No X**; if yes, describe:

H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy: **NA**

I. Is the project site currently being regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes ___ **No X**; if yes, what is the Release Tracking Number (RTN)?

J. If the project is site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or Wachusett subwatershed? ___ Yes **X No**; if yes, is the project site subject to regulation under the Watershed Protection Act? ___ Yes _X_ No