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April 25, 2008

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

PROJECT NAME : Rushy Marsh Restoration Project  
PROJECT MUNICIPALITY : Barnstable (Cotuit)  
PROJECT WATERSHED : Cape Cod  
EOEA NUMBER : 14208  
PROJECT PROPONENT : Town of Barnstable/Conservation Division  
DATE NOTICED IN MONITOR : March 26, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) 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).

This project consists of re-establishing the hydraulic connection between Rushy Marsh Pond and Nantucket Sound to improve water quality. Additional ecological benefits may include re-colonization of fringe salt marsh around the pond and re-establishment of a marine ecosystem within the pond. The connection will be created through construction of an open cut inlet extending 220 feet from the Pond's edge through Oregon Beach to mean low water (MLW). The inlet will be constructed within a 25-foot easement granted to the Town by a private property owner for the purpose of emergency drainage. The inlet layout includes 180 feet of open cut (10 ft x 25 ft) and a 40-foot box culvert (5 ft x 10 ft) installed under Oregon Way. The final 60 feet of the inlet entering Nantucket Sound includes a stone groin along the west side of the inlet to protect the opening. Project impacts (temporary and permanent) include alteration of 780 square feet (sf) of land under the ocean (LUO) and land containing shellfish, 3,625 sf of barrier beach and coastal beach, 7,065 sf of coastal dune and 1,350 sf of bordering vegetated wetlands (BVW). Also, the project will include dredging of approximately 275 cubic yards (cy) of material that will be used for dune nourishment.

Rushy Marsh Pond is located along the southern shoreline of Barnstable in the village of Cotuit. The pond is separated from Nantucket Sound by Oregon Beach. Four stone groins are located along this section of the beach, two of which have been buried under the sand through accretion. The existing hydraulic connection consists of an 18" diameter culvert extending from the northeastern edge of Rushy Marsh Pond to Nantucket Sound. At the April 10, 2008 site visit the culvert was completely buried under the beach and, according to the ENF, is normally clogged. Wetland resources on the site include land under water (LUW), BVW, dune, coastal beach, barrier beach and LUO. According to the 12<sup>th</sup> Edition of the Massachusetts Natural Heritage Atlas, the project is located within Priority and Estimated Habitat. Also, according to the Division of Marine Fisheries (DMF), the project abuts shellfish habitat.

The project is undergoing MEPA review pursuant to Section 11.03 (3)(b)(1)(a) because it requires a state permit and consists of alteration of coastal dune, barrier beach or coastal bank. The project requires a 401 Water Quality Certificate, a Chapter 91 License and a Superseding Order of Conditions (SOC) from the Department of Environmental Protection (MassDEP). It requires federal consistency review by Coastal Zone Management (CZM) and a Section 404 Permit from the US Army Corps of Engineers (ACOE).

Because the proponent is not seeking financial assistance from the Commonwealth, MEPA jurisdiction extends to those aspects of the project that may have significant environmental impacts and that are within the subject matter of required or potentially required state permits. These include wetlands, water quality, tidelands and public access.

The ENF includes a report, *Feasibility Study to Improve Tidal Circulation in Rushy Marsh Pond*, that evaluates alternatives for improving water quality within the pond. These include no action, removal of nitrogen sources, installation of a larger culvert, creation of an inlet and inclusion of coastal engineering structures. The report indicates that 100% removal of nitrogen associated with wastewater discharges from the Rushy Marsh watershed would not support the attainment of water quality goals. It indicates that water quality improvements could be obtained with construction of a 4 to 10-foot wide inlet. It indicates that a 10-foot wide inlet would maximize tidal velocities and maintain a more stable inlet configuration. Also, this analysis suggests that maintenance dredging could be reduced through the installation of an updrift jetty and that associated adverse impacts to downdrift beaches could be offset through removal of the existing groins in the vicinity. Although comments from state agencies identify significant issues that must be addressed to ensure consistency with regulatory standards, they indicate that an open cut appears to be the most effective alternative to re-establish tidal flow to the pond.

An Order of Conditions for the project was issued by the Barnstable Conservation Commission on October 11, 2006 and an Amended Order of Conditions was issued on March 11, 2008. The October 11, 2006 Order required the permanent removal of two existing stone groins and the abandonment of the buried groins in place as compensation for the groin proposed to protect the mouth of the inlet. The Amended Order does not include any references to the removal of the groins. At the site visit, the Town indicated that the owners of the nearby groins had not granted permission for their removal and therefore this mitigation measure was not considered feasible. Other conditions included in both Orders require the establishment of a funded

maintenance plan (prior to the start of work) to ensure the proper function of the inlet over time, removal of shellfish from the work area to a suitable site (and/or replanting at the site following construction) and planting of nourished dune areas with American Beach Grass (18-inch on center density). MassDEP comments identify several concerns with the proposed design including consistency with the performance standards for coastal beaches, dunes and barrier beaches. Based on these concerns, MassDEP appealed the Order of Conditions.

Comments from CZM and MassDEP identify potentially competing environmental interests and goals. These comments indicate that the goal of restoring water quality must be balanced against potential impacts to the natural beneficial functions of the fronting barrier beach. The report included with the ENF clearly identifies the impaired nature of the pond and a rationale for the proposed design. However, the design of the project and the inclusion of the stone groin will require additional analysis and substantiation during subsequent permitting and review processes to demonstrate that the structure has been minimized to the extent possible while providing protection to the mouth of the inlet. Both CZM and MassDEP comments indicate that the proponent should reconsider whether existing jetties can be removed to balance impacts and stress the importance of regular, ongoing maintenance to keep inlet clear of sand and functioning as designed.

Comments from MassDEP indicate that the construction of the open cut inlet will present an obstacle to the public's rights to lateral access in tidelands. These comments indicate that its approvals will be predicated on inclusion of an upland public accessway around the jetty or a boardwalk across the inlet, located at or near the mean high water shoreline. MassDEP also recommends that the proponent consider culvert designs that support the safe passage of canoes and kayaks between the inlet and pond or provide a portage area.

As noted previously, the project is located near shellfish habitat. Comments from the Division of Marine Fisheries (DMF) identify the potential for contamination of shellfish areas upon the initial opening of the inlet. MassDEP should consult with DMF during permitting to ensure adequate protection is provided during construction and upon opening of the inlet. Comments from the Cape Cod Commission recommend the development of water quality monitoring and watershed management activities to ensure nitrogen threshold is not exceeded as development continues in the area and recommend that the Town re-run its model to analyze the benefits of the project at full build-out.

The review of the ENF has served to adequately disclose the potential impacts associated with this project. Although there are significant outstanding issues that must be resolved, these issues fall within the parameters of the permitting process and can be addressed during the state permitting and review process. Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required.

April 25, 2008

Date



Ian A. Bowles

Comments Received:

4/15/08	Department of Environmental Protection /Southeast Regional Office (MassDEP/ SERO)
4/14/08	Coastal Zone Management
4/7//08	Division of Marine Fisheries
4/11/08	Cape Cod Commission

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