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January 27, 2012

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

PROJECT NAME : Town Creek Flood Hazard Mitigation  
and Wetland Restoration  
PROJECT MUNICIPALITY : Salisbury  
PROJECT WATERSHED : Merrimack River  
EEA NUMBER : 14835  
PROJECT PROPONENT : Town of Salisbury  
DATE NOTICED IN MONITOR : December 21, 2011

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). On December 15, 2011, the Town of Salisbury requested a full Waiver from the requirement to submit a mandatory EIR. In a separate Draft Record of Decision also issued today, I have proposed to grant a Waiver from the requirement to prepare the mandatory EIR for the project. If a full Waiver is not granted in the Final Record of Decision, then I will reissue the Certificate on the Expanded ENF and determine whether a Single EIR is appropriate.

Project Description

As described in the Expanded Environmental Notification Form (EENF), the Town of Salisbury is proposing to replace an undersized four-foot by four-foot culvert and associated flap gate, which carries Town Creek beneath an existing railroad embankment, with two five-foot by five-foot culverts with modern adjustable tide gates. The project will also reconstruct the existing

railroad embankment, and dredge approximately 9,700 square feet of outwash material from the creek bed. Town Creek is a tributary of the Merrimack River, and the marsh and creek in this location are crossed by both Route 1 and an abandoned railroad corridor. Currently, the undersized culvert in the railroad embankment restricts the discharge of flood flows, resulting in routine and severe flooding of the Route 1 corridor properties to the east of the embankment. Severe coastal storms in 2005 and 2007 caused significant flooding of these properties, and overtopped the railroad embankment, causing severe erosion and sediment deposition into the creek. After the 2007 storm, the embankment was temporarily repaired with stone and sand bags. The existing culvert also severely restricts tidal exchange between the downstream and upstream reaches of the creek, resulting in a degraded wetland dominated by the invasive reed *Phragmites australis*. Functioning tide gates will allow the Town more control over the flow of water, preventing surges. Increasing the flow of salt water will help to alleviate the phragmites stands, which is strangling the salt marsh, thus helping restore the salt marsh to a more pristine condition.

The railroad embankment will be reconstructed with riprap armor stone. Also proposed is dredging of approximately 1,500 cubic yards of sediment from both the upstream and downstream of the culverts to improve water flow through the proposed culverts. Construction of the proposed culverts will be done in two phases in order to maintain flows during installation of the culverts. The southern culvert will be constructed during Phase I and the northern culvert will be constructed during Phase II.

The project has been developed through a cooperative effort between the Town of Salisbury, the Massachusetts Division of Ecological Restoration (DER), the U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA), the Gulf of Maine Council (GOMC), and the Federal Emergency Management Agency (FEMA).

### Jurisdiction

The project requires a mandatory EIR and is undergoing review pursuant to 301 CMR 11.03 (3)(a)(1)(a) of the MEPA regulations because it requires a State Agency Action and includes the alteration of one or more acres of salt marsh. It will require a Chapter 91 Waterways License as a water-dependent use project and a Section 401 Water Quality Certificate from the Massachusetts Department of Environmental Protection (MassDEP) and review and a possible Conservation and Management Permit from the Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP). The Town must also obtain a Massachusetts General Permit (Category II Authorization) under Section 404 of the Federal Clean Water Act from the United States Army Corps of Engineers (ACOE) and the project will require Federal Consistency review by the Massachusetts Office of Coastal Zone Management (MCZM). It will also require an Order of Conditions from the Salisbury Conservation Commission, and, on appeal only, a Superseding Order of Conditions from MassDEP.

Because the Town has received financial assistance from the Commonwealth for the project (Massachusetts Environmental Bond Fund), MEPA jurisdiction over this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations.

## Review of the EENF

### Alternatives Analysis

The Town has prepared an alternatives analysis for the culvert replacement. For the culvert replacement, the Town developed the following alternatives to convey flows to the salt marsh:

- Alternative 1 – No Action: The no-action alternative would not provide a solution to existing flooding problems, would not encourage restoration of the degraded salt marsh, and would result in the continued deterioration of the temporary embankment repair. This alternative was not considered further.
- Alternative 2 – Bridge: Removing the culvert and replacing it with a bridge structure would maximize tidal exchange in the upstream marsh and would be the most beneficial alternative from an ecological restoration perspective. This alternative would also, however, severely exacerbate the existing flooding conditions along Bridge Road during higher high tides and, in particular, during storm surges, rendering this alternative infeasible.
- Alternative 3 – Preferred Alternative, Culvert Improvements: Improving the exchange of tidal flows between the upstream and downstream segments of the Town Creek salt marsh can best be accomplished by upgrading the existing culvert. Various alternative culvert sizes, layouts (i.e., separation distances), and target openings were considered, and were summarized in the Final Technical Memorandum included in the EENF.

### Wetlands

According to the EENF, the project would alter about 255 sf of salt marsh for embankment repairs and reconstruction, 47 acres of salt marsh for restoration, 12,170 sf of Land Under the Ocean (which includes 2,470 sf embankment repairs and culvert installation and 9,700 sf dredging), 140 linear feet of Coastal Bank, 10,925 sf of land subject to coastal storm flowage, and 10,925 sf of riverfront. Although the project site is within a Priority and Estimated Habitat (PH 1321, EH65), the Natural Heritage and Endangered Species Program has not raised concerns for any of the state listed species within the project area. The Town should follow the time-of-year restrictions indicated in Massachusetts Division of Marine Fisheries' comments to protect the spawning and forage habitat for several diadromous fish species.

The Salt Marsh and Land Under the Ocean to be altered for construction are located along the toe of the existing embankment in a disturbed area that is subject to wave action. Because the embankment will be restored to its original configuration, permanent adverse impacts are not anticipated.

In addition to filling impacts, a total of approximately 9,700 square feet LUO will be impacted by the proposed dredging that is necessary to improve flow within the upstream and downstream channel. A total of 1,500 cubic yards of sediment will be removed from Town Creek within the upstream approach channel and the area directly downstream of the outlet. There are no alternatives to dredging in these locations as the channel is currently obstructed by

accumulated sediment and removal of these deposits is necessary in order to allow adequate flow through the proposed culverts.

Although survey data indicates that the top of the embankment is above the FEMA 100-year flood elevation, the FEMA flood map for the Project area indicates that the entire site is within 100-year floodplain, a Zone AE, and therefore within Land Subject to Coastal Storm Flow (LSCSF). The regulations of the Massachusetts Wetlands Protection Act do not include performance standards for work within LSCSF, and the Project is not anticipated to result in increased flood extent or duration. Rather, the proposed culvert improvements will provide significant mitigation for existing flooding conditions along Bridge Road.

According to the EENF, the entirety of the project outside of Town Creek is located within 200-foot Riverfront Area. Because this project constitutes maintenance of a structure in existence on August 7, 1996 and will require a Chapter 91 Waterways License, the work is exempt from the Rivers Protection Act Regulations per 310 CMR 10.58(6)(a) and (6)(i). The entire project area outside of the above-mentioned resource areas is located within the 100-foot buffer zone.

The project's limited project status under the Wetlands Protection Act will be determined by the Salisbury Conservation Commission. The EENF has presented an Alternatives Analysis in the EENF to demonstrate the project's limited status.

#### Operation and Maintenance Plan

The Tide Gate Operation and Maintenance Plan (O&M Plan) presented in the EENF specifies the procedures, protocols and evaluation methods that will be applied to the operation, inspection, and maintenance of the proposed Town Creek culverts and tide gates. The O&M Plan is intended to permit a consistent approach to implementing long-term, adaptive tidal management of the Town Creek marsh as well as to formalize the operation and maintenance of the water control structures for continued flood risk management. The O&M Plan also provides direction on controlling the high tide elevation to avoid flooding to low-lying properties. In addition, hydrodynamic modeling predicts that restoration of the marsh would be most effective with slide gate openings of three feet in both culverts during normal tidal conditions. To achieve an optimal flow for restoration, an adaptive management approach is planned to allow for a gradual increase in the tide gate openings and assessment of the impacts before further slide gate adjustments are made.

The O&M Plan identifies the Town of Salisbury Department of Public Works (DPW) as the entity responsible for operating the gates, monitoring the effects, and undertaking maintenance. The EENF states that an Advisory Committee, composed of Town staff, a Salisbury resident, as well as representatives from the Massachusetts Division of Ecological Restoration (DER), the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) will review data and advise the DPW.

### Construction

Construction of the culverts will be phased. The southern half of the project will be constructed first, and a culvert will remain open at all times during construction. Steel sheet piling will be used to isolate the work areas and armor stone will be stockpiled during construction for reuse. These boulders and other construction materials must not be stockpiled within wetlands resources. Dredging of about 1,500 cubic yards (cy) of material from an area of about 9,700 sf will be necessary to remove sediment that has built up during flooding events at the ends of the culverts. MassDEP has stated in its comments that sediment from a sample site (S2-DS), upriver and west of the culvert has high levels of cadmium. Therefore, sediment from this area of the stream may need to be disposed of off-site. The Town will protect adjacent resource areas by implementing a sedimentation and erosion control program during and following construction activities until the soils have stabilized.

The Town should participate in MassDEP's Diesel Retrofit Program to mitigate construction-period impacts of diesel emissions. All non-road engines should be operated using only ultra low sulfur diesel fuel. The Town is advised that, if oil and/or hazardous material are identified during the implementation of the project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to MassDEP. The Chapter 91 License Application should include more details on the approximate volume of material to be dredged/excavated and the method of disposal or beneficial reuse.

### Greenhouse Gas Policy

The Town Creek Flood Hazard Mitigation and Wetland Restoration Project is subject to the MEPA Greenhouse Gas Emissions Policy and Protocol because it requires an EIR. However, I have determined that this project will produce minimal greenhouse gas emissions and, therefore, falls within the Policy's de minimis exception.

### Conclusion

A number of commenters have written in support of the Town's request for a full waiver of the mandatory EIR. MassDEP has stated that Chapter 91 issues can be resolved during the Chapter 91 license application review period.

Based on a review of the information provided by the Town 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.

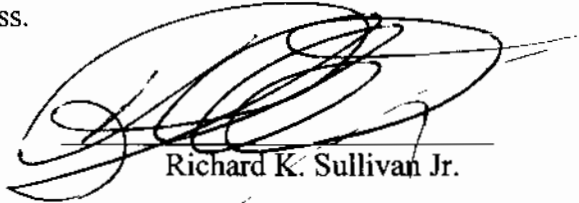
I have also issued today a Draft Record of Decision (DROD) proposing to grant a Waiver from the requirement to prepare an EIR for the project. The DROD will be published in the next edition of the Environmental Monitor on February 8, 2012, in accordance with 301 CMR 11.15(2), which begins the public comment period. The public comment period lasts for 14 days and will end on February 22, 2012. Based on written comments received concerning the DROD, I shall issue a Final Record of Decision 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 because of the

comments received on the DROD, then this Certificate on the Expanded ENF will be re-issued with a Scope for a Single EIR.

At this time, pursuant to 301 CMR 13.02, I am declining to require an additional Public Benefit Review for the project. Furthermore, as a water-dependent use project, it is presumed that this project will provide adequate public benefit in accordance with 301 CMR 13.04. I am satisfied that the projects' impacts to tideland resources can be adequately addressed during the Chapter 91 Waterways permitting process.

January 27, 2012

Date



Richard K. Sullivan Jr.

Comments received:

01/11/2012	Senator Steven A. Baddour
01/12/2012	Representative Michael A. Costello
12/23/2012	Natural Heritage and Endangered Species Program
12/29/2012	Massachusetts Board of Underwater Archaeological Resources
01/10/2012	Eight Towns and the Bay
01/10/2012	Town of Salisbury Board of Selectmen
01/12/2012	Merrimack Valley Planning Commission
01/12/2012	David's Fish Market
01/18/2012	Massachusetts Office of Coastal Zone Management
01/20/2012	Massachusetts Division of Marine Fisheries
01/20/2012	Massachusetts Department of Environmental Protection, Northeast Region
01/20/2012	Salisbury Chamber of Commerce

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