



Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: *14258*
MEPA Analyst: *ANNE CANADAY*
Phone: 617-626-*1035*

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: Medouie Creek Salt Marsh Restoration		
Street: Dike Road, Polpis Harbor		
Municipality: Nantucket	Watershed: Nantucket Harbor Watershed	
Universal Transverse Mercator Coordinates: (UTMN) 415164.46544170624 (UTME) 4573335.830983291	Latitude: 41°18'25.288"N Longitude: 70°0'48.39"W	
Estimated commencement date: 10/08	Estimated completion date: 03/09	
Approximate cost: \$160,000	Status of project design: 75% complete	
Proponent: Ms. Karen Beattie, Science and Stewardship Manager		
Street: Nantucket Conservation Foundation, 118 Cliff Road		
Municipality: Nantucket	State: MA	Zip Code: 02554
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Neal Price, Senior Project Manager		
Firm/Agency: Horsley Witten Group, Inc.	Street: 90 Route 6A, Unit 1	
Municipality: Sandwich	State: MA	Zip Code: 02653
Phone: 508-833-6600	Fax: 508-833-3150	E-mail: nprice@horsleywitten.com

- 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 301 CMR 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): **MA Coastal Zone Management (CZM) is providing \$70,000 in financial assistance, and federal agencies, National Oceanic and Atmospheric Administration (NOAA), Natural Resources Conservation Service (NRCS) and US Fish and Wildlife Service (USFWS), are collectively contributing \$90,000 toward the proposed restoration project.**

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 (application to be submitted to the Nantucket Conservation Commission);
General Waterways Chapter 91 License (application to be submitted);

**Water Quality Certification (application to be submitted); and
 Category II Department of the Army Programmatic General Permit (application to be submitted).**
 Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|--------------------------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> Land | <input checked="" 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 <i>(including Legislative Approvals) – Specify:</i>
Total site acreage (salt marsh)	18.41 acres			
New acres of land altered		0.2 acres		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		3,207 sq. ft. (temporary) / 418 sq. ft. (permanent)		
Square feet of new other wetland alteration		2,038 sq. ft. (temporary) / 216 sq. ft. (permanent)		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
TRANSPORTATION				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

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 (Specify: **At this time, the project site has been mapped as Estimated Habitats of Rare Wildlife and Priority Habitats of Rare Species, but we do not know the actual species yet. A MESA Information Request has been filed.**) **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 necess ary.)

(a) a description of the project site:

The Medouie Creek salt marsh borders the northern edge of Polpis Harbor in Nantucket, Massachusetts. Its tidal exchange with the harbor is severely restricted by the historical construction of dike roads and the partial blockage of the only remaining connecting channel. The vegetative communities located north and south of the existing dirt road differ significantly as a result of the constricted tidal flow beneath the roadway. The salt marsh area south of the roadway is exposed to unrestricted tidal flows associated with Polpis Harbor. Vegetation in this portion of the salt marsh is characterized by a lower salt marsh dominated by smooth cordgrass (*Spartina alterniflora*). The upper salt marsh is dominated by salt marsh cordgrass (*Spartina patens*) with the upper reaches characterized by scattered clumps of marsh elder (*Iva frutescens*). Restriction of the marsh to the north of the roadway has caused a proliferation of cattail (*Typha*) and invasive species, such as common reed (*Phragmites australis*), and has resulted in adverse effects to wetland habitat functions, including fisheries habitat. By opening a ford in the road and installing a small box culvert at the low point of the ford, the project aims to restore substantial tidal flow to the currently degraded salt marsh. Increasing tidal flow will improve tidal flushing of nutrients and pollutants from the upstream marsh areas and will increase beneficial saltwater inputs (see Project Narrative for details).

(b) a description of both on-site and off-site alternatives and the impacts associated with each alternative:

A prior HW feasibility study identified a limited breach of the dike road on the southern edge of marsh as the most cost-effective approach to begin to increase flushing to the marsh. All parties understand that this limited opening is an initial step and will not restore full tidal exchange to the marsh. The proposed approach is to open an approximately 115-foot wide, gently sloping ford in the road to convey higher elevation flood flows, with an associated 3-foot by 3-foot box culvert at the low point to convey daily low flows. Limited dredging to reconnect existing isolated channel segments on either side of the dike road will further facilitate low flow drainage from the marsh. This approach provides a cost-effective means to increase flushing to the marsh under both low and high flow conditions.

During the planning phase of this tidal restriction removal and habitat restoration project, HW,

Nantucket Conservation Foundation (NCF), and project partners considered the advantages and disadvantages of the different project alternatives. All Federal Clean Water Act Section 401 activities are subject to an alternatives analysis as part of the DEP's review process for Water Quality Certification. The six alternatives considered here are to install: 1) 3' x 3' Box Culvert Low Flow Channel with a Broad Ford in Road (Preferred Alternative), 2) Twin 3' x 3' Box Culverts, 3) 4' Diameter Culvert, 4) Wide Span Bridge, 5) 15" Diameter Culvert, or 6) the no-build alternative.

There are no practical alternatives to the project activities as currently proposed that will further minimize adverse impacts to the wetland resource areas, while meeting the project's salt marsh restoration goals. All project alternatives considered, including the no build alternative, will impact the resource areas. The project as currently proposed minimizes these impacts and incorporates a substantial restoration component, which will improve wetland habitat and function with no loss of wetland area.

Please find a complete evaluation and ranking of each of the six alternatives in the enclosed 'Project Narrative'.

(c) potential on-site and off-site mitigation measures for each alternative:

The footprint in which the ford construction, dredging and culvert installation will occur has been reduced in size to the extent feasible to minimize alterations to the coastal resource areas. The construction staging area shown on the 'Marsh Locus' in the enclosed project site plans (sheet 2 of 4) will be located in an existing open portion of the site to the north of the proposed work area. Details of the proposed mitigation measures, including erosion and sedimentation control barriers and proposed slope stabilization techniques and materials, are also provided on the site plans (sheet 4 of 4). As required under the local wetland protection bylaw, guidance and instructions provided in the Massachusetts Erosion Control Manual will be applied.

This salt marsh restoration project will serve the wetland interests and values, as specified in the Massachusetts Wetlands Protection Act, as well as the Town of Nantucket Bylaw for Wetlands (Section 136-7) and associated Wetland Protection Regulations, by contributing to the prevention of pollution, protection of land containing shellfish, protection of marine fisheries, the protection of wildlife habitat, recreation, and aesthetics. The project will also serve these interests and values by meeting the performance standards for the protected wetland resource areas in or near the project location. Project mitigation measures are described in detail in the enclosed Project Narrative. The site plans depict the implementation of these measures and how they will help to protect wetland resource areas during the construction phase of the project.