

ENF

**Environmental
Notification Form**

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>12823</u>
MEPA Analyst:	<u>Bill Gage</u>
Phone:	617-626- <u>1025</u>

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Herring Creek Restoration		
Street:		
Municipality: Edgartown	Watershed: Islands	
Universal Transverse Mercator Coordinates: N 4578894 E 371883	Latitude: 41°21'00"	Longitude: 70°31'30"
Estimated commencement date: Oct. 02	Estimated completion date: January 03	
Approximate cost: \$100,000	Status of project design: 75%complete	
Proponent: Town of Edgartown, Attn: Harbormaster		
Street: P.O. Box 739		
Municipality: Edgartown	State: Mass.	Zip Code: 02539
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Burton B. Bryan		
Firm/Agency: Robert L. Fultz & Associates	Street: 74 Colonial Road	
Municipality: Marshfield	State: Mass.	Zip Code: 02050
Phone: 781-659-2003	Fax: 781-659-2003	E-mail: bbbryan1@earthlink.net

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes No

Has this project been filed with MEPA before?

Yes (EOEA No. _____) No

Has any project on this site been filed with MEPA before?

Yes (EOEA No. _____) No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8)) Yes No

a Special Review Procedure? (see 301CMR 11.09) Yes No

a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No

a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): _____

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify _____) No

List Local or Federal Permits and Approvals: Order of Conditions, Edgartown Conservation Commission; U.S. Army Corps of Engineers Permit, Coastal Zone Management Consistency Review

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: _____ _____ _____ _____ _____
Total site acreage				
New acres of land altered		2.4		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		13,000		
Square feet of new other wetland alteration		86,800		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	N/A			
TRANSPORTATION				
Vehicle trips per day	N/A			
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

- Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of

Rare Species, or Exemplary Natural Communities?

Yes (Beach, piping plovers) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

This project is a cooperative project with funding and technical assistance from the National Oceanic and Atmospheric Administration Community Restoration Program, the Fish America Foundation Restoration Program, and the Mass Division of Marine Fisheries. The Town supports the project through six cooperating committees. A technical Committee consisting of DMF and NMFS staff, Local Shellfish Constable, Harbormaster, consulting engineers, environmental planners and biologists developed this proposal.

Mattakeset Herring Creek was dug starting in the 1890s to connect Katama Bay with Edgartown Great Pond in order to maintain a herring fishery by providing passage for spawning herring to Great Pond. The creek is 1.2 miles long and originally connected with Great Pond at Crackatuxet Cove. When Crackatuxet Cove was separated from the rest of Great Pond by formation of a sand barrier across its entrance, a passage, the "sluiceway", was dug from Crackatuxet Cove to Great Pond. Since Great Pond drains eastward through Crackatuxet Cove to Herring Creek and then to Katama Bay, a control structure with removable boards was installed to enable the water level in Great Pond to be controlled. A permit for dredging the sluiceway and building the control structure was issued in December 1972, and the passage was kept open until 1992. Since the passage between Great Pond and Crackatuxet Cove was last maintained, it has naturally re-closed and the control structure has fallen into disrepair. The approximately 180 feet from the mean low water mark of Great Pond to the sluiceway control structure has filled with sand, and has become a sparsely vegetated coastal beach near the pond, then a dune vegetated with beach grass, and a narrow water-filled depression for the 40 feet nearest to the control structure. To the sides of this ditch are dunes vegetated with small shrubs such as bayberry and rugosa rose. Within the control structure and extending approximately 260 feet to the east of it is a heavy growth of reeds, *Phragmites australis*, succeeded by other aquatic grasses to the east. Water flows into this area through a culvert from marshes adjacent to Great Pond at times of higher pond levels. Approximately 400 feet from the sluiceway weir, the vegetated area gives way to an area with no apparent vegetation. This in turn is bordered by a sandbar vegetated with aquatic grasses at the border of the main body of water of Crackatuxet Cove, at the limit of excavation for this portion of the project.

Where Herring Creek enters the east end of Crackatuxet Cove, it passes through an area of cattails (*Typha* sp.) for approximately 155 linear feet. From the end of this cattail stand east to the Herring Creek Road Bridge, a distance of 750 feet, the creek consists of open water with vegetation impinging on it from both sides, either from overhanging shrubs from the shore (mainly on the south side) including buttonbush (*Cephalanthus occidentalis*), roses (*Rosa* sp.), and cherry (*Prunus* sp.), or from aquatic

plants growing in the water at the sides of the creek, consisting of purple loosestrife (*Lythrum salicaria*), soft rush (*Juncus effusus*), wool-grass (*Scirpus cyperinus*), and other grasses. The extent to which rooted vegetation extends into the water in this stretch of the creek varies from about 2' to 6' from shore, and the width of open water from about 7' to 15'. South of the Herring Creek Bridge, purple loosestrife, grasses, and Virginia rose extend into the water about 7' on the north side, and 3' on the south side. There is about 9' of open water. The amount of vegetation in the water diminishes to the east, and starting at the footbridge 1000' east of Herring Creek Road, the water surface is about 12' wide, with only scattered vegetation at the sides. Vegetation at the base of the slope adjacent to the water is dominated by small shrubs and vines such as bayberry, groundsel-bush (*Baccharis halimifolia*), and dewberry (*Rubus hispidus*). From the easternmost footbridge to the Katama Road Bridge, a distance of 1000', the water surface is weed-free and about 21' wide. Salinity on April 6, 2002, was measured at 6 ppt at Tide Board 2, 1,600' east of Herring Creek Road, and 5 ppt at the easternmost footbridge. Water in the creek was flowing toward the east.

This project simply consists of restoring a pre-existing herring run and water level control structure and instituting Town management and maintenance of the system. The proposed work consists of re-opening the connection between Crackatuxet Cove and Edgartown Great Pond, which has become closed since it was last maintained in 1992, and replacing the sluiceway control structure, which has fallen into disrepair. In addition, an area of cattails filling the end of Herring Creek at the east end of Crackatuxet Cove will be removed. Vegetation within the fish run bank to bank will be removed. Other proposed work includes installing a control structure on the end of one of two 36" culverts under Herring Creek Road, and installing stone-filled gabions in a box culvert under Katama Road, to concentrate flow. Material excavated (dredged) will be trucked to South Beach (barrier beach ET 34) next to the end of Herring Creek Road and used as beach nourishment in an area of compatible grain size.

This qualifies as a limited project under two sections of the Wetlands Protection Act regulations, 310 CMR 10.33(4) and 10.53(4), and permits will be prepared under the guidance of the DEP's Wetlands Protection Program Policy 91-2, *Criteria for Evaluating and Permitting Openings of Salt Ponds in Order to Manage, Maintain, or Enhance Marine Fisheries*.

The goal of the program is to restore and optimize marine habitat for shellfish in the Edgartown Great Pond while restoring access for anadromous fish to existing spawning and nursery habitat in this Pond, and to restore the Herring Creek fish run to further develop Crackatuxet Pond as a spawning and nursery habitat for alewife. The Great Pond suffers from low and variable salinity from insufficient tidal exchange impacting shellfish populations and eelgrass, and reduced anadromous fish populations due to an inability to control flooding and control the timing and duration of openings to the ocean (G. Skomal, Division of Marine Fisheries (DMF), 1998), due to the filled sluiceway to Crackatuxet Pond. Edgartown Great Pond has been opened to the ocean regularly since 1949 by excavating a passage directly through the barrier beach, but the inability to control water levels in the pond restricts the effectiveness of these openings, and is the major barrier to increasing the Pond's use as adult, spawning, and nursery habitat for species of significant commercial and recreational value. These species include the alewife (*Alosa pseudoharengus*), white perch (*Morone americana*), winter flounder (*Pleuronectes americanus*), Atlantic tomcod (*Microgadus tomcod*), bluefish (*Pomatomus saltatrix*), striped bass (*Morone saxatilis*), American eel (*Anguilla rostrata*) and blue crab (*Callinectes sapidus*).

A management plan will evolve for the system as control of water levels and openings is possible. The plan will evolve through feedback resulting from monitoring of many parameters such as water quality, salinity, flow rates, shellfish growth rates and diseases, and anadromous fish passage. This plan is unique in that it seeks to manage for two primary goals previously thought to be conflicting. Dr. Roxanna Smolowitz of the Marine Biological Laboratory has concluded that the probability of significant spread of disease resulting from this project is low, and had recommended a monitoring program for disease surveillance in oysters and soft shell clams. This monitoring is part of the management plan. Management and maintenance of the run will be conducted by the Town as

private control of the run led to its decay. The Town will assume responsibility under state law for the run. Water levels in the Great Pond system will initially be controlled in accordance with previous permits (between 3.5 and 3.6 ft. MSL) but will be adjusted according to monitoring to optimize beneficial results.

Other benefits of the project include the enhancement of breeding habitat for endangered piping plovers on South Beach through beach nourishment, improved habitat for osprey and eagle, enhancement of beach functions of storm damage and flood control and an education program in local and regional schools, instructing local teachers and students in the ecology of the creek and pond system. The disposal area will have slopes of 10:1 or less to ensure good breeding habitat. Several workshops for teachers have already been held in Spring 2002 on the water quality, fisheries, and wetlands of Herring Creek.

Alternatives

The only alternative to the project would be to not build it. No dredging is conducted. The fish run will continue to be closed. The timing of the pond opening to the ocean will not be optimized for marine fisheries, the fish run or for flood control. This will decrease the habitat for commercial and recreational finfish and shellfish in the pond, through decreased access, salinity and increased nutrient build-up. Hundreds of acres of eelgrass and shellfish will not have optimum conditions as recommended by DMF.