

**Commonwealth of Massachusetts**  
**Executive Office of Environmental Affairs ■ MEPA Office**

**ENF**

**Environmental Notification Form**

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>12748</u>
MEPA Analyst:	<u>Arthur Pugsley</u>
Phone:	617-626- <u>1029</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: Damde Meddowes Salt Marsh Restoration (World's End Reservation)		
Street: Martin's Lane		
Municipality: Hingham	Watershed: Boston Harbor Basin	
Universal Transverse Mercator Coordinates: 4680 <sup>000</sup> N, 345 <sup>353</sup> E	Latitude: 42°15'24"	Longitude: 70°52'29"
Estimated commencement date: August 2002	Estimated completion date: September 2002	
Approximate cost: \$200,000	Status of project design: 100% complete	
Proponent: The Trustees of Reservations		
Street: 2468B Washington Street		
Municipality: Canton	State: MA	Zip Code: 02021
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Garrett Hollands		
Firm/Agency: ENSR	Street: 2 Technology Park Drive	
Municipality: Westford	State: MA	Zip Code: 01886
Phone: 978-589-3000	Fax:	E-mail: ghollands@ensr.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 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

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List Local or Federal Permits and Approvals: Local and/or State (Order of Conditions, 401 Water Quality Certification, Chapter 91 License); Federal (Section 404, CZM Consistency). \_\_\_\_\_

\_\_\_\_\_ 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 checked="" 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
<b>LAND</b>				<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	~15 acres			
New acres of land altered		2,525 sf (direct impact)		
Acres of impervious area	0	0		
Square feet of new bordering vegetated wetlands alteration		4.7 acres (indirect impact)		
Square feet of new other wetland alteration		~10 acres (indirect impact)		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage				
Number of housing units				
Maximum height (in feet)				
<b>TRANSPORTATION</b>				
Vehicle trips per day				
Parking spaces				
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use				
GPD water withdrawal				
GPD wastewater generation/ treatment				
Length of water/sewer mains (in miles)				

**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?

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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 \_\_\_\_\_ )  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 However, the 1600's dike has been determined to be eligible for listing in the National Register of Historic Places.

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 – The project site is located within the Weir River ACEC)  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.)

The project site is located at World's End Reservation in Hingham, Massachusetts, which is owned and managed by The Trustees of Reservations. The proposed salt marsh restoration project will restore tidal flow to Damde Meddowes, a brackish, shallow water pond and marsh system located at World's End between Planter's Hill and Rocky Neck. Prior to European settlement, Damde Meddowes was a typical New England salt marsh. Stone dikes were constructed at both ends of Damde Meddowes in the 1600's to prevent the daily tides from reaching the marsh and to allow conversion of the area to an agricultural hayfield. A third stone dike was constructed near Martin's Cove in 1890. In 1967, The Trustees of Reservations acquired the site and agricultural use was discontinued. Several drainage structures were installed in the early twentieth century to help drain the marsh including a tile drainage system, a 12-inch steel pipe and pump house, and tide gates. Since 1940, the drainage structures have fallen into disrepair allowing fresh and salt water to accumulate within Damde Meddowes. As a result, the agricultural field reverted to the brackish pond/marsh system that exists today (refer to Appendix A for a more detailed site and project description).

The applicant proposes to restore the normal ebb and flood of the tide to restore the area to salt marsh. The following three alternatives were developed by the Natural Resources and Conservation Service:

Alternative 1: Replace the existing 12-inch steel pipe with a new 15-inch PVC pipe with two tide gates;

Alternative 2a: Install a 4 ft. by 8 ft. concrete box culvert through each dike; and

Alternative 2b: Install a 4 ft. by 8 ft. concrete box culvert through the 1890's dike and breach the 1600's dike with a 20 foot wide, rock-lined open channel.

Alternative 1 would maintain the existing condition of Damde Meddowes as a brackish water wetland system. Alternatives 2a and 2b would allow daily tidal flow within Damde Meddowes and, therefore, restore the wetland to a salt marsh. However, Alternative 2b would significantly damage the historic quality

of the 1600's stone dike and would prevent the dike from continuing to be used as a footpath. Alternative 2a was selected as the preferred alternative because it maintains the historic integrity of the 1600's dike and creates sufficient hydrology to restore Damde Meddowes as a salt marsh. The proposed restoration project will result in approximately 2,525 square feet of direct impacts to resource areas, consisting of Salt Pond (625 sf), Salt Marsh (400 sf), Coastal Beach (600 sf), and Coastal Bank (900 sf). In addition, there will be 1800 sf of impact to the resource area buffers.. Approximately 14.7 acres of Salt Pond (10 ac.) and Bordering Vegetated Wetlands (4.7 ac.) will be subject to indirect impacts due to changing hydrology. Tidal flow will be enhanced within approximately 0.8 acres of degraded Salt Marsh located between the two dikes near Martin's Lane. There are no adjacent properties that will be adversely affected by the restoration of tidal flows to the Damde Meddowes. (Refer to Appendix A for a detailed site and project description.)

**LAND SECTION – all proponents must fill out this section**

**I. Thresholds / Permits**

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))  
 \_\_\_ Yes  No; if yes, specify each threshold:

**II. Impacts and Permits**

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>NA</u>	<u>          </u>	<u>          </u>
Roadways, parking, and other paved areas	<u>NA</u>	<u>          </u>	<u>          </u>
Other altered areas (describe)	<u>          </u>	<u>2,525 sf</u>	<u>2,525 sf</u>
Undeveloped areas	<u>~15 ac.</u>	<u>          </u>	<u>~15 ac.</u>

B. Has any part of the project site been in active agricultural use in the last three years?  
 \_\_\_ Yes  No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?  
 \_\_\_ Yes  No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? \_\_\_ Yes  No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? \_\_\_ Yes  No; if yes, does the project involve the release or modification of such restriction? \_\_\_ Yes \_\_\_ No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? \_\_\_ Yes  No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes \_\_\_ No ; if yes, describe:

H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy: NA

I. Is the project site currently being regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes \_\_\_ No ; if yes, what is the Release Tracking Number (RTN)?

I. If the project is site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or