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.: 13448
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: **Newburyport Water Works - Bartlett Pond Re-Activation and Increase in Water System Withdrawal**		
Street: **7 Spring Lane**		
Municipality: **Newburyport**	Watershed: **Merrimack**	
Universal Tranverse Mercator Coordinates: **Northing: 4744039.5 Easting: 343549.3 Zone: 19**	Latitude: **42.83293° N** Longitude: **-70.91424° W**	
Estimated commencement date: **May 2005**	Estimated completion date: **May 2006**	
Approximate cost: **$570,000**	Status of project design: **90%complete**	
Proponent: **Newburyport Water Works, Attention: Don Finocchio**		
Street: **City Hall, 60 Pleasant Street**		
Municipality: **Newburyport**	State: **MA**	Zip Code: **01950**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Christina Hoffman**		
Firm/Agency: **Metcalf & Eddy**	Street: **701 Edgewater Drive**	
Municipality: **Wakefield**	State: **MA**	Zip Code: **01880**
Phone: **781-224-6069**	Fax: **781-224-6676**	E-mail: **christina.hoffman@m-e.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): **N/A**

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

List Local or Federal Permits and Approvals: **US Army Corps of Engineers Programmatic General Permit, Modified Water Management Act Permit, New Source Approval, Order of Conditions**

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	1.97 acres		
New acres of land altered		0.06 acre	
Acres of impervious area	0.88 acre	0.0005 (20 sq ft)	0.88 acre
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		900 sq ft	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0.16 acre	0	0.16 acre
Number of housing units	0	0	0
Maximum height (in feet)	20 ft (approx)	0	20 ft (approx)
TRANSPORTATION			
Vehicle trips per day	<10 (approx)	0	<10 (approx)
Parking spaces	10 (approx)	0	10 (approx)
WATER/WASTEWATER			
Gallons/day (GPD) of water use	2.2 MGD overall water system	0.8 MGD	3.0 MGD
GPD water withdrawal	2.2 MGD overall water system	0.8 MGD	3.0 MGD
GPD wastewater generation/ treatment	0	0	0
Length of water/sewer mains (in miles)	<1 mile	<1 mile	<1 mile

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:

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 **MNHESP reviewed project and indicated no adverse effects**) ☐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 project entails the re-activation of Bartlett Spring Pond in Newburyport, MA as an active component of the public water supply system. Also proposed is an increase in the permitted water withdrawal amount included in the Water Management Act Permit for the City of Newburyport Water Works (NWW) Department.

Given the projected water demands through 2014, the City of Newburyport requires 3.0 MGD of water within its system. Through this ENF, Newburyport Water Works is proposing to increase its overall public water supply system withdrawal by 0.8 million gallons per day (MGD) to meet projected needs through the year 2014, which is the expiration date of their existing Water Management Act Permit. Existing facilities at each of the water sources are anticipated to be sufficient to withdraw the requested volume of water with the exception of Bartlett Spring Pond (as discussed below).

The increase in overall system withdrawal volume is based on the projected water demands within the City of Newburyport and the Town of Newbury. The volumes are based on the Newburyport Water Works Master Plan prepared by Fay, Spofford, and Thorndike in 2001. The existing Water Management Act Permit allows 2.2 million gallons per day (MGD) withdrawal from all water sources. NWW is requesting a 3.0 MGD registered withdrawal limit to meet future demands. A Modified Water Management Act Permit application to increase NWW's permitted withdrawal by 0.8 MGD was submitted to the Massachusetts Department of Environmental Protection (DEP) in November of 2004.

Alternatives to the project include reducing the future demand of water in the NWW service area. The City is complying with MA DEP conservation measures and requirements to 1) reduce residential per capita water use to below 80 gallons per day and 2) reduce unaccounted for water to 15% or less. Both of these measures have been met and additional measures have been taken to reduce water use. Further reduction of the demand to offset the projected future needs is not feasible; therefore, a new source is needed.

Another alternative is to develop a new water supply source within the watershed. This option would require the exploration and then development of withdrawal/pumping facilities, including

piping and potentially new treatment facilities, depending on the water quality. Development of a new source could potentially result in substantial environmental impacts. Given that an adequate source has already been developed, new construction is not the preferred alternative.

The preferred alternative will utilize an existing water supply source (Bartlett Spring Pond) from which high quality water is currently pumped to waste to the Merrimack River. DEP has preliminarily approved the reactivation of this man-made reservoir through the New Source Approval process. Final approval is anticipated within the next year after NWW meets requirements regarding activities in the Zone A surrounding Bartlett Spring Pond. Flooding in and around Bartlett Spring Pond during large rain storm events has been a significant problem and is required by DEP to be addressed as part of this project.

Bartlett Spring Pond has been used in the Newburyport public water supply system since 1881. In 1987, the source was designated as an emergency supply. This change was made due to improvements to the overall water system which made use of the pond impractical. The pond is a man-made, spring-fed reservoir with no outlet. The constant flows from the springs are currently pumped to waste on a semi-daily basis into the nearby Merrimack River. This project proposes to capture a portion of this water stream and add it to the water supply system. The project also includes a gravity overflow structure which will allow excess flows to discharge into the Merrimack River. The water quality of these flows is very high, as evidenced by the former and proposed use of them as a public water supply.

No new buildings are required due to the reuse of the existing gatehouse. Most work (pipeline installation to the existing water treatment plant and the overflow pipe) will occur underground and within the existing gatehouse; however, work is required within the pond and adjacent to the river.

Mitigation measures for the preferred alternative will include the use of erosion and sedimentation controls during construction. Most of the anticipated impacts will be temporary and the resource areas will be substantially restored to pre-construction conditions. Protected resource areas anticipated to be permanently impacted include inland bank (20 linear feet), coastal bank (12 linear feet), land under water (900 square feet), coastal beach (16 square feet), land subject to coastal storm flowage (95 square feet) and riverfront area (95 square feet). Some of these impact areas are overlapping.

The requested increase in withdrawal to 3.0 MGD includes the use of Bartlett Spring Pond as a water supply source. Use of this pond requires the rehabilitation of the existing gatehouse located at the pond, the installation of a new intake pipe, and the installation of a gravity overflow system to maintain pond elevations and prevent flooding of the adjacent facilities. Currently, excess flows from Bartlett Spring Pond are pumped to waste in the Merrimack River on a semi-daily basis. In addition, during storm events the pond floods the adjacent facilities, including the gatehouse and the Spring Lane Finished Water Pump Station. Additional temporary pumps are required to pump the pond down to prevent flooding. The pumped water is of high quality and is discharged into the Merrimack River. This project would capture some of these excess flows and convey them to the existing Newburyport Spring Lane Water Treatment Plant for treatment and distribution. No modifications to the treatment plant are required to handle the flow from Bartlett Spring Pond. The proposed overflow structure would maintain the elevation of the pond without requiring the use of pumps.