

ENF Environmental Notification Form

For Office Use Only
 Executive Office of Environmental Affairs
 EOEA No.: 12878
 MEPA Analyst: Janet Hutchins
 Phone: 617-626-1023

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: West Dennis Yacht Club Proposed Maintenance Dredging & Float Addition		
Street: 259 Loring Avenue		
Municipality: Dennis	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates:	Latitude: 041° 39' 19.9" N Longitude: 070° 10' 37.6" W	
Estimated commencement date: Oct. 2003	Estimated completion date: Jan 2004	
Approximate cost: \$180,000	Status of project design: 20 %complete	
Proponent: West Dennis Yacht Club, Attn: Charles Alix, P.E.		
Street: 46 Great Road		
Municipality: Sudbury	State: MA	Zip Code: 01776
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Beth E. Hays		
Firm: Coastal Engineering Company, Inc.	Street: 260 Cranberry Highway	
Municipality: Orleans	State: MA	Zip Code: 02653
Phone: 508-255-6511	Fax: 508-255-6700	E-mail: bhays@ceccapecod.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): N/A

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 (Notice of Intent to be filed)

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 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	1.42(upland) 1.28(wetland)			
New acres of land altered		<0.01(upland) 0.44(wetland)		
Acres of impervious area	0.19	0	0.19	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0.02(retaining wall) 1.28(maintenance dredge)		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	8158+/-	0	8158+/-	
Number of housing units	0	0	0	
Maximum height (in feet)	25'+/-	0	25'+/-	
TRANSPORTATION				
Vehicle trips per day	100+/-	8+/-	108+/-	
Parking spaces	40	6	46	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	2020	0	2020	
GPD water withdrawal	2020	0	2020	
GPD wastewater generation/ treatment	2020	0	2020	
Length of water/sewer mains (in miles)	<0.04 water	0	<0.04	

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: **Roseate Tern, Common Tern, Least Tern & Piping Plover**) 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.)

Project Description

The proposed project involves the maintenance dredging of approximately 19,123 square feet and the construction of additional floats for the docking of vessels at the West Dennis Yacht Club. The maintenance dredging is precipitated by the altered conditions of sediment distribution which resulted from the reconstruction of the adjacent bridge over Weir Creek. Dredge spoils would be placed behind proposed bulkhead and utilized as beach nourishment (see Soils Analysis in Appendix B). The reconstructed bridge, along the Town Way, has also caused a hostile environment to the peat bank along the northeast portion of the property adjacent to the roadway and bridge. A low overwash bulkhead is proposed along the peat bank in order to protect the integrity of the peat bank, which would promote the re-establishment of salt marsh vegetation in that area. The preferred alternative also includes the proposed construction of an upper terraced retaining structure which would be integral in the establishment of storm wastewater management, and the elimination of storm wastewater runoff, which now discharges directly into Weirs Creek. See Appendix C for Alternative Plans 2 thru 6, and Project Memorandum, prepared by Woods Hole Group, for additional project discussion.

Alternatives Analysis

Alternative 1 – Maintenance dredge only.

This alternative would allow for the dredging of the sediment build-up which resulted from the sediment re-distribution caused by the bridge reconstruction. No stabilization of the peat marsh would occur, therefore, the peat bank would continue to deteriorate, and ultimately be non-existent in the hostile environment. The proponent would not benefit from additional boat mooring slips, and the continuing deterioration of the peat bank would require more frequent maintenance dredging.

Alternative 2 – Maintenance dredging, a low overwash bulkhead aligned with end of existing bulkhead with additional floats in a similar configuration as the adjoining float systems.

This alternative would maximize the number of floats mooring spaces to a total of 12 additional spaces. A low overwash bulkhead would be constructed seaward of mean high water, commencing at the southeast corner of the existing bulkhead, terminating at the rip-rap adjacent to the bridge. The overwash bulkhead would be constructed with a top elevation approximately .5' below mean high water. Dredge spoil material from directly fronting the bulkhead would be placed behind the bulkhead, sloped and to mean high water elevation. *Spartina alterniflora* and *spartina patens* would be planted, initially, behind the bulkhead to encourage the natural propagation of the salt marsh. A net gain of approximately 780 square feet of salt marsh would be realized. However, the proposed floats would protrude into the channel, and into the most eastern end of Weir Creek, adjacent to the bridge, causing a navigational impediment for boaters from negotiating a turn around at the impassible bridge underpass.

Alternative 3 – Maintenance dredging, a low overwash bulkhead aligned with end of existing bulkhead with all float slips perpendicular to the shoreline and bulkhead line (the preferred float configuration).

This alternative would position the floats in the preferred configuration. The number of additional floats would be decreased to accommodate only eight additional spaces. The low overwash bulkhead would be configured similarly to Alternative 2, with the accompanying benefits to the salt marsh. This float configuration, however, still presents an impediment to navigation at the end of Weir Creek, since navigation would be difficult due to the high velocity currents, and turbulent waters entering and exiting the bridge orifice.

Alternative 4 – Maintenance dredging, a low overwash bulkhead pulled in landward of edges of saltmarsh with no net loss of saltmarsh, with a float configuration which would be the preferred configuration.

This alternative would position the bulkhead in such a manner that would result in no net loss, but a net increase of approximately 140 square feet of replication or re-planting of salt marsh, on-site, behind the proposed overwash bulkhead. The float configuration would allow for eight additional spaces, and would bring the floats, with associated docked vessels landward enough to cause no impediment to navigation that occurs at the end of Weir Creek, at the bridge.

Alternative 5 – Preferred Alternative --Maintenance dredging, a low overwash bulkhead, placement and configuration of floats as described in Alternative 4, with the addition of an upper tier retaining wall to stabilize the upper surface at the edge of the existing parking area and inclusion of storm wastewater collection and treatment.

This alternative would position the low overwash bulkhead and the floats in the same configuration as Alternative 4, with associated benefits. This alternative would include an upper tier retaining wall that would both stabilize the upper surface at the edge of the existing parking area, and would eliminate the source discharge of storm wastewater runoff into Weir's Creek.

This is the preferred alternative, since it would accommodate the following environmental and functional benefits:

- It would provide additional stable bank and parking area behind the retaining wall;
- It would eliminate storm wastewater runoff into Weir's Creek;
- It would include appropriate collection and leaching facilities to accommodate treatment of storm wastewater;
- It would result in a net increase of approximately 140 square feet of replication or re-planting of salt marsh, on-site, behind the proposed overwash bulkhead;
- It would eliminate deterioration of the peat bank, which serves as a medium for salt marsh;
- It would bring the new floats away from the dynamic currents caused by the bridge opening;
- It would provide the best alternative for navigation within the channel and at the bridge entrance;
- It would bring the new floats out of possible protrusion in the traveled channel; and
- It would provide 8 new docking spaces for the yacht club.

Alternative 6- Maintenance dredging, construction of a high bulkhead at the end of the parking area with collection and treatment of storm wastewater runoff.

This alternative would exclude the overwash bulkheads proposed in the previous alternatives, but would propose the construction of a bulkhead at approximately the level of the parking area, seaward of the saltmarsh. This alternative would eliminate approximately 280 square feet of saltmarsh. The bulkhead would be just landward of the saltmarsh, with fill placed behind the bulkhead to bring the grade up to match the parking area. The area seaward of the bulkhead would be dredged to approximately -5 MLW. This would require the bulkhead to be constructed approximately 13' above the dredge line, thereby requiring more extensive construction and also involving anchoring of the bulkhead. The required mitigation would be off-site, and in the order of 1200 square feet of marsh replication. Although the floats may be moved further to shore, no significant navigational benefits would be realized than as proposed and shown on Alternatives 4 and 5. Therefore, this Alternative is not recommended since:

- No additional benefits would be realized than Alternative 5;
- It would cause the complete elimination of the entire saltmarsh.