



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental Affairs*  
*100 Cambridge Street, Suite 900*  
*Boston, MA 02114*

Deval L. Patrick  
GOVERNOR

Timothy P. Murray  
LIEUTENANT GOVERNOR

Richard K. Sullivan, Jr.  
SECRETARY

Tel: (617) 626-1000

Fax: (617) 626-1181

<http://www.mass.gov/envir>

October 7, 2011

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : West Springfield Water Transmission Main Project  
PROJECT MUNICIPALITY : Westfield, West Springfield, and Southwick  
PROJECT WATERSHED : Westfield River  
EEA NUMBER : 14794  
PROJECT PROPONENT : West Springfield Department of Public Works  
DATE NOTICED IN MONITOR : September 7, 2011

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

Project Description

The proposed project consists of replacement of an existing 16-inch water main with a 24-inch main along a 23,550-foot alignment that involves crossings of the Westfield River, Great Brook and an unnamed perennial stream. The proposed alignment is located within the towns of West Springfield, Southwick, and Westfield. The existing water transmission main conveys approximately eighty percent of West Springfield's water supply from the Southwick Wellfield. The 16-inch cast-iron main was constructed in 1938 and is in need of replacement to avoid problems relating to leaks and breaks that have been occurring in recent years. The project includes upgrades at the Southwick Wellfield facilities as well as installation of generators and electrical conduit interconnections between well pump houses #2 and #4. These facility improvements will enable increased carrying capacity of the proposed new transmission main. No new buildings are proposed and the project does not involve an increase in capacity of the

existing Southwick Wellfield beyond what is already permitted by the Massachusetts Department of Environmental Protection (MassDEP).

### MEPA Jurisdiction and Permitting

The project is undergoing environmental review because it exceeds a MEPA review threshold and requires a state Agency Action. The project is subject to review pursuant to Section 11.03(3)(b)(1)(f) of the MEPA regulations because it will result in one half-acre or more of other wetlands alteration (non-bordering vegetated wetlands); and Section 11.03(2)(b)(2) because it may result in a “take” of a state-listed endangered or threatened species or species of special concern. The project requires a 401 Water Quality Certification and a Water Supply Treatment Facility Modification Permit from the MassDEP. One or more local Orders of Conditions will be required (and, on appeal only, a Superseding Order from MassDEP) for work that is determined to be non-exempt from the Wetlands Protection Act. The project also requires a Massachusetts Department of Transportation (MassDOT) Highway Access Permit. The project is subject to review under the Massachusetts Endangered Species Act (MESA) and may require a Conservation and Management Permit.

The project has received financial support from the Commonwealth through the Drinking Water State Revolving Fund (DWSRF). Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that may cause damage to the environment as defined in the MEPA regulations.

## REVIEW OF THE ENVIRONMENTAL NOTIFICATION FORM

### Land Alteration

The proposed project will result in alteration of approximately seven acres of land; approximately 0.54 acres of this land is associated with the new portion of alignment where it deviates from the existing alignment and proceeds along Dewey Street to connect with an existing 24-inch main. The 11-acre project site includes residential lawn or paved roadways (7.5 acres), woodland (1.9 acres), and floodplain (1.5 acres). The project will result in the creation of 0.096 acres of new impervious area.

### Alternatives Analysis

The ENF includes an alternatives analysis that evaluates several potential routes for the water main and proposed construction methods at each of the stream crossings. Alternative A is 5.1 miles in length, B is 4.8 miles, and C (preferred) is 4.5 miles. Alternatives A and B were eliminated due to potential problems relating to existing utilities, which are numerous and densely located in some areas. An Alternative D was also considered but not evaluated further because of its location near a stretch of Great Brook that is highly vulnerable to a break. The preferred alternative, Alternative C, is the shortest, most direct route that avoids problematic

issues associated with the existing transmission easement, portions of which are difficult to access and would involve more extensive wetlands disturbance compared with the selected route.

The proposed alignment crosses the Westfield River between Feeding Hills Road and Route 20. The Town of West Springfield evaluated Horizontal Directional Drilling (HDD) but concluded this was not a feasible method for the crossing because of the proximity of roadways and lack of sufficient space for layout and construction. Microtunneling was also considered but the town concluded it was cost-prohibitive. In addition, the deep construction required could be a risk to the integrity of the existing transmission main, which the town intends to maintain as a backup river crossing. Pipe-jacking was also considered for stream crossings and rejected as it would be cost-prohibitive for Great Brook and was considered unnecessary given the narrow width and low flows of the unnamed perennial stream. The Open Cut Trench alternative using cofferdams was selected as the preferred method for crossing the Westfield River, Great Brook (South), and the unnamed perennial stream. For the Great Brook Crossing (North), an aerial crossing was selected as the most feasible and cost-effective.

#### Wetlands and Waterways

The project will impact approximately 2.24 acres of Bordering Land Subject to Flooding (BLSF) and 4.07 acres of Riverfront Area (1.45 acres of Riverfront Area overlaps the BLSF). The project will also impact 240 linear feet of Bank, 5,635 square feet (sf) of Isolated Vegetated Wetlands, and 8,400 sf of Land Under Water. The ENF does not indicate that the project will result in any direct alteration of Bordering Vegetated Wetlands (BVW).

Some of the proposed public water supply work may be exempt from the Wetlands Protection Act (WPA) regulations. The limited project provisions of the regulations may be applicable for portions of the project that are determined to be non-exempt. The Town may file a Request for Determination (RDA) of Applicability with the appropriate local Conservation Commission if there is uncertainty about the applicability of the exemption to any portion of the project. As indicated in the comment letter from the West Springfield Conservation Commission, the Commission will make a decision on the RDA and whether or not it concurs with the Town's interpretation of what portions of the project are exempt. A Notice of Intent is required for non-exempt project work. The West Springfield Department of Public Works (DPW) should consult with the Town's Conservation Commission to address its concerns regarding the proposed crossing at Paucatuck Brook.

A 401 Water Quality Certification (WQC) is required for the project. The Town should submit applications for the 401 WQC dredge and fill portions of the project to the MassDEP Boston Office as a single filing, and send a copy to the regional office. As noted in its comment letter, MassDEP's Western Regional Office will work closely with the Boston Office to issue a single permit for the project.

The project may be subject to the Massachusetts Public Waterfront Act, MGL Chapter 91 and its associated regulations because a portion will be constructed below the high-water mark of a non-tidal navigable river or stream. I recommend that the Town submit a request for determination of applicability to MassDEP's Waterways Program (Boston office).

I refer the Town to MassDEP's comment letter for guidance on delineation of jurisdictional resource areas and information required during permitting. As noted by MassDEP, although the Commonwealth will accept the federal "Wetland Determination Data Form-Northcentral and Northeast Region", there are some differences between the resource areas regulated under the state and federal regulations. Additional information may be required to supplement the federal form in order to meet state requirements. MassDEP also recommends that scientific nomenclature for vascular plant species follow "The Vascular Plants of Massachusetts: A County Checklist" (2011 revision available from NHESP) and/or the USDA Natural Resources Conservation Service PLANTS Database (<http://plants.usda.gov>).

The Town may be required to conduct a Wildlife Habitat Evaluation in accordance with the Massachusetts Wildlife Habitat Guidance for Inland Wetlands (March 1, 2006) as indicated in MassDEP's comment letter. During permitting, the Town will also be required to demonstrate that adequate compensatory flood storage is provided and that the project meets applicable BLSF performance standards.

#### Stormwater

All underground stormwater control structures are subject to the jurisdiction of the MassDEP Underground Injection Control (UIC) program. The stormwater control structures required for this project may require registration under MassDEP's UIC program. The Town should refer to MassDEP's website for further information, as noted in MassDEP's comment letter.

#### Endangered Species

Portions of the proposed project are located within Priority and Estimated Habitat of several rare species and therefore require a direct filing with the Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP) for compliance with MESA. As indicated in the Environmental Notification Form (ENF), the rare species known to occur within the project site are the Triangle Floater (mussel, *Alasmidonta undulata*), Wood turtle (reptile, *Glyptemys insculpta*), Bristly Buttercup (plant, *Ranunculus pensylvanicus*) and the Spine-crowned Clubtail (dragonfly, *Gomphus abbreviatus*).

The Town has been consulting with the NHESP to reduce impacts to rare species and their habitats. As indicated in its comment letter, NHESP is awaiting the results of a botanical survey from the Town, as well as a plan to protect turtles during vegetation management and construction activities, and the calculations of temporary and permanent alterations to state-listed species habitats. Therefore, it is still unclear as to whether a "take" will occur as a result of the proposed project. In order to be considered for a Conservation and Management Permit, the Town must 1) avoid and minimize impacts to state-listed species to the greatest extent practical, (2) demonstrate that an insignificant portion of the local population will be impacted or that no viable alternative exists, and (3) develop and implement a conservation plan that provides a long-term net benefit to the conservation of the local population of the impacted species.

The Town has committed in the ENF to making all efforts possible to avoid a “take” and will continue to coordinate with NHESP.

### Bear Hole Reservoir

I have received many comment letters from residents in the project area expressing concern about the future status of the Bear Hole Reservoir and surrounding lands. The ENF does not propose any change in the protection status of Bear Hole Reservoir or surrounding land in the watershed that is conserved to protect the drinking water supply. As indicated in correspondence from the Town (email dated September 26, 2011), the proposed project will enable the Town to reduce its reliance on Bear Hole Reservoir and the Bear Hole water treatment plant, which is old, expensive to operate and maintain, and in need of costly upgrades. However, it is the Town’s intent to maintain Bear Hole Reservoir as a viable water supply.

If the Town proposes to abandon the reservoir in the future, and/or a change is proposed in the status of the Bearhole Reservoir that would involve a disposition of Article 97 protected land, further MEPA review will be required and the Town should consult with the MEPA Office to determine what the appropriate filing would be. If the Town proposes abandoning the reservoir in the future, a Public Water System Modification Permit for Abandonment of a Water Source would be required from MassDEP. Approval of the legislature would be required for any disposition of Article 97 land. However, at this time, the Town intends to maintain the Bear Hole Reservoir as a back-up drinking water supply and is not proposing to remove any land from Article 97 protection.

### Transportation

Approximately 4,000 linear feet of the proposed water main will be installed along and across a section of Route 20 that is under MassDOT jurisdiction. A Non-Vehicle Access Permit will be required from MassDOT to work within the state highway layout. The Town should develop a Traffic Management Plan (TMP) to maintain safe and efficient mobility for all modes of travel throughout the construction process. Vehicular traffic, as well as bicyclists and pedestrians, should be considered in development of the TMP for both local roadways and State Highway Route 20. I refer the town to MassDOT’s comment letter for further guidance on the content of the TMP.

### Construction

The project will require significant coordination with the Springfield Water and Sewer Commission (SWSC) to avoid any negative impacts to SWSC’s infrastructure. The town has acknowledged this and MassDEP is available to assist and coordinate with the SWSC as necessary. The town should also coordinate with Southwick and Westfield Public Works Departments regarding work associated with the proposed water main replacement and potential impacts to existing infrastructure.

I refer the Town to MassDEP's comment letter for additional guidance on regulatory requirements pertaining to air pollution control and solid waste management during construction, and procedures for handling and oil or hazardous materials that may be encountered.

The Board of Underwater Archaeological Resources does not expect that the project will impact submerged cultural resources. However, if any unforeseen cultural resources are encountered during project construction, the Town should implement measures to limit adverse effects and notify the Board and other agencies as indicated in the Board's comment letter.

#### Preliminary Restoration Plan

The ENF includes a preliminary restoration plan to stabilize disturbed area upon completion of construction and identifies the proposed New England Erosion Control/Restoration seed mix to be used for upland BLSF and Riverfront Area (outside paved and gravel roadways, driveways and garden areas) and the mix for detention basins and moist sites. Inland bank will be stabilized using bioengineering techniques including a double row of coir logs and native shrub species appropriate for the site will be planted.

Isolated vegetated wetland restoration activities will preserve pre-existing wetlands hydrology through careful placement of backfill and grading to ensure consistency with pre-construction micro-topography and substrate composition. Wetlands temporarily impacted during construction will be restored in place. The ENF outlines the procedures for segregating and stockpiling soils during construction and for the proposed restoration.

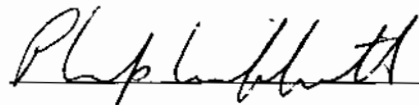
#### Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review. I am satisfied that any outstanding environmental issues relating to the project can be addressed during the MassDEP, NHESP, MassDOT, and local Conservation Commission permitting processes.

Based on review of the ENF and comments received, and in consultation with state agencies, I have determined that no further MEPA review is required. The project may proceed to state permitting.

October 7, 2011

DATE



for Richard K. Sullivan Jr.  
Secretary

#### Comments Received:

09/11/2011 Amy Ramos  
09/15/2011 Charles Roger  
09/19/2011 Board of Underwater Archaeological Resources

09/23/2011 West Springfield Conservation Commission  
09/25/2011 Tim Pitkin  
09/25/2011 Frederick Gawron  
09/25/2011 Sheila Croteau  
09/25/2011 Mary Anne O'Connor  
09/25/2011 Diane Crowell  
09/25/2011 Julie Schlobohm  
09/25/2011 Howard Fife  
09/26/2011 Bill Ashley  
09/26/2011 Beth Cardillo  
09/26/2011 Todd Steglinski  
09/26/2011 Dr. Dietrich Schlobohm  
09/27/2011 Department of Environmental Protection, Central Regional Office  
09/27/2011 Division of Fisheries and Wildlife, Natural Heritage and Endangered Species  
Program  
09/27/2011 Department of Transportation

RKS/AEO's/aeo's