

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: *13480*
 MEPA Analyst: *Aisling Eglinton*
 Phone: *617-626-1024*

ENF Environmental Notification Form

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: Free Street Well #4		
Street: Free Street		
Municipality: Hingham	Watershed: Weymouth and Weir	
Universal Transverse Mercator Coordinates: 4675732.893N, 344792.288 E	Latitude: 042° 13' 6" N Longitude: 070° 52' 49.8" W	
Estimated commencement date: December 2005	Estimated completion date: N/A	
Approximate cost: \$500,000	Status of project design: 100 %complete	
Proponent: Aquarion Water Company		
Street: 200 Cordwainer Drive		
Municipality: Norwell	State: MA	Zip Code: 02043
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Stephanie Hanson		
Firm/Agency: Comprehensive Environmental Inc.	Street: 64 Dilla Street	
Municipality: Milford	State: MA	Zip Code: 01757
Phone: (800) 725-2550	Fax: (508) 482-5445	E-mail: shanson@ceiengineers.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. 7595) 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 301 CMR 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): NA

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes Department of Environmental Protection, Department of Conservation and Recreation – Water Resources Commission No

List Local or Federal Permits and Approvals:
MA DEP- Approval to Conduct Pump Test and Pump Test Approval/New Source Approval ,MA DEP-

Water Management Act Withdrawal Permit, DCR- Interbasin Transfer Review

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|-------------------------------------------|---------------------------------------|----------------------------------------------------------------|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input checked="" type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input checked="" type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> Pump Test Approval Interbasin Transfer Review
Total site acreage	44 acres			
New acres of land altered		0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	N/A			
Number of housing units	N/A			
Maximum height (in feet)	N/A			
TRANSPORTATION				
Vehicle trips per day	N/A			
Parking spaces	N/A			
WATER/WASTEWATER				
Gallons/day (GPD) of water use				
GPD water withdrawal	0.8 mgd emergency use only	0.5mgd	1.3mgd	
GPD wastewater generation/ treatment	0.34 mgd emergency use only	0.22 mgd	0.56 mgd	
Length of water/sewer mains (in miles)	180	0	180	

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 _____) 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.

Aquarion Water Company (AWC) provides water and services to five communities within the Commonwealth of Massachusetts. The AWC Hingham water system covers approximately 27 square miles and includes the Towns of Hingham, Hull and a portion of North Cohasset. AWC relies on both surface and groundwater sources to supply drinking water to its customers. AWC is currently authorized by the MA DEP to withdraw 3.51 million gallons per day (mgd) on an annual basis. The areas serviced by AWC have undergone significant development since the authorized withdrawal was determined resulting in an exceedance of the 3.51 mgd approved withdrawal in 1999 and 2001. Additionally, there are several major planned developments anticipated over the next five years to include approximately 893 residential units. Additionally, water demand is expected to increase within the three service towns since none of the areas meet the State's Chapter 40B Subsidized Housing threshold of 10%.

As a result of past withdrawal exceedances and foreseeable water demand increases due to regional growth, AWC is currently pursuing the approval of Free Street Well #4 as a water supply source. Constructed in 1981, Free Street Well #4 was originally recognized in AWC's source registration, however, it was later approved for emergency use due to ownership issues of the entire protective Zone I area, however, these issues are now addressed. Free Street Well #4 has been used during emergency declaration and was last operated in 1995. The proposed project is requesting an expansion in water withdrawal by 1.3 mgd. Operating Well #4 would permit AWC to meet the projected demands and allow some operational flexibility within the system. Currently, 43% of the area serviced by AWC is sewered by the MWRA or Town of Hull. Operating Well #4 on a permanent basis will increase the amount of water being transferred out of the basin through these discharge points to the Massachusetts Coastal Basin. Free Street Well #4 is located on AWC property on Free Street, Hingham, MA. The property is bordered at the north by Tower Brook, at the east by the Weir River, at the south by Free Street and at the west by private property. This forty-four acre property is predominately forested wetland.

Project alternatives include interconnection purchase from Cohasset, Norwell, and Weymouth, however none of these towns presently have surplus water supply for sale and water obtained from any of these towns would still result in an out-of-basin transfer. Purchase from the MWRA system is another alternative however the cost of MWRA's finished water in addition to major infrastructure upgrades would be cost prohibitive. Connecting to the Bluestone Desalination Plant as well as the construction of new desalination plants in Hingham and/or Hull have been pursued however costs related to permitting, construction and infrastructure upgrades as well as timing make these alternatives currently not considered feasible.

A prolonged pump test was completed from October, through November of 2003 with representatives from both DEP and DCR visiting the pump test site throughout the process. The pumping test data shows that the streamflows in the immediate area are driven primarily by rainfall. These surface flows are separated from the actual pumping wells in the deep aquifer by an underlying peat layer. Data also show that the stream bottom is made up of low permeable soil and during the nonpumping conditions groundwater elevations adjacent to the stream channels are below the surface water elevations. Therefore, the streamflows during low flow conditions are not adversely affected from this projected groundwater withdrawal. Pumping from Well #4 to supply Hingham and Hull will have little to no direct effect on streamflow maintenance.

Bringing Free Street Well #4 online as a permanent well is currently the most cost effective and feasible alternative considered. With infrastructure already in place, there will be little to no need for additional construction and will allow for greater operational flexibility to meet increasing water demand.