



**Environmental
Notification Form**

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 14239
MEPA Analyst: Deirdre Buckley
Phone: 617-626-1044

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 River Channel Relocation and Expansion		
Street: Near Menauhant Road / Yacht Club Road / Washburn Island		
Municipality: Falmouth	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: Zone 19 370859E 4601339N	Latitude: 41° 33' 10"	Longitude: 70° 32' 53"
Estimated commencement date: Fall 2008	Estimated completion date: Continuing as needed	
Approximate cost:	Status of project design:	75 %complete
Proponent: Town of Falmouth, Gregg Fraser, Harbormaster		
Street: 180 Scranton Ave		
Municipality: Falmouth	State: MA	Zip Code: 02540
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Alyssa Richard		
Firm/Agency: Bourne Consulting Engineering	Street: 3 Bent Street	
Municipality: Franklin	State: MA	Zip Code: 02038
Phone: 508-533-6666	Fax: 508-533-0600	E-mail: arichard@bournece.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. 2031) 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: **We will be seeking an Order of Conditions, Falmouth Board of Selectmen special permit, Ch 91 dredge permit and a 401 WQC as well as USACE approval. See Narrative for historic permits.**

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 <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	5.5			
New acres of land altered		3.5		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
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 _____ NHESP PH 1232 _____) 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__ Adjacent to Waquoit Bay _____) 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.*)

Please See Attached Narrative

Project Narrative

Project Summary

The Town of Falmouth is seeking permits for the relocation and expansion of the Eel River Channel to allow dredging for navigation. The Town is requesting to relocate the more southerly leg of the channel, which leads to the Child’s River, so that it does not conflict with the sediment accretion that is occurring at Washburn Island. The Town is also requesting to extend the channel north of the Menauhant Yacht Club, and proposing to permit a Future Turning Basin to meet the potential future navigation needs of this system.

Historic Dredging

The entrances of Great Pond, Green Pond, Eel River and Falmouth Inner Harbor have historically been dredged on a regular basis. Dredge material from all of these sites is used for beach nourishment on area beaches. Since 1997 the entrance channels have been maintained by the Barnstable County Dredge. Records indicate that the County dredges a total volume between 4000 and 8300 cubic yards (cys) per year from these inlets, as illustrated in the following table. All dredging is done hydraulically and dredge material is pumped onto adjacent beaches, where it is dewatered and graded across the beach. All beach regrading is done above the high tide line except at Great Pond, where the material is needed at the toe of the seawall. Additionally, approximately 1500 cubic yards was dredged from Bourne’s Pond in 2006.

Table 1: Annual Dredge Volumes (Cubic Yards)

<i>Year</i> / <i>Site</i>	2000	2001	2002	2003	2005	2006	2007	Avg
<i>Great Pond</i>	1000*	1000*	936	0	751	1544	1355	941
<i>Green Pond</i>	1275	1329	1326	2342	588	1071	1955	1412
<i>Eel River</i>	1131	2836	1187	1342	876	1983	1262	1517
<i>Falmouth Inner Harbor</i>	3070	1677	1330	1353	3284	5343	3717	2825
Annual Total	6476	6842	4779	5037	5499	9941	8289	6695

*Conducted as part of a larger dredge program exact volumes are not known (assume 1000 Cubic Yards)

Beach Nourishment

Beach nourishment areas are located adjacent to each dredge site. Historically, material has been placed above the mean high water line except at the Great Pond Channel where material is required at the base of the seawall. Sieve analyses have been provided comparing the dredge material to sands from the adjacent beaches. Dredge material gradation is within 10% of beach material gradation and suitable for beach nourishment. Sieve analyses for the material are included in Appendix A. Given the granular nature of the material (less than 1% passing the number 200 sieve) no chemical analysis was performed.

Eel River Channel

The entrance to Eel River is maintained annually. The maintenance channel varies in width between 50 and 60' wide and 385' long. The channel is maintained at 6' deep. Dredge material will be placed along the beach, west of the channel for approximately 2700', depending on the volume dredged and the condition of the beach at the time of dredging. All nourishment material will be placed landward of the high tide line and outshore of the beach grass.

In addition to maintenance dredging of Eel River this application includes a proposed area of new dredging that will extend the channel from the current southern terminus to deeper waters approximately 400' to the south that the Town of Falmouth will dredge and maintain annually to a depth of -6'MLW.

The Town is also proposing to relocate the existing Child's River channel (the more southern branch of the channel) approximately 100 feet north of its current location. This relocation is proposed based on comments from and consultation with representatives of the Conservation Commission, Coastal Resources Working Group, Waquoit Bay National Estuarine Research Reserve and the Natural Heritage and Endangered Species Program (NHESP). The relocation of the channel is necessary because the northwest corner of Washburn Island is prone to shoaling and the accumulating sediment has continued to cause expansion of the island into the existing channel. This new location will avoid dredge conflicts with the north and northwesterly expansion of the shoreline, which has been observed in recent years (see attached letter). The relocated dredge channel overlays a natural channel that is currently used for navigation. The channel will extend north from the existing entrance channel for a distance of 1550' and a width of 60'. At the northern end the channel splits into two distinct channels, the Eel River channel and the Child's River Channel. The total area of the new channel is 94,500 square feet (SF), while the area of proposed dredging within the channel is limited to 58,100 SF. The dredge volume needed to establish the channel and turning basin to a depth of -6 MLW, is approximately 6,000 cys. Given that this is a new dredge channel, we anticipate that maintenance volumes in this area will be lower than the original dredge volume and limited to approximately 1000 to 2000 cys annually.

In addition to the relocated channel and the extension of the existing channel, the proposal also includes an area shown a Future Turning Basin area. Given the dynamic migration of sediments and the Washburn Island shoreline, it is the intention of this proposal to provide an area within which the channel can be maintained. The Future Turning Basin is an area not intended to be dredged at this time, but instead designated for future maintenance of the channel. It is not proposed for dredging beyond the future maintenance needs of the channel. The Future Turning Basin as shown on the plan, along with the channel itself yield a total area to be permitted of 235,967 square feet (approximately 5.5 acres). At no time is it anticipated that the entire area, or even most of that area would be impacted during a single dredge cycle.

Environmental Impact / Mitigation

The Eel River system directly abuts the Waquoit Bay National Estuary Research Reserve, a state recognized Area of Critical Environmental Concern (see attached). This system encompasses

3,000 acres of open waters, barrier beaches, marshlands and uplands, including Washburn Island, which makes up the eastern border of the Eel Pond / Eel River / Child's River system. Washburn Island is a 330 acre island made up of barrier beaches, oak and pine forests, and coastal salt ponds. Washburn Island is one of the last undeveloped coastal properties on Cape Cod. The Town of Falmouth is conscientious of the wildlife resources directly adjacent to the area to be dredged and have made great efforts to coordinate dredging and beach nourishment so as to have no impact on this area.

The beach along the shoreline west of the Eel River entrance, where dredge spoils will be deposited as nourishment materials, is a known NHESP Priority Habitat for State Protected Rare Species, including Piping Plovers (PH 1232, see attached). Therefore, nourishment projects in this area will be required to monitor the beach for plovers and other species of concern prior to the start of dredging. The beach nourishment site for this project would be the same site that is approved for use (NAE-2006-674, Order of Conditions 25-3261 and NHESP 06-20094) for the recent dredging of Bourne's Pond. This approval is conditional upon the restriction of beach nourishment between 1 April and 31 August. This Time of Year (TOY) restriction also overlaps with the United States Army Corps of Engineers (USACE) TOY restriction on dredging between 15 January and 30 June to protect winter flounder and horseshoe crab species. We would expect and fully comply with all TOY restrictions on dredging and beach nourishment for this project as well.

According to Charles Martinsen, Falmouth Shellfish Warden, the area of the proposed channel has not been seeded. This is also supported by the MAGIS Oliver mapping (see attached). Mr. Martinsen also indicated that no material should be placed on the beach, north of Menauhant Yacht Club, as soft shell clams have established within that area.

Historic Permits

The following permits are active and are being provided for reference. Previously Eel River dredging was permitted as part of a larger management strategy. All permits shown have regulated work described in this proposal or in the immediate area of the proposed work.

Table 2: Current Permits

Type / Site(s)	USACE	DEP	Chapter 91 (Waterways)	401 WQC
Eel Pond, Falmouth Inner Harbor, Green Pond & Great Pond	NAE-2005-1672	SE-25-3165	11838	DEP 25-3165
<i>Expires</i>	<i>1/20/10</i>	<i>12/23/08</i>	<i>7/9/17</i>	<i>1/20/10</i>
Bourne's Pond	NAE-2006-674	SE-25-3261	12108	DEP 25-2873
<i>Expires</i>	<i>1/20/10</i>	<i>8/4/09</i>	<i>4/1/18</i>	<i>1/20/10</i>