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.: 13643
MEPA Analyst: BRIONY ANGUS
Phone: 617-626-1029

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: **Water Treatment Facility Improvements for Callahan Wells**		
Street: **South side of Bay Road**		
Municipality: **Hadley**	Watershed: **Fort River/ Connecticut River**	
Universal Tranverse Mercator Coordinates: **N4713814.005 E666913.275**	Latitude: **N42.33313** Longitude: **W72.58002**	
Estimated commencement date: **Winter 2005/2006**	Estimated completion date: **Winter 2006/ 2007**	
Approximate cost: $3.9 Million	Status of project design: 75% complete	
Proponent: **Town of Hadley**		
Street: **100 Middle Street**		
Municipality: **Hadley**	State: **MA**	Zip Code: **01035**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Paul G. Davis, Ph.D.**		
Firm/Agency: **BEC, Inc.**	Street: **296 North Main St.**	
Municipality: **East Longmeadow**	State: **MA**	Zip Code: **01028**
Phone: **413-525-3822**	Fax: **413-525-8348**	E-mail: **pdavis@b-e-c.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):

MA DEP low interest Drinking Water State Revolving Funds (DWSRF) have been appropriated for $3.9 Million.

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

List Local or Federal Permits and Approvals: **None Required**

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	1.5± acres		
New acres of land altered		1.0± acres	
Acres of impervious area	0.2± acres	0.1± acres	0.3± acres
Square feet of new bordering vegetated wetlands alteration		0.0	
Square feet of new other wetland alteration		15,100± SF riverfront 60,000± SF BLSF	
Acres of new non-water dependent use of tidelands or waterways		0.0	
STRUCTURES			
Gross square footage	1200 sf	2800 sf	4000± SF
Number of housing units		NA	
Maximum height (in feet)		35± ft	
TRANSPORTATION			
Vehicle trips per day	10	0	10
Parking spaces			
WATER/WASTEWATER			
Gallons/day (GPD) of water use	0	0	0
GPD water withdrawal	Up to 3 mgd	0	Up to 3 mgd
GPD wastewater generation/ treatment	0	Up to 13,653	Up to 13,653
Length of water/sewer mains (in miles)	0	0.6	0.6

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: **Wood Turtle Habitat Identified within Fort River Corridor**) ☐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 attch one additional page, if necessary.*)

Project Description: Due to the recent detection of perchlorate in its two Mt. Warner Wells, the Hadley Water Department is seeking to construct a manganese removal water treatment plant (WTP) for its other two Callahan Wells. The two Mt. Warner wells have a combined pumping capacity of 2.0 mgd. Mt. Warner #1 has a pumping capacity of 0.8 mgd and Mt. Warner #2 has a pumping capacity of 1.2 mgd. In addition to perchlorate, the Mt. Warner wells also have detectable concentrations of nitrates. This has led the Town to decide on treating the higher producing (3 mgd) Callahan Wells for its primary source of supply.

Based on successful piloting results, the process of ultrafiltration was selected. A WTP with an installed maximum flow capacity of 2 mgd (expandable to 3 mgd in the future) is proposed.

Based on the design requirements, the building footprint is 40-feet by 70-feet. The first floor will contain the required treatment equipment, electrical equipment, control room and lavatory. The lower level will contain a pipe gallery, clearwell, recycle tanks, and waste holding tanks.

The ultrafiltration process will filter the pretreated raw water through its primary stages. The backwash and cleaning water from the filters will be discharged into the recycle tanks. From the recycle tanks, the water will be pumped to a secondary unit for further filtering (backwash water recycling/reduction). The remaining waste water from the secondary units will drain into the waste holding tanks and be pumped via a dedicated force main to a sewer pump station at the intersection of Bay Road and South Middle Street. Lavatory waste will also be pumped through the force main via a dedicated grinder type pump station. No on-site discharge is proposed. The 3" force main will be installed beneath existing pavement for a distance of about 3100 lf by directional drilling in 500 foot segments, minimizing disturbance of the pavement surfaces.

In order to minimize the size of the WTP, room within the existing pumping station building shall be utilized for the potassium permanganate feed system and air compressors required by the ultrafiltration process. An emergency generator within a sound attenuation enclosure shall be located outside as shown on the plans.

Alternatives: The Town owns the 12.7 acre parcel of land on which the Callahan Wells and existing pumping station are located. The proposed location for the WTP (as shown) has been selected to be on this lot within the previously disturbed areas adjacent to the existing pumping station. An adjacent level hayfield area (on the same lot) was previously the preferred location due to easier construction. However, based upon the results of a site visit with MA DEP and local conservation commission members on July 14th, 2005, the site adjacent to existing pumping station was recommended by the MA DEP. Reasons for this included less required flood compensatory storage requirements and the site was previously disturbed.

Other Town owned land areas previously considered for the future WTP are the areas around the existing highway garage and wastewater treatment plant facilities. Due to anticipated future upgrades/expansions on these sites, the future WTP could not be located at either of these sites. Additional costs in excess of a million dollars would also have been required to install large diameter water mains to bring the raw water to the site.

Mitigation: The proposed water filtration plant is an environmental mitigation project relative to drinking water quality. Additional mitigation for work within the floodplain will be achieved by providing compensatory storage for filled Bordering Land Subject to Flooding along the driveway fill slopes and within an adjacent existing field. The field area will remain as field following regrading, replacing the topsoil in place and stripping the subsoils in order to adjust the local grading. There will be no net loss of flood storage. Compensatory storage will be provided within each one-foot increment. The Applicant will install erosion and sedimentation measure to prevent secondary impacts to regulated resources.