

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: 13782
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: Eel Pond Restoration & Improvements		
Street: End of Railroad Ave.		
Municipality: <i>Mattapoisett</i>	Watershed: <i>Buzzards Bay</i>	
Universal Tranverse Mercator Coordinates: 348387 E, 4613116 N (NAD27)	Latitude: 41d39'26.63" N Longitude: 70d49'13.27" W	
Estimated commencement date :Fall 2006	Estimated completion date: Spring 2007	
Approximate cost: \$548,400.00	Status of project design: 90 %complete	
Proponent: Town of Mattapoisett of the Board of Selectmen		
Street: 16 Main Street, P.O. Box 435		
Municipality: Mattapoisett	State: MA	Zip Code: 02739
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Susan E. Nilson, P.E.		
Firm/Agency: CLE Engineering, Inc.	Street: 15 Creek Road	
Municipality: Marion	State: MA	Zip Code: 02738
Phone: 508-748-0937	Fax: 508-748-1363	E-mail: snilson@cleengineering.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):

Financial assistance was provided for the Town of Mattapoisett by a grant administered by the BBNEP.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify: MA DEP, CZM Federal Consistency Review, Mattapoisett Conservation Commission, DEP Chapter 91 Waterways License, US Department of ACOE PGP Cat. II, Water Quality Certificate) No

List Local or Federal Permits and Approvals: See previous for permit submittals, all permits are presently in progress.

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 checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> Mass. CZM Consistency Statement ACOE PGP Category 2
Total site acreage				
New acres of land altered				
Acres of impervious area				
Square feet of new bordering vegetated wetlands alteration				
Square feet of new other wetland alteration				
Acres of new non-water dependent use of tidelands or waterways				
STRUCTURES				
Gross square footage				
Number of housing units				
Maximum height (in feet)				
TRANSPORTATION				
Vehicle trips per day				
Parking spaces				
WATER/WASTEWATER				
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?

- 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 WH 27 – Diamondback Terrapin (*Malaclemys terrapin*)) 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.)

- a. The proposed scope of work for this project will occur in three phases. The first phase includes the dredging of the East channel to Eel Pond. This would involve dredging approximately 9,700 cubic yards from the channel and removing the restriction at its mouth. Dredging would improve water quality in Eel Pond by increasing the tidal flows to Eel Pond by 29%. The second phase of the project includes the installation of a new 24' x 8' culvert. Opening of the new culvert would be followed by a closure of the West channel and filling in the contours of the adjacent barrier beach with approximately 9,700 cubic yards of compatible materials. Closing the West channel will allow for the creation of approximately 4,000 square feet of potential salt marsh. Upon completion of the three phases, the tidal exchange in Eel Pond would improve by 86%, almost double the present rate, and provide critical protection for the existing sewer force pipeline.
- b. The Town of Mattapoisett investigated several alternatives to meet the project goals of increasing tidal height elevation to restore salt marsh areas and to eliminate eutrophication by an increase in tidal flushing. The alternatives were:
 1. **No-build Alternatives:** With the West channel still expanding, the tidal exchange will continue to grow. However, there is no predictive analysis available to determine if the West channel once stabilized, will meet project goals. Moreover, natural salt pond openings go through a cyclical process of opening and closing. This analysis will also result in the continued shoaling and closure of the East channel. Added to the factors related to the restoration of Eel Pond is the issue of the widening and deepening of the West channel, causing the exposure and breakage of the sewer force main. Subsets of the no-build alternative to address the issue of the sewer force main were also investigated they were:
 - i. **Armor West Channel:** Armoring the West Channel over the force main to prevent further down cutting would offer some limited protection for the sewer force main. However, future meandering of the West channel through the barrier beach would render this effort useless. Armoring the entire channel would reduce channel meandering but not meet provisions of the Wetland Regulations relating to Coastal Dunes and Coastal Beaches. This alternative does not include increasing the tidal height of the pond to inundate the salt marsh or increase the tidal flushing. Armoring the entire West channel would prevent further enlargement of the channel and not result in an increase in tidal height or tidal flushing.
 - ii. **Reroute Force Main to Back of Barrier Beach:** Rerouting the sewer force main to the back of the barrier beach at a deeper elevation would protect the force main. This alternative does not include increasing the tidal height of the pond to inundate the salt marsh or increase the tidal flushing. This alternative would not meet project goals of increasing tidal height or tidal flushing.
 - iii. **Reroute Force Main to run along Route 6:** Relocating the sewer force main out of the barrier beach system is the most effective protection for the force main, but is a very costly alternative. The cost estimate for rerouting the line to avoid the barrier beach area is approximately \$1,300,000. This alternative does not include increasing the tidal height of the pond to inundate the salt marsh or increasing the tidal flushing. The alternative does not meet project goals of increasing tidal height or tidal flushing. The no-build alternative does not meet the project goals of increasing tidal flushing and tidal height and is not considered further.

2. **Dredge East Channel:** Dredging the East Channel alone will not meet the project goals. Projected flow velocity within the East channel will not be sufficient to maintain a clear channel. Flow will continue to migrate to the West Channel. While dredging the East Channel will increase flow by 29% initially, this flow will be reduced as the East Channel refills with fine sediment. No appreciable increases in tidal height will occur with this alternative. This alternative will allow for the continuing down-cutting of the West channel over the force main. The alternative does not meet project goals of increasing tidal height or tidal flushing.
 3. **Dredge East Channel & Fill West Channel:** Dredging the East Channel and filling the West Channel will protect the sewer force main. This alternative will reduce tidal flushing by 39% and reduce tidal height by over eight inches during times of mean low water and by over a foot at the time of Spring tide. The alternative does not meet project goals of increasing tidal height or tidal flushing.
 4. **Dredge East Channel, Install New Culvert, & Fill West Channel:** By taking a three-step approach, dredging the East Channel, installing a new culvert under the railroad abutment, and filling the West Channel, all project goals are met. Tidal flushing increases by 86%. Tidal Height at Spring Tide is increased by almost three inches. The force main is protected from exposure. This preferred alternative is the proposed project.
- c. The project has been designed to minimize the impacts to the wetland resource areas. By increasing the saltwater flows to Eel Pond and surrounding marsh areas, the project will improve water quality in Eel Pond, restore salt marsh areas and potential shellfish areas, and provide critical protection to the existing sewer force main.
- In accordance with the DMF recommendation, prior to the start of construction, the oysters located along the western shoreline in "a relatively small tract" will be moved further into the pond so that the bi-valves will not be adversely affected by the proposed dredging and still provide a brood stock for the pond. The quahogs at the mouth of the pond shall be moved from Eel Pond to an area to be determined by DMF and the Mattapoissett Shellfish Department. (See attached letter as Exhibit D). By improving tidal exchange between Eel Pond and Buzzards Bay, there is potential restoration of the shellfish habitat within Eel Pond.