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May 1, 2009

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

PROJECT NAME: Town Brook Dam Removal – Plymco and Off-Billington Street  
PROJECT MUNICIPALITY: Plymouth  
PROJECT WATERSHED: Town Brook  
EEA NUMBER: 14392  
PROJECT PROPONENT: Town of Plymouth  
DATE NOTICED IN MONITOR: March 25, 2009

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and Sections 11.06 and 11.11 of the MEPA Regulations (301 CMR 11.00), I have reviewed this project and hereby determine that it **does not require** the preparation of an Environmental Impact Report (EIR). In a separate Draft Record of Decision also issued today, I have proposed to grant a Waiver from the requirement to prepare a Mandatory EIR for the project. This Certificate sets forth the issues that must be addressed by the Proponent during permitting and discusses recommendations that were submitted on the project during the MEPA comment period. The Certificate on the Expanded Environmental Notification Form (EENF) is contingent upon the granting of a Full Waiver in the Final Record of Decision (FROD). If a Full Waiver is not granted in the FROD, then I will reissue the Certificate on the EENF with an EIR scope.

Project Description

According to the EENF, the proposed project will restore fish passage from the Off-Billington Street Dam to the Billington Sea. Project elements include the following: removal of the Off-Billington Street dam; excavation of a channel, approximately 600 feet long, through the

the Off-Billington Street dam; excavation of a channel, approximately 600 feet long, through the impounded sediment behind the dam; replacement of the existing bridge at the Off-Billington Street dam to provide enough width for bankfull flow to pass unobstructed with a riparian shelf; removal of approximately 150 feet of culvert and daylight channel through reach; and the removal of the Plymco dam.

Overall project goals include the elimination of a barrier to anadromous species movement; the reestablishment of the river's natural flow regime; improvement of water quality, sediment dynamics, and water temperature for coldwater species; and restoration of the natural clean gravel and cobble streambed.

### Jurisdiction

The project is subject to the preparation of a mandatory EIR pursuant to Section 11.03(3)(a)(4) of the MEPA regulations because it will result in a decrease in impoundment capacity of an existing dam. The project will require a Programmatic General Permit from the U.S. Army Corps of Engineers (ACOE) pursuant to Section 404 of the Clean Water Act; a Chapter 253 Dam Safety from the Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS); and a 401 Water Quality Certificate and a Chapter 91 Permit from the Department of Environmental Protection (MassDEP). The project may require an Order of Conditions from the Plymouth Conservation Commission for impacts to wetland resource areas (river and wetlands restoration) as a potentially "limited" project.

Because Commonwealth funds will be utilized for this project, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined by the MEPA regulations.

### Review of the EENF

The EENF outlined the project restoration goals, presented a full dam removal/habitat restoration alternative and a no-build alternative, and a discussion of potential aquatic species impacts. The EENF notes that dam removal will restore anadromous fish passage and improve coldwater habitat for resident and state-listed fish species on Town Brook as part of the Town Brook Herring Run Restoration Project.

The EENF included a technical feasibility assessment prepared by Milone & MacBroom, Inc. This initial feasibility study was prepared subsequent to field data gathering, hydrologic and hydraulic modeling and sediment management evaluations. The feasibility study assessed a full dam removal and a partial dam removal, roughened ramps, bypass channels, technical fishways, and a combination of these methods. Each was evaluated against the project goals. Of these, dam removal was found to provide the most efficient fish passage and the most complete restoration of riverine functions and values to their natural condition at both dam locations. This alternative provides fish passage, as well as passage of all riverine species and life stages, increased habitat connectivity, sediment and nutrient transport, and improved water quality in the impoundments. Through the analysis, partial dam removal was determined to provide similar benefits to full dam removal, but with decreased water quality benefits and habitat restoration. Installation of a

technical fishway, bypass channel, or roughened ramp would not improve water quality within the impoundments, provide increased habitat connectivity, nor restore the original sediment and nutrient transport patterns.

### Project Site

The project site consists of two aging dams, the Off-Billington Street and Plymco dams. The Off-Billington Street Dam is the furthest downstream dam, located approximately 0.9 miles upstream of Plymouth Harbor. The Plymco Dam is located approximately 0.2 miles upstream of the Off-Billington Street dam. The impoundments formed by the dams are approximately 550 feet long, and inundate approximately 1.2 acres, and 1.6 acres, respectively. They are separated by approximately 345 feet of artificially constrained stream channel, of which 150 feet is enclosed in a culvert.

Town Brook through the project reach has been extensively modified by human activity, and has historically been the power source of mills and factories. The dams no longer serve the functional purposes they were constructed for, and are falling into disrepair. They inhibit anadromous fish passage of resident species to upstream habitat and breeding areas, and pose safety hazards to downstream population if left in place without maintenance. The impoundments shows evidence of aggradation and are retaining silty and sandy sediments. Heavy sedimentation inside the slow-moving waters of the impoundments has perpetuated a transition to emergent marsh systems with low dissolved oxygen and high water temperatures. As a result, the existing impoundments have limited quality emergent marsh zones, and support only warm-water fish species such as large and smallmouth bass, chain pickerel, bluegill, pumpkinseed, and bullhead. These fish species are not found in cold-water riverine environments, which is the natural condition for this reach of Town Brook.

The Off-Billington Street Dam is in fair condition, and consists of an approximately 110-foot long earth embankment with a concrete and stone masonry spillway. The existing fishladder at the Off-Billington Street Dam has very limited functionality and is in poor condition. The embankment serves as an access road to the adjacent residential area. The Plymco Dam is in poor condition, and consists of an approximately 200-foot long earthen embankment with a concrete box spillway. Both a water and a sewer service line run through the spillway structure. The existing fishladder is in fair condition with only minor evidence of cracking and seepage. This fishladder likely provides limited fish passage.

### Wetlands

Dam removal will require temporary alterations to Bank, Land Under Water (LUW), BVW, Bordering Land Subject to Flooding (BLSF), and Riverfront Area. The EENF indicates that approximately 8,500 cubic yards of material will be dredged in conjunction with the dam removal. Estimated wetland resource area impacts include: an increase of 219 linear feet (lf) of impact to Bank; 42,690 square feet (sf) of temporary impact to BVW; a permanent impact increase of 21,000 sf to Riverfront Area; a permanent decrease of 89,210 sf of LUW; and a permanent decrease by 117,500 sf to BLSF.

The EENF states that dam removal and the associated dredging will allow the river to better accommodate high flows, thereby lowering the 100-year flood level. The Department of Conservation and Recreation's (DCR) Flood Hazard Management Program, as the state coordinating agency for the National Flood Insurance Program, has provided a comment letter detailing the steps the Proponent should follow and has committed to provide technical assistance for the project related to floodplain management. Therefore, the Proponent should consult with DCR's Flood Hazards Management Program and submit hydraulic analysis to the Federal Emergency Management Agency (FEMA) upon completion of the project for use in future floodplain map revisions.

MassDEP has noted that the Proponent will be required to demonstrate that the project meets the General Performance Standards (as defined at 310 CMR 10.04) for jurisdictional Resource Areas (as defined at 310 CMR 10.04). The Proponent should utilize the MassDEP Dam Removal Guidance found at <http://www.mass.gov/dep/water/resources/dampol.pdf> to assist in the preparation of permit applications. Delineation of jurisdictional wetland resource areas should be conducted in accordance with applicable regulations and the recommendations provided by MassDEP in its comment letter on the EENF.

The Proponent will be required to submit a Chapter 91 application and a Section 401 Water Quality Certificate application to MassDEP. MassDEP administers the Section 401 Water Quality Certification regulations on behalf of the U.S. Army Corps of Engineers.

### Historic Resources

The project is contained within the Town Brook Historic and Archeological District, which is listed in the State and National Registers of Historic Places. A Reconnaissance Cultural Resources Survey was performed by Public Archeology Labs, Inc. (PAL) in 2008, and documented in a Technical Memorandum which was included in the EENF. Based on the findings of the Reconnaissance Cultural Resources Survey, intensive above and belowground archeological surveys were recommended to locate and identify potentially significant belowground elements associated with the historic dam and mill structures at the Plymco Dam, the Off-Billington Street Dam, and in the location of the Plymco factory building.

The Massachusetts Historical Commission (MHC) has indicated that they will review the project under Section 106 of the National Historic Preservation Act of 1966, (36 CFR 800), as amended. I encourage the Proponent to work with the lead federal agency and MHC as the project proceeds with regard to assessment of the potential historical significance of the dam.

### Greenhouse Gas Emissions

The project is subject to the EEA Greenhouse Gas Policy and Protocol because it requires a mandatory EIR and MEPA has full scope jurisdiction. However, this is an environmental restoration project that will not result in significant emissions of Greenhouse Gases (GHG) and therefore falls within the de minimis exception of the policy. The Proponent was not required to prepare an analysis of GHG emissions or identify measures to mitigate GHG emissions.

Construction Period Impacts

The EENF states that the Proponent will utilize Best Management Practices (BMPs) during the construction period to limit impacts to wetland resource and habitat areas. The removal of the dam should be completed during low flow periods in late summer, August and September, to minimize impacts to spawning anadromous fish. The Division of Marine Fisheries (MarineFisheries) requests a time-of-year (TOY) prohibition on all in the water work from March 15 through July 31<sup>st</sup>. MassDEP has also noted that demolition and construction activities must comply with both MassDEP Solid Waste and Air Quality control regulations. The Proponent should carefully review MassDEP’s comments to ensure that the project is consistent with the applicable Solid Waste and Air Quality control regulations.

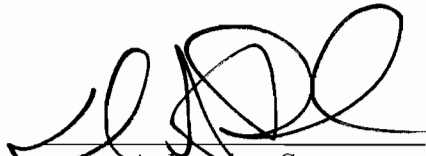
MassDEP has recommended that the Proponent retain a Licensed Site Professional (LSP) to review MassDEP’s oil and/or hazardous material disposal site list and associated files prior to start-up of the project, in order to determine contaminated areas that could pose a problem with onsite excavation activities. The Proponent is advised that if soil and/or groundwater contamination is encountered during construction activities, a LSP will be needed to manage the contaminated materials in compliance with the Massachusetts Contingency Plan (MCP).

Conclusion

Based on a review of the information provided by the Proponent and after consultation with the relevant public agencies, I find that the potential impacts of this project do not warrant further MEPA review. Outstanding issues may be addressed during the permitting process.

I have also issued today a Draft Record of Decision (DROD) proposing to grant a Waiver from the requirement to prepare an EIR for the project. The DROD will be published in the next edition of the Environmental Monitor on May 6, 2009 in accordance with 301 CMR 11.15(2), which begins the public comment period. The public comment period lasts for 14 days and will end on May 20, 2009. Based on written comments received concerning the DROD, I shall issue a Final Record of Decision or a Scope within seven days after the close of the public comment period, in accordance with 301 CMR 11.15(6). If the Full Waiver is not approved based on comments received on the DROD, then this Certificate on the EENF will be re-issued with a Scope for an EIR.

May 1, 2009  
Date

  
Ian A. Bowles, Secretary

Comments received:

- 04/24/09      President of the Senate Therese Murray, State Representative Vinny deMacedo, State Representative Thomas Calter
- 04/06/09      Massachusetts Historical Commission
- 04/24/09      Department of Conservation and Recreation

Comments received (continued):

04/24/09      Division of Marine Fisheries  
04/24/09      Department of Environmental Protection-SERO  
04/28/09      U.S. EPA

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