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May 8, 2020

FINAL RECORD OF DECISION

PROJECT NAME : Eagle Neck Creek Salt Marsh Restoration
PROJECT MUNICIPALITY : Truro
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 16158
PROJECT PROPONENT : Town of Truro
DATE NOTICED IN MONITOR : April 22, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L.c.30, ss. 61-62I) and Section 11.11 of the MEPA Regulations (301 CMR 11.00), I have reviewed the Expanded Environmental Notification Form (EENF) for this project and hereby **grant a Waiver** from the categorical requirement to prepare an Environmental Impact Report (EIR).

Project Description

As described in the EENF, the project consists of restoration of 15.4 acres of salt marsh and associated natural resources within the Eagle Neck Creek system in Truro through a combination of tidal restoration and sediment management actions. The project proposes to restore ecological processes by removing tidal restrictions caused by a history of anthropogenic influences to allow degraded vegetative communities to revert to diverse compositions more closely resembling natural conditions prior to construction of Old County Road and the railroad berm. The project includes the following four elements:

- Element #1 – Installation of a new 8-foot by 8-foot open bottom culvert under Old County Road to fully eliminate tidal restriction to Eagle Neck Creek (replacing the existing undersized culvert);
- Element #2 – Widening and deepening the railroad berm opening (removing the northern 50 feet of the berm and berm debris currently occupying the channel) to alleviate tidal restrictions and minimize scour (new edges of the widened berm will be protected from additional erosion);
- Element #3 – Dredging approximately 400 cubic yards (cy) of sediment to create a 1,200 linear foot (lf) channel (improvement dredging) between Old County Road and the railroad berm to remove tidal restrictions; and beneficially reuse the dredged sediment for marsh enhancement

adjacent to the railroad berm (fill approximately 7,565 square feet (sf) in two areas of tidal flat that would then be planted with *Spartina alterniflora*);
Element #4 – Raising Stick Bridge Road to mitigate for increased flooding through the new culvert associated with removal of existing tidal restrictions.

The project will reduce the ongoing degradation of existing natural resources, restore native salt marsh habitat, and increase marsh resilience to sea level rise. The project has received DER Priority Project status. The site was listed in the 2001 Cape Cod Atlas of Tidally-Restricted Salt Marshes (site TR-1) and was identified by the Cape Cod Water Resources Restoration Project (CCWRRP) as a candidate for restoration.

Project Site

The 20.33-acre project site is located within the Pamet River system in Truro. The salt marsh is sustained by tidal flow from Pamet Harbor and a creek system that flows from Upper Eagle Neck Creek, located within the Cape Cod National Seashore (CCNS), westerly through Lower Eagle Neck Creek, located between Old County Road and a railroad berm, where it connects to the Pamet Estuary and Pamet Harbor. The site has a history of man-made alterations that have restricted tidal flow and limited drainage of the system including the railroad berm that separates Eagle Neck Creek from the Pamet River Estuary, and a roadway embankment for Old County Road that separates the lower and upper sections of Eagle Neck Creek. Both the railroad berm and roadway embankment, which convey flows via an 8-inch culvert, have segmented the estuary and restricted tides which caused the natural salt marsh ecosystem to transition to a mixed brackish and freshwater ecosystem. A storm breached the railroad dike in 1993. The Town replaced the 8-inch culvert under Old County road in 1994 with two 36-inch culverts, which subsequently failed. The Town installed an 8-inch pipe inside one of the culverts to maintain minimal flow prior to its complete collapse.

Currently, the 8-inch pipe severely restricts tidal exchange under Old County Road, allowing salt water intrusion to only 1.6 acres of the 15.4-acre marsh system. The upper Eagle Neck Creek marsh shows signs of tidal restriction, including encroachment of invasive freshwater wetland vegetation and scouring around the 8-inch pipe. During heavy rainfall events the culvert also restricts drainage, causing the upper marsh to remain flooded for extended periods of time. Shoaling in the tidal channel in lower Eagle Neck Creek, in combination with the restriction created by the railroad berm, acts to further inhibit flood and ebb tidal flow to the project site. Aerial photography of the site from 1938 indicates that lower Eagle Neck Creek was once a vegetated wetland/marsh complex. Since this time the wetland has converted into an area of tidal flats mixed with isolated salt marsh hummocks.

Wetland resource areas within the vicinity of the project include Salt Marsh, Bordering Vegetated Wetlands (BVW), Land Under Water (LUW), Riverfront Area (RFA), Coastal Beach (tidal flat), Coastal Bank, and Land Subject to Coastal Storm Flowage (LSCSF). The project area upstream of the culvert at Old County Road is within the boundaries of the CCNS, which is an Outstanding Resource Water (ORW). The project site is located in *Priority* and *Estimated Habitat* as mapped by the Division of Fisheries and Wildlife's (DFW) Natural Heritage and Endangered Species Program (NHESP). According to Massachusetts Division of Marine Fisheries (DMF), the Pamet River and Pamet Harbor system provide habitat for several diadromous fish species. Specifically, the Pamet River provides fish passage and spawning habitat for alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*) and nursery and foraging habitat for American eel (*Anguilla rostrata*). The project site likely only provides habitat for American eel. Salt marsh provides a variety of ecosystem services, including habitat

and energy sources for many fish and invertebrate species. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the entire project area is located within Zone AE with a Base Flood Elevation (BFE) of 12 feet NAVD88.¹

Environmental Impacts and Mitigation

Potential environmental impacts are associated with the alteration of wetland resources, a necessary component of a salt marsh restoration project. The project will directly alter the following wetland resource areas: Salt Marsh, BVW, Coastal Beach, Coastal Bank, LUW, LSCSF, and RFA. Impacts are identified in Wetlands, Waterways, and Water Quality section herein. The restoration project will also alter the hydrology of the 15.4-acre Salt Marsh.

Element #2 will involve dredging of 150 cy of sediment from areas of the tidal channel at the railroad berm breach that are currently below the High Tide Line (HTL) and an additional 450 cy of sediment is proposed to be excavated from areas of the northern railroad berm that are above the HTL. Element #3 will involve dredging of 400 cy of sediment from a 1,200 lf long section of the tidal channel in lower Eagle Neck Creek.

The project itself is an ecological restoration project designed to remove restrictions to tidal flow in Eagle Neck Creek and restore ecological processes that will maintain the health and resiliency of coastal resources within the system. Measures to avoid or minimize impacts during and after the construction period include: adherence to time-of-year (TOY) restrictions for all work as required by regulatory agencies; elevation of Stick Bridge Road to mitigate for flooding up to the 100-yr storm event; installation and maintenance of erosion and sedimentation controls in all construction and staging areas; installation of exclusionary fencing during construction to protect the Eastern Box Turtle; restriction for dredging activities to lower tides (three hours before and after high tide); use of turbidity curtains during dredging; use of bypass pipe under Old County Road during construction to maintain tidal flow; use of dredged sediments for targeted salt marsh enhancement; implementation of a post construction operation and maintenance (O&M) plan; and implementation of a post construction invasive species prevention and control plan. Restoration efforts will be monitored through surveys of active marsh restoration plots and the larger area that will be relieved of tidal restriction.

Jurisdiction and Permitting

The project is subject to MEPA review and preparation of a mandatory EIR pursuant to 301 CMR 11.03(3)(a)(1)(a) and 301 CMR 11.03(3)(a)(1)(b) because it requires State Agency Actions and involves alteration of one or more acres of Salt Marsh and BVW and alteration of ten or more acres of any other wetlands. The project also exceeds the following ENF thresholds: 301 CMR 11.03(3)(b)(1)(a), alteration of Coastal Bank; 301 CMR 11.03(3)(b)(1)(c), alteration of 1,000 or more sf of ORW; and 301 CMR 11.03(3)(b)(6), construction, reconstruction or expansion of an existing solid fill structure of 1,000 or more sf base area. The project requires a Chapter 91 (c.91) License and 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP).

¹ All elevations referenced in this Certificate are based on North American Vertical Datum of 1988 (NAVD88) unless otherwise specified.

The project requires an Ecological Restoration Limited Project Order of Conditions from the Truro Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP), authorization under the General Permits for Massachusetts from the U.S. Army Corps of Engineers (ACOE), National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) from the U.S. Environmental Protection Agency, and Federal Consistency Review from Coastal Zone Management (CZM).

Funding and technical assistance will be provided from DER. Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Waiver Request

In accordance with Section 11.05(7) of the MEPA regulations, the Proponent submitted an EENF with a request that I waive the requirement for a mandatory EIR. The EENF identifies the project's consistency with the criteria for a Waiver and was subject to an extended comment period pursuant to Section 11.06(1) of the MEPA regulations. The Waiver request was discussed at the remote consultation session for the project. Almost all comments including MassDEP, NHESP, CZM, DER, and Cape Cod Commission (CCC) identify strong support for the project and waiver request and do not identify additional alternatives or mitigation measures that warrant additional analysis through an EIR. The project is a collaboration of local, state, and federal partners working together to restore and enhance 15.4 acres of salt marsh. The local, state, and federal permits required for this project will result in additional review from regulators and opportunities for public input.

Standards for All Waivers

The MEPA regulations at 301 CMR 11.11(1) state that I may waive any provision or requirement in 301 CMR 11.00 not specifically required by MEPA and may impose appropriate and relevant conditions or restrictions, provided that I find that strict compliance with the provision or requirement would:

- (a) Result in an undue hardship for the Proponent, unless based on delay in compliance by the Proponent; and,
- (b) Not serve to avoid or minimize Damage to the Environment.

Determinations for an EIR Waiver

The MEPA regulations at 301 CMR 11.11(3) state that, in the case of a Waiver of a mandatory EIR review threshold, I shall at a minimum base the finding required in accordance with 301 CMR 11.11(1)(b) stated above on a determination that:

- (a) The project is likely to cause no Damage to the Environment; and,
- (b) Ample and unconstrained infrastructure facilities and services exist to support those aspects of the project within subject matter jurisdiction.

Findings

Based on the EENF, supplemental information and consultation with State Agencies, I find that the Waiver request has merit and that the Town has demonstrated that the project meets the standards for all waivers at 301 CMR 11.11(1). I find that strict compliance with the requirement to prepare a Mandatory EIR for the project would result in undue hardship by delaying completion of an environmental restoration project and would not avoid or minimize Damage to the Environment, as the Town has adequately analyzed project alternatives, and comment letters do not identify alternatives or mitigation measures that warrant additional analysis through an EIR. Furthermore, the restoration project will reduce the ongoing degradation of existing natural resources, restore native salt marsh habitat, and increase marsh resilience to sea level rise. State Agency comments note that the permitting process will support resolution of any remaining issues and the majority of comments fully support the EIR Waiver request.

I also find that compliance with the requirement to prepare an EIR for the project would not serve to avoid or minimize Damage to the Environment. In accordance with 301 CMR 11.11(3), this finding is based on my determination that:

1. The project is not likely to cause Damage to the Environment. The project will employ the following mitigation measures to ensure the impacts of the project are avoided, minimized and mitigated:
 - Staging and maintenance of construction vehicles and equipment in a designated area outside of wetland resource areas to prevent leakage of fuel or other fluids.
 - The Town will obtain an Ecological Restoration Limited Project Order of Conditions from the Truro Conservation Commission, and a c.91 License/Permit and 401 WQC from MassDEP, and will comply with all conditions of these permits
 - Work will be conducted in accordance with any TOY restrictions identified by DMF to avoid habitat impacts;
 - The Town will monitor conditions post-construction to gauge the efficacy of restoration efforts;
 - elevation of Stick Bridge Road to mitigate for flooding up to the 100-yr storm event;
 - installation and maintenance of erosion and sedimentation controls in all construction and staging areas;
 - installation of exclusionary fencing during construction to protect the Eastern Box Turtle;
 - restriction for dredging activities to lower tides (three hours before and after high tide);
 - use of turbidity curtains during dredging; use of bypass pipe under Old County Road during construction to maintain tidal flow;
 - use of dredged sediments for targeted salt marsh enhancement; implementation of a post construction operation and maintenance (O&M) plan; and
 - implementation of a post construction invasive species prevention and control plan.

The Truro Conservation Commission will review the project to determine its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00), and associated performance standards. MassDEP will review the project to determine its consistency with the 401 WQC Regulations (314 CMR 9.00) and c. 91 Waterways Regulations (310 CMR 9.00). The c.91 authorization from MassDEP will include conditions maintaining appropriate public navigation access. The Town should continue to work collaboratively with project partners, State

Agencies and the CCNS during the permitting process to further refine project mitigation measures.

- 2. Ample and unconstrained infrastructure facilities and services exist to support those aspects of the project within subject matter jurisdiction:
 - The project does not require any infrastructure or services to accomplish its overall goal of habitat restoration. Therefore, this criterion has been met.

Conclusion

Based on these findings, I have determined that the Waiver request has merit. A Draft Record of Decision (DROD) was issued on April 17, 2020 and was published in the *Environmental Monitor* on April 22, 2020 in accordance with 301 CMR 11.15(2), which began the public comment period. The 14-day public comment period concluded on May 6, 2020. Accordingly, I hereby **grant a Waiver** from the requirement to prepare a mandatory EIR.

May 8, 2020
Date



Kathleen A. Theoharides

Comments received on DROD:

None

KAT/PPP/ppp