

**ENVIRONMENTAL NOTIFICATION FORM**

For

10 Year Comprehensive Dredge Maintenance and Beach  
Nourishment Plan

Town of Edgartown, MA

May 29, 2009

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# Environmental Notification Form

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

**ENF Environmental Notification Form**

*For Office Use Only*  
*Executive Office of Environmental Affairs*  
 EOEA No.:  
 MEPA Analyst:  
 Phone: 617-626-

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: 10 Year Comprehensive Maintenance Dredge and Beach Nourishment Permit		
Street:		
Municipality: Edgartown/Oak Bluffs	Watershed: Nantucket Sound/Atlantic Ocean	
Universal Transverse Mercator Coordinates:	Latitude: Longitude: See USGS Map for all locations	
Estimated commencement date: 9/2009	Estimated completion date: 6/2019	
Approximate cost: \$2,100,000	Status of project design: 100 %complete	
Proponent: Town of Edgartown/Town of Oak Bluffs		
Street: 70 Main Street		
Municipality: Edgartown	State: NY	Zip Code: 02539
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Lynne Fraker		
Firm/Agency: Town of Edgartown Dredge	Street: 70 Main Street	
Municipality: Edgartown	State: MA	Zip Code: 0239
Phone: 508-989-5840	Fax: 508-627-6123	E-mail: lfraker@edgartown-ma.u

- 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. see project list)  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): None

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes (Specify DEP Chp 91, 401WQC, ACOE, \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: See list of Permits Appendix, Local Orders of Conditions, DEP Chp91, 401 WQC, Army Corps PGP

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- Land
- Water
- Energy
- ACEC

- Rare Species
- Wastewater
- Air
- Regulations

- Wetlands, Waterways, & Tidelands
- Transportation
- Solid & Hazardous Waste
- 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	81.9 acres dredge and beach nourishment			
New acres of land altered		0		
Acres of impervious area		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		
<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?

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?  
X Yes (Specify Estimated and priority habitat piping plover, least terns )  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 \_\_\_\_\_ ) X No  
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?  
 Yes (Specify \_\_\_\_\_ ) X No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?  
 Yes (Specify \_\_\_\_\_ ) X 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 Towns of Edgartown and Oak Bluffs are requesting a waiver from a mandatory EIR. This project proposes the implementation of the Town of Edgartown/Town of Oak Bluffs Ten-Year Maintenance dredging and beach nourishment plan. The Plan is a comprehensive effort to consolidate and manage 29 existing dredge and beach nourishment maintenance permits within Edgartown and Oak Bluffs. Each of these 29 sites has historically completed a full permit and review process with the applicable local, State and Federal Authorities on an individual basis at different times. The project is designed to provide the Towns with more effective ways to manage these ongoing maintenance beach nourishment and dredging activities.

**Project Locations:**

The maintenance dredging component in Cape Pogue Bay combines 3 maintenance dredge areas, *the Gut, the Narrows, and Dike Bridge Approach*. There are 3 nourishment sites: Cape Pogue Elbow (NSELB) Nourishment site, Dike Bridge (NSDB), Nourishment Site, the Narrows (NSN),

The Edgartown Harbor component combines 7 maintenance dredge areas: *Eel Pond, Lighthouse, Inner Harbor, Collins Beach, Caleb's Pond, Katama Boat Ramp and Channel, and Katama Channel*. There are 5 Beach nourishment sites: Eel Pond (EPNS), Fuller Beach (FBNS), Nourishment site "E"(NSE), Nourishment sites "A"- "D"(NSA-D), NBNS(Norton Beach).

The Edgartown Great Pond component combines 4 maintenance dredging areas: *Great Pond Ramp (Wilson's Landing), Great Pond Channel, Sluiceway Approach, and Herring Creek Restoration Project*. Nourishment site is South Beach. (SBNS)

Sengecontactet Pond component combines 3 dredging areas *Borrow Area #1, Borrow Area #2, Little Bridge Outside Channel*. 3 Nourishment sites are Sylvia State Beach (SBNS), Bend in the Road (BITRNS) Beach, Cow Bay Dunes(CBNS).

**Waiver Request**

Maintenance dredging is for a total of 173,570cy, and 39.4 acres at various sites. Beach nourishment will affect 42.5 acres. The cumulative impact of the consolidated projects exceeds a mandatory EIR threshold. The filing of an EIR would result in undue hardship for the proponents. This is maintenance dredging and nourishment project. Further review would not reduce damage to the environment.

This project is not likely to cause damage to the Environment. Each of the project components have been dredged or nourished and historically approved by local, State and federal environmental

permitting process. The proponents will obtain individual comprehensive permits from Mass DEP (cp 91,401 WQC), and NHESP (MESA) review. The permits will include conditions such as time of year restrictions to ensure compliance with applicable regulations and standards

All beach nourishment components have been historically reviewed by NHESP and the proponents will work to address any outstanding issues. The proponents will work with NHESP to address any additional rare species concerns including endangered shorebirds.

The project does not include any new improvement dredging or structures. Any future improvement projects will be reviewed by local State and federal agencies separately, and then added to the comprehensive permit. The Towns will work with the agencies on a reporting protocol for dredging and beach nourishment

The proponents will develop and establish a monitoring program to gauge overall project success.

Ample and unconstrained infrastructure facilities and services exist to support the project. All work will be performed by the Town of Edgartown Dredge. This project is a continuation of ongoing beach nourishment and dredging which are intended to provide safe navigation and enhance beach areas. Dredging in the Great Pond is a continuation of an ongoing project to maintain flushing for fisheries habitat and the overall health of the Pond.

#### Alternative Analysis

1. **No-Build:** No dredging is conducted. Shoaling in the maintenance dredge areas will continue to provide a greater risk to public safety and property due to vessels colliding with each other or running onto shoals. Shoaling represents a threat to public safety by restricting vessels from using the established course; potential vessel damage from avoiding and/or coming in contact with a hazard (such as a shoal or another vessel and jeopardizing safe turning. No dredging in Great Pond and Sengecontacket Pond will reduce water circulation and reduce salinity and water quality and degrade fisheries habitat. Sand would be barged in for needed beach renourishment for road and storm protection at a prohibitive cost.
2. **Maintenance dredging** is conducted with a hydraulic dredge and beach nourishment. This option would cause minimal and temporary amounts of environmental impacts to water quality and/or coastal resource because dredging would be completed during cold seasons when there is less growth and fisheries activity in the nearby resource areas. Hydraulic dredging has the least environmental impact of dredging methods. Maintenance dredging will provide multiple benefits of enhanced marine fisheries habitat by maintaining tidal exchange, navigation for public safety, and access to shellfishing areas. Beneficial reuse of dredged material has the multiple benefits of storm and flood damage protection, improved habitat for state listed endangered species, enhancement of public recreational beaches, and maintenance of public OVL trails.
3. **Upland De-watering and Disposal of Dredged Material.** The proposed areas would be dredged, and then dredge spoils would be de-watered and trucked and disposed at an upland site. The project would then not provide the multiple benefits of storm damage protection, and state-listed endangered species habitat improvement, public OVL trail maintenance, and safe navigation to allow access for commercial and recreational shellfishing.

#### **Preferred Alternatives:**

**Alternative No. 2 Maintenance dredging with beneficial reuse of material as beach nourishment.**

**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	_____	_____	_____
Roadways, parking, and other paved areas	_____	_____	_____
Other altered areas (dredging/beach nourish)	<u>81.9</u>	_____	<u>81.9</u>
Undeveloped areas	_____	_____	_____

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:

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)?

J. If the project site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or Wachusett subwatershed?  Yes  No; if yes, is the project site subject to regulation under the Watershed Protection Act?  Yes  No

K. Describe the project's other impacts on land:

**III. Consistency**

A. Identify the current municipal comprehensive land use plan and the open space plan and describe the consistency of the project and its impacts with that plan(s): **Consistent with the Town of Edgartown Harbor Management and Dredge Plan**



B. Identify the current Regional Policy Plan of the applicable Regional Planning Agency and describe the consistency of the project and its impacts with that plan:

C. Will the project require any approvals under the local zoning by-law or ordinance (i.e. text or map amendment, special permit, or variance)? Yes \_\_\_ No X; if yes, describe:

D. Will the project require local site plan or project impact review?  
\_\_\_ Yes X No; if yes, describe:

## **RARE SPECIES SECTION**

### **I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? X Yes \_\_\_ No; if yes, specify, in quantitative terms: 42.5 acres beach nourishment

B. Does the project require any state permits related to **rare species or habitat**? \_\_\_ Yes X No

C. If you answered "No" to both questions A and B, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

### **II. Impacts and Permits**

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes \_\_\_ No. If yes,

1. Which rare species are known to occur within the Priority or Estimated Habitat (contact: Environmental Review, Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, allowing 30 days for receipt of information): **Piping Plovers, Least Terns, Roseate Terns**

2. Have you surveyed the site for rare species? \_\_\_ Yes X No; if yes, please include the results of your survey.

3. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? X Yes \_\_\_ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? X Yes \_\_\_ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? \_\_\_ Yes X No; if yes, describe:

C. Will the project alter "significant habitat" as designated by the Massachusetts Division of Fisheries and Wildlife in accordance with M.G.L. c.131A (see also 321 CMR 10.30)? \_\_\_ Yes X No; if yes, describe:

D. Describe the project's other impacts on rare species including indirect impacts (for example, stormwater runoff into a wetland known to contain rare species or lighting impacts on rare moth habitat):

**WETLANDS, WATERWAYS, AND TIDELANDS SECTION**

**I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))?  Yes  No; if yes, specify, in quantitative terms:  
**81.9 acres of dredging and beach nourishment**

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

**II. Wetlands Impacts and Permits**

A. Describe any wetland resource areas currently existing on the project site and indicate them on the site plan:

B. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (in square feet) or Length (in linear feet)</u>
Land Under the Ocean	<u>705325sf</u>
Designated Port Areas	_____
Coastal Beaches	<u>376,313sf</u>
Coastal Dunes	<u>200,000_sf</u>
Barrier Beaches	<u>127,7031sf</u>
Coastal Banks	_____
Rocky Intertidal Shores	_____
Salt Marshes	_____
Land Under Salt Ponds	<u>1,009,415sf</u>
Land Containing Shellfish	_____
Fish Runs	_____
Land Subject to Coastal Storm Flowage	_____
 <u>Inland Wetlands</u>	
Bank	_____
Bordering Vegetated Wetlands	_____
Land under Water	_____
Isolated Land Subject to Flooding	_____
Bordering Land Subject to Flooding	_____
Riverfront Area	_____

C. Is any part of the project

1. a limited project?  Yes  No
2. the construction or alteration of a dam?  Yes  No; if yes, describe:
3. fill or structure in a velocity zone or regulatory floodway?  Yes  No

**Beach Nourishment**

4. dredging or disposal of dredged material?  Yes  No; if yes, describe the volume of dredged material and the proposed disposal site:

**Various disposal sites, 173,570 cy dredged**

5. a discharge to Outstanding Resource Waters?  Yes  No

6. subject to a wetlands restriction order?  Yes  No; if yes, identify the area (in square feet):

D. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)?  Yes \_\_\_ No; if yes, has a Notice of Intent been filed or a local Order of Conditions issued?  Yes \_\_\_ No; if yes, list the date and DEP file number: **Application Submitted** \_\_\_\_\_. Was the Order of Conditions appealed? \_\_\_ Yes  No. Will the project require a variance from the Wetlands regulations? \_\_\_ Yes  No.

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw?  Yes \_\_\_ No
2. alter any federally-protected wetlands not regulated under state or local law? \_\_\_ Yes  No; if yes, what is the area (in s.f.)?

F. Describe the project's other impacts on wetlands (including new shading of wetland areas or removal of tree canopy from forested wetlands): **project designed to enhance endangered shorebird and fisheries habitat, improve flushing in Great Pond**

### III. Waterways and Tidelands Impacts and Permits

A. Is any part of the project site waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91?  Yes \_\_\_ No; if yes, is there a current Chapter 91 license or permit affecting the project site?  Yes \_\_\_ No; if yes, list the date and number: **See supporting documents**

B. Does the project require a new or modified license under M.G.L.c.91?  Yes \_\_\_ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water dependent use?

**0** Current **0** Change \_\_\_ Total **0**

C. Is any part of the project

1. a roadway, bridge, or utility line to or on a barrier beach? \_\_\_ Yes  No; if yes, describe:
2. dredging or disposal of dredged material?  Yes \_\_\_ No; if yes, volume of dredged material **173,570 cy of dredged material**
3. a solid fill, pile-supported, or bottom-anchored structure in flowed tidelands or other waterways? \_\_\_ Yes  No; if yes, what is the base area? \_\_\_\_\_
4. within a Designated Port Area? \_\_\_ Yes  No

D. Describe the project's other impacts on waterways and tidelands: **Project designed to enhance storm protection on beaches and enhance fisheries and shorebird habitat. Will improve navigation.**

### IV. Consistency:

A. Is the project located within the Coastal Zone?  Yes \_\_\_ No; if yes, describe the project's consistency with policies of the Office of Coastal Zone Management: **See Compliance Assessment Appendix A**

B. Is the project located within an area subject to a Municipal Harbor Plan? \_\_\_ Yes  No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan: **The project is consistent with Town of Edgartown Harbor Plan, Sept. 1997**

## WATER SUPPLY SECTION

### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? \_\_\_ Yes  No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? \_\_\_ Yes  No; if yes,

specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

**II. Impacts and Permits**

A. Describe, in gallons/day, the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____
Municipal or regional water supply	_____	_____	_____

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? \_\_\_ Yes \_\_\_ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source,

1. have you submitted a permit application? \_\_\_ Yes \_\_\_ No; if yes, attach the application
2. have you conducted a pump test? \_\_\_ Yes \_\_\_ No; if yes, attach the pump test report

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons/day)? \_\_\_\_\_ Will the project require an increase in that withdrawal? \_\_\_ Yes \_\_\_ No

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? \_\_\_ Yes \_\_\_ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Water supply well(s) (capacity, in gpd)	_____	_____	_____
Drinking water treatment plant (capacity, in gpd)	_____	_____	_____
Water mains (length, in miles)	_____	_____	_____

F. If the project involves any interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve

1. new water service by a state agency to a municipality or water district? \_\_\_ Yes \_\_\_ No
2. a Watershed Protection Act variance? \_\_\_ Yes \_\_\_ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? \_\_\_ Yes \_\_\_ No

H. Describe the project's other impacts (including indirect impacts) on water resources, quality, facilities and services:

**III. Consistency** -- Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

**WASTEWATER SECTION**

**I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? \_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? \_\_\_ Yes **X** No; if yes,

specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

**II. Impacts and Permits**

A. Describe, in gallons/day, the volume and disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater (Title 5)	_____	_____	_____
Discharge to groundwater (non-Title 5)	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Municipal or regional wastewater facility	_____	_____	_____
<b>TOTAL</b>	_____	_____	_____

B.  Yes  No; Is there sufficient capacity in the existing collection system to accommodate the project? if no, describe where capacity will be found:

C.  Yes  No; Is there sufficient existing capacity at the proposed wastewater disposal facility? if no, describe how capacity will be increased:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility?  Yes  No. If yes, describe as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Wastewater treatment plant (capacity, in gpd)	_____	_____	_____
Sewer mains (length, in miles)	_____	_____	_____
Title 5 systems (capacity, in gpd)	_____	_____	_____

E. If the project involves any interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

F. Does the project involve new sewer service by an Agency of the Commonwealth to a municipality or sewer district?  Yes  No

G. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, or other sewage residual materials?  Yes  No; if yes, what is the capacity (in tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the project's other impacts (including indirect impacts) on wastewater generation and treatment facilities:

**III. Consistency -- Describe measures that the proponent will take to comply with federal, state,**

regional, and local plans and policies related to wastewater management:

A. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? \_\_\_ Yes \_\_\_ No; if yes, indicate the EOEA number for the plan and describe the relationship of the project to the plan

**TRANSPORTATION -- TRAFFIC GENERATION SECTION**

**I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

**II. Traffic Impacts and Permits**

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):			

B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

C. Describe how the project will affect transit, pedestrian and bicycle transportation facilities and services:

**III. Consistency** -- Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

**ROADWAYS AND OTHER TRANSPORTATION FACILITIES SECTION**

**I. Thresholds**

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

**II. Transportation Facility Impacts**

A. Describe existing and proposed transportation facilities at the project site:

<u>Existing</u>	<u>Change</u>	<u>Total</u>
-----------------	---------------	--------------

Length (in linear feet) of new or widened roadway \_\_\_\_\_

Width (in feet) of new or widened roadway \_\_\_\_\_

Other transportation facilities:

- B. Will the project involve any
1. Alteration of bank or terrain (in linear feet)? \_\_\_\_\_
  2. Cutting of living public shade trees (number)? \_\_\_\_\_
  3. Elimination of stone wall (in linear feet)? \_\_\_\_\_

**III. Consistency** -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

## ENERGY SECTION

### **I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?  
\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? \_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

### **II. Impacts and Permits**

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? \_\_\_ Yes \_\_\_ No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

**III. Consistency** -- Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

## AIR QUALITY SECTION

### **I. Thresholds**

A. Will the project meet or exceed any review thresholds related to **air quality** (see 3X01 CMR

11.03(8)?  Yes  No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**?  Yes  No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

**II. Impacts and Permits**

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)?  Yes  No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

**III. Consistency**

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

**SOLID AND HAZARDOUS WASTE SECTION**

**I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))?  Yes  No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**?  Yes  No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

**II. Impacts and Permits**

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste?  Yes  No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____



Disposal \_\_\_\_\_

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? \_\_\_ Yes \_\_\_ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos? \_\_\_ Yes \_\_\_ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

**III. Consistency**--Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

## **HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION**

### **I. Thresholds / Impacts**

A. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? \_\_\_ Yes X No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? \_\_\_ Yes \_\_\_ No; if yes, please describe:

B. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? \_\_\_ Yes X No; if yes, does the project involve the destruction of all or any part of such archaeological site? \_\_\_ Yes \_\_\_ No; if yes, please describe:

C. If you answered "No" to all parts of both questions A and B, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

D. Have you consulted with the Massachusetts Historical Commission? \_\_\_ Yes \_\_\_ No; if yes, attach correspondence

E. Describe and assess the project's other impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

**II. Consistency** -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

**ATTACHMENTS:**

1. Plan, at an appropriate scale, of existing conditions of the project site and its immediate context, showing all known structures, roadways and parking lots, rail rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
2. Plan of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
3. **Original** U.S.G.S. map or good quality **color** copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
4. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
5. Other:

**CERTIFICATIONS:**

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

**Vineyard Gazette**

May 29, 2009

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

spalag Lynne Fraker  
Lynne Fraker

5/29/2009

Lynne Fraker Edgartown Dredge Administrator

Town of Edgartown

70 Main Street

Edgartown, MA 02539

508-989-580

# Appendix A

## Supporting Information

**Maintenance Dredging and Beach Nourishment  
10 year Comprehensive Permit**

**18 Maintenance Dredge Areas  
12 Beach Renourishment Sites  
Performance Standards**

**Edgartown, MA**

**I. Project Description:**

This project consists of the implementation of the Town of Edgartown's Ten-Year Maintenance dredging and beach nourishment plan. The Plan is a comprehensive effort to consolidate and manage 29 existing dredge and beach nourishment sites within the Town. The project is designed to provide the Town with more effective ways to manage these ongoing maintenance beach nourishment and dredging activities. Maintenance dredging is for a total of 173,570cy at various sites. Please refer to inclusion list for the chart of all projects including breakdown of square footage and cubic yardage, permit and dredge history.

**II. Project Locations:**

The maintenance dredging component in Cape Pogue Bay combines 3 maintenance dredge areas, the Gut, the Narrows, and Dike Bridge Approach. There are 3 nourishment sites: Cape Pogue Elbow (NSELB) Nourishment site, Dike Bridge (NSDB), Nourishment Site, the Narrows (NSN),

The Edgartown Harbor component combines 8 maintenance dredge areas: Eel Pond, Lighthouse, Inner Harbor, Collins Beach, Caleb's Pond, Katama Boat Ramp and Channel, and Katama Channel. There are 5 Beach nourishment sites: Eel Pond (EPNS), Fuller Beach (FBNS), Nourishment site "E"(NSE), Nourishment sites "A"- "D"(NSA-D), NBNS(Norton Beach).

The Edgartown Great Pond component combines 4 maintenance dredging areas: Great Pond Ramp (Wilson's Landing), Great Pond Channel, Sluiceway Approach, and Herring Creek Restoration Project. Nourishment site is South Beach. (SBNS)

Sengecontacket Pond component combines 3 dredging areas Borrow Area #1, Borrow Area #2, Little Bridge Outside Channel. 3 Nourishment sites are Sylvia State Beach (SBNS), Bend in the Road (BITRNS) Beach, Cow Bay Dunes(CBNS).

Please refer to locus map.

**III. Dredging and Beach Nourishment Projects:**

**A. CAPE POGUE**

**Cape Pogue Dredging:**

The Cape Pogue project is maintenance dredging for navigation and beach nourishment. The combined maintenance dredging of three areas in Cape Pogue Pond by hydraulic dredge is for a total of 14800cy. Maintenance dredging of these channels is vital to navigation for commercial and

recreational shellfishing and tidal pond flushing. There are no eelgrass beds or shellfish located in any of the project areas. There is eelgrass in the vicinity of the Gut, but not in the project area. Previous information received during the initial permitting has indicated that Winter flounder will not be impacted in the Narrows or the Dyke Bridge Approach. Due to the high current velocity in the area of the Gut it is not likely that winter flounder will spawn in that entrance channel. Work in the 3 project areas will occur between Nov 1 and March 15 to avoid adverse impacts nesting birds.

- **The Gut** is maintenance dredging of 9900cy of material, for 135,000sf to 2.5'
- **The Narrows** is maintenance dredging of 3100cy for 48,500sf to -3'
- **Dike Bridge Approach** is maintenance dredging of 1800cy for 21,000sf to -3'

#### **Cape Pogue Beach Nourishment:**

For all three nourishment sites, dredged materials will be placed as beach renourishment, on previously permitted barrier beaches and over the sand roads, in coordination with Trustees of Reservations, above mean high water. Silt barriers will be placed to protect salt marsh in the nourishment areas as required by the Conservation Commission Orders of Conditions and removed by April 15. Dredged sand shall be dewatered within a temporary dewatering basin prior to final placement on the beach. Placement of dredge pipes across the marsh shall be coordinated to cause the least amount of disturbance. Efforts shall be made to minimize the impact of dredge pipes on beach vegetation. Any vegetation disturbed by placement of dredge pipe shall be replanted in coordination with the Conservation Commission. Disposal will only take place between Nov 1 and March 15 to minimize adversely effecting piping plovers.

- **Cape Pogue Elbow (NSELB)** Nourishment area will affect 101,000 sq ft of beach above the high tide line. This project was reviewed by NHESP file # 97-1566 and is determined to be **near** but not within plover and Least Tern nesting habitat. Prior to work, including the laying of pipe, the nesting sites of snowy egret and the black-crowned night heron will be demarcated by qualified persons. No spoils shall be deposited within 10 feet of vegetation containing heron nests. Dredge pipe shall not run through or within 10 feet of any heron nests.
- **The Narrows (NSN)** Nourishment area will affect 25,000sf above the mean high tide line. This project was reviewed by NHESP file # 97-1666. It has been determined to be within the actual habitat of Piping plovers. Disposal along the Nantucket Sound of 45,000sf will be at a 10-1 slope to provide habitat for plovers. Over the short duration of construction activities (3 days), work will be monitored by qualified monitor.
- **Dike Bridge (NSDB)** Nourishment site, will affect 21000sf above the mean high tide line on over the sand roads. This project was reviewed by NHESP file # 97-1562. Disturbance to marsh vegetation shall be avoided in an effort not disturb adult and chick foraging areas.

## **B. EDGARTOWN HARBOR**

#### **Edgartown Harbor Dredging:**

The combined maintenance dredging of 7 areas in Edgartown Harbor by hydraulic dredge is for a total of 44,864 cy of sand, for navigation and beach nourishment. Maintenance dredging of these channels is vital to navigation for the public safety, for access for commercial and recreational shellfishermen, to maintain shellfish habitat and for beach nourishment

- **Eel Pond** channel and ramp is maintenance dredging 3200cy from approximately 59,000SF area to a depth of -4' below MLW in the channel in Eel Pond and Nantucket Sound and an approximately 800cy, 10,000sf area to a depth of -2.5 ft MLW in the ramp area. There will be no dredging in eelgrass beds. There are no shellfish located in any of the project areas.
- **Lighthouse Point** is maintenance dredging of 8400cy, approximately 50,990 sq feet, to a depth of -7' MLW at the entrance to Edgartown Harbor for navigation safety.
- **Inner Harbor** is maintenance dredging of 8500cy, 113,000 sq ft to a depth of -6' MLW in the mooring area off Chappaquiddick Point in order to maintain safe navigation for commercial and recreational vessels.
- **Collins Beach** is maintenance dredging of 2150cy, to a depth of -6' MLW to maintain navigation for commercial and recreational vessels.
- **Calebs Pond** Channel is maintenance dredging of 8400cy, 92,000sq ft to -4' MLW. The channel is 55 ft wide and 1700ft long and maintains access to the Pond for commercial and recreational shellfishing.
- **Katama Boat Ramp** is maintenance dredging of 9390 cy, to -5' MLW for maintenance of the area around the boat ramp and a navigation channel.
- **Katama Channel** is maintenance dredging of 3975cy, 50,094 sq ft to a depth of -5' MLW to maintain a navigation channel for commercial, recreational and emergency vessels.

#### **Edgartown Harbor Beach Nourishment:**

For all 5 nourishment sites, dredged materials will be placed as beach renourishment, on previously permitted beaches, above mean high water. Nourishment will provide storm protection and habitat for endangered shorebirds. Silt barriers will be placed to protect salt marsh in the nourishment areas required by the Conservation Commission Orders of Conditions. Dredged material shall be dewatered on the beach. Placement of dredge pipes shall be coordinated with Conservation Commission and/or Sherriff's Meadow. Efforts shall be made to minimize the impact of dredge pipes on beach vegetation. Any vegetation disturbed by placement of dredge pipe shall be replanted in coordination with the Conservation Commission. To comply with TOY restrictions, disposal will only take place between Nov 1 and April 1 to eliminate any adverse effect on nesting shorebirds. Unless otherwise noted, beach slope will be 10-1 for shorebird habitat.

- **Eel Pond (NSEP)** nourishment area is adjacent to the dredge area and owned by Sherriff's Meadow. Private eroding beaches, also adjacent to dredge area, will be available for renourishment if, in consultation with Sherriff's Meadow, that beach area is not available. 1800 cy will be placed HTL over 19500sf, 1400cy over 9700sf will be placed above HTL. This project was reviewed by NHESP file # 97-1566 and is determined to be within plover and Least Tern nesting habitat. Slope of the Sherriff's Meadow Beach is 10-1. Private Beaches were reviewed by NHESP file# 06-21069. There is no known nesting taking place in this area. Monitoring will be required if species are found.

- **Fuller Beach (NSFB)** nourishment area, is a barrier beach. It was reviewed by NHESP file # 98-3287, and was determined to be within the actual habitat of endangered shorebirds. Nourishment will be placed above MHW at a slope of 10:1 to maintain habitat for endangered shorebirds.
- **A-D, F (NSA-D,F) and (NSE)** nourishment sites are located on separate beach areas in Edgartown Inner Harbor. Nourishment will be placed landward of MHW. Nourishment sites.
- **(NSNB)** nourishment area at Norton Beach is located at the southern edge of Katama Bay. Material will be placed above MHW. Slope will be 10:1 for shorebird habitat. Reviewed by NHESP file# 02-10721

### C. EDGARTOWN GREAT POND

#### **Edgartown Great Pond Dredging:**

Combined 4 dredging projects in Edgartown Great Pond are for maintenance dredging of 25,500 cy of material to be used for beach nourishment. Maintenance dredging of these channels is vital to navigation and tidal pond flushing. There are no eelgrass beds or shellfish located in the project areas. Great Pond Channel excavation may occur between April 1 and July 31 with approved monitoring of shorebirds and in consultation with Conservation Commission. Work will be done under the supervision and conditions set forth by the Conservation Commission Order of Conditions, SE 20-868, SE 20-854, SE 20-911, SE 20-809, 20-818.

- **Great Pond Ramp** project is to hydraulically dredge 500cy to maintain the navigation area at a Town owned boat ramp known as Wilson's Landing.
- **Great Pond Channel** project is for maintenance excavation/dredging of 9800cy in the channel at the outlet to the Atlantic Ocean to enhance tidal flushing and improve marine fisheries habitat within the Pond.
- **Sluiceway Approach** is to dredge 9800cy to maintain the approach to the Herring Creek restored sluiceway and fish run.
- **Herring Creek Restoration** Project is to dredge up to 5800 cy to maintain a restored historic anadromous fishway from Katama Bay through Herring Creek and Crackatuxet Pond to Edgartown Great Pond, using a combination of hydraulic and mechanical dredging. Some maintenance excavation will be carried out using conventional construction equipment operating from the beach, bank or dune. Where necessary invasive nuisance species will be removed, by hand if possible, and disturbed areas will be replanted with native species.

#### **Edgartown Great Pond Beach Nourishment:**

All material appropriate for beach nourishment will be placed above the MLW. No beach nourishment shall occur from April 1 to August 31 for the protection of shore birds. Slope will be set at 10-1 and there will be no planting on the beach for the maintenance of shorebird habitat

- **(SBNS)** South Beach is the permitted nourishment site for dredged materials from the Sluiceway Approach, Great Pond Channel and compatible material from the Herring Creek Restoration. Material will be pumped through a pipeline and pumped directly

onto the beach. For Herring Creek Restoration project, the material suitable for beach nourishment will be placed into trucks and transported to the permitted South Beach (SBNS), barrier beach renourishment area and placed landward of MHW. Any invasive nuisance vegetation will be disposed of upland.

- **(BRNS)** Great Pond Boat Ramp (Wilson's Landing) disposal area will be used for the Boat Ramp project only and disposal will occur only when the Pond is low, on Town beach adjacent to the Ramp and under supervision of the Conservation Commission.

#### **D. SENGECONTACTET POND**

##### **Sengecontactet Pond Dredging**

Three areas in Sengecontactet Pond are permitted for maintenance dredging of 78,000 cy to be used for beach nourishment on the barrier and coastal beaches.

- **Borrow Area #1** is permitted for 67,000cy, 720,000sf, to -3MLW
- **Borrow Area #2** is permitted for 2500cy, 147814sf, to -3MLW
- **Little Bridge Outside Channel** is permitted for 4000 cy 12,000sf to -5MLW

##### **Sengecontactet Pond Beach Nourishment Areas**

The 4 permitted nourishment areas are part of the barrier beach system and are all important for storm and flood protection for the barrier and coastal beaches, roads and infrastructure. Severe winter storms make erosion a constant issue. All projects are designed to maintain and enhance endangered shorebird habitat. Recreational value is enhanced on the very popular public beaches.

- **(SBNS)** Sylvania State Barrier Beach requires nourishment to provide storm protection for the State Highway and Sengecontactet Pond. Temporary groins were installed as part of the 1997 Beach Road Erosion Control project. These groins help control the rate of erosion and need to be maintained. Dukes County and the Barrier Beach Task Force have implemented a Beach Management program to monitor the beach erosion at Sylvania and the need for maintenance.
- **(BITRNS)** Bend in the Road is part of the barrier beach system protect Sengecontactet Pond and the State Highway. This popular Town beach was recently restored and will need to be maintained. Dunes were restored and habitat for endangered species was created.
- **(CBNS)** Cow Bay Dunes is maintenance of badly eroded dunes on private beaches. Trapps Pond and upland infrastructure are protected by these dunes. Habitat for endangered shorebirds was created and will need to be maintained.

#### **IV. Performance Standards**

##### **Coastal Resource Area: Land Under the Ocean [310 CMR 10.25(3)]**

**When land under the ocean or nearshore areas of land under the ocean are found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention or flood control, 310 CMR 10.25(3) through (7) shall apply:**



**10.28(3)(a) Effects on ability of waves to remove sand from dunes.** The beach nourishment project will build the slope of the beach to the recommended 10:1 slope, and will not affect the ability of waves to remove sand from the dune.

**10.28(3)(b) Effects disturbing vegetative cover so as to destabilize the dune.** These projects are designed to protect vegetation on the dune adjacent to the project from impacts, and any disturbed vegetation will be replanted. Dune maintenance in project areas will include planting to restabilize the dune.

**10.28(3)(c) Effects causing any modification of the dune form increasing the potential for storm or flood damage.** These projects are designed to enhance the dune form to increase storm and flood damage protection.

**10.28(3)(c) Effects interfering with the landward or lateral movement of the dune.** The beach nourishment sands are the same quality as the dunes and no changes to landward or lateral movement of the dunes are anticipated

**10.28(3)(e) Effects causing removal of sand from the dune artificially.** These are renourishment projects and will add sand to the dune

**10.28(3)(f) Effects interfering with mapped or otherwise identified bird nesting habitat.** These projects are designed to increase and improve bird nesting habitat. All sites are designed with NHESP guidance

#### **Coastal Resource Area: Land under Salt Ponds: [310 CMR 10.33]**

**When Land Under a Salt Pond is determined to be significant to the protection of marine fisheries and wildlife habitat, 310 CMR 10.33(3) through (5) shall apply:** There is a presumption that Land Under Sengekontacket Pond and Edgartown Great Pond is significant to protection of marine fisheries and wildlife habitat. Detailed responses to 310 CMR 10.33(3) through (5) are:

**(3) Any project on Land Under a Salt Pond....shall not have an adverse effect on marine fisheries or wildlife habitat of such a pond caused by:**

- (a) **Alteration of water circulation.** These projects will maintain circulation in the salt ponds by maintenance.
- (b) **Alterations in the distribution of sediment grain size and the real elevation of the bottom topography.** Continued maintenance will remove the build-up of material in shoaling areas to allow for safer navigation and more fisheries habitat.
- (c) **Modifications in the flow of fresh and/or salt water.** The modifications that will be created by the projects will be in the flow of salt water and may improve fisheries habitat
- (d) **Alterations in the productivity of plants.** The increase in flow and salinity may increase the area and density of any eel grass beds in the ponds. There is no eelgrass in the dredge area.
- (e) **Alterations in water quality, including, but not limited to, other normal fluctuations in the level of dissolved oxygen, nutrients, temperature or turbidity or the addition of pollutants.** The projects will maintain the openings

at the channels which will maintain and may improve the current level of water quality which will likely have a positive effect on marine fisheries.

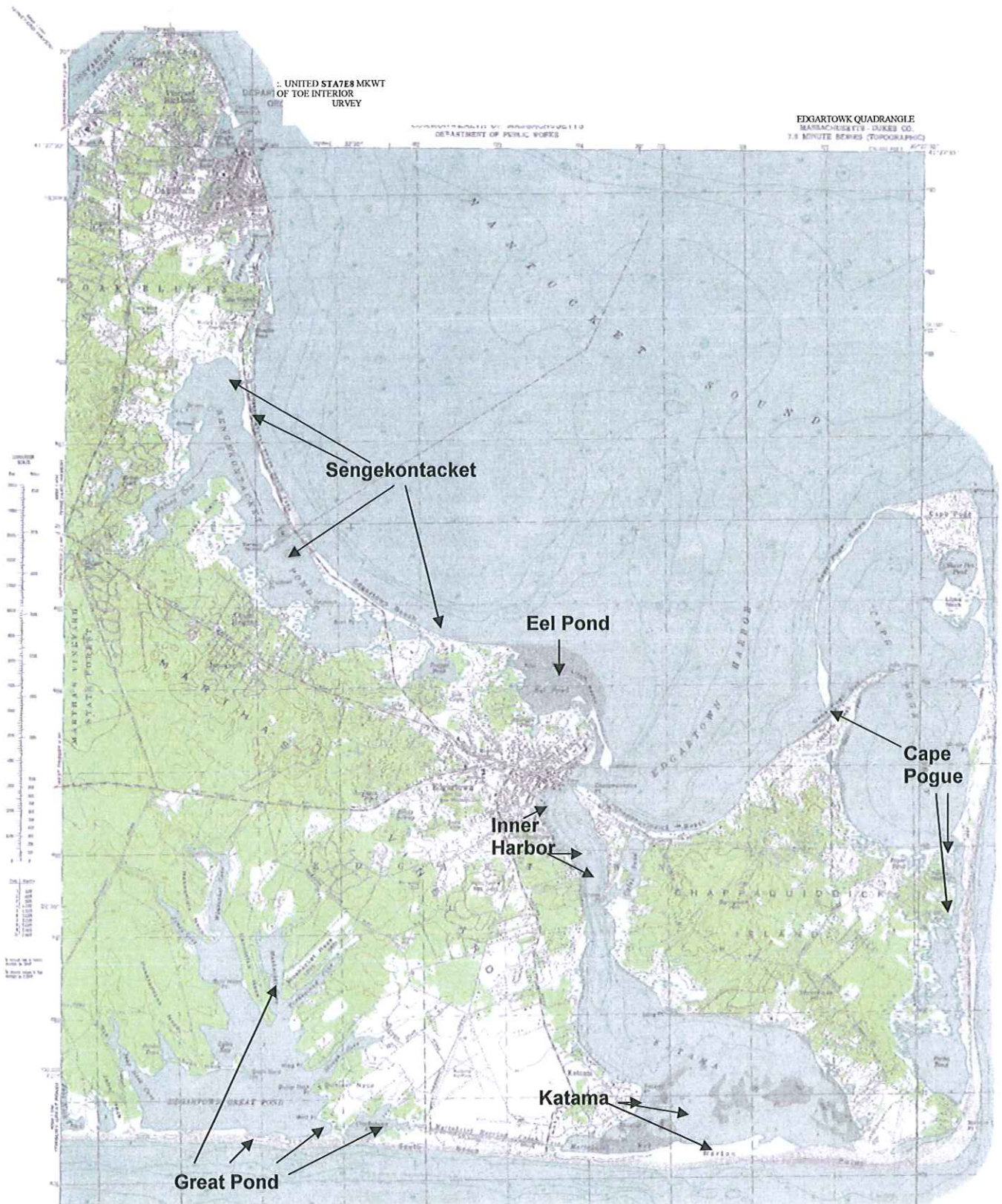
**(4) "...activities specifically required and intended to maintain the depth and opening of the salt pond to the ocean in order to maintain or enhance the marine fisheries...may be permitted."** This project will maintain fisheries habitat, and is designed to maintain the depth and opening of the salt ponds to the ocean.

**(5) "...no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species..."** This project will provide additional and improved nesting habitat for State-listed shorebirds. There are no other known rare species in these ponds.

**Coastal Resource Area: Banks of or Land Under the Ocean, Ponds, ..... that underlie an Anadromous/Catadromous Fish Run (Fish Run):[ 310 CMR 10.35]**

**When such land or Bank is determined to be significant to the protection of Marine Fisheries, 310 CMR 10.35(3) through (5) shall apply:**

- (3) Any project on such land or bank shall not have an adverse effect on the anadromous or catadromous fish run by:**
- (a) Impeding or obstructing the migration of fish.** Prohibiting dredging activity between March 15 and June 15<sup>th</sup> will prevent any obstruction to the migration of the fishery.
  - (b) Changing the volume or rate of flow within the fish run** Rate of flow will be maintained/improved by this project and improve habitat for migration
  - (c) Impairing capacity of spawning or nursery habitats.....**Project is not located in the spawning or nursery habitat
- (4) Unless otherwise allowed by DMF.... Dredging, disposal of dredged material.....shall be prohibited between March 15<sup>th</sup> and June 15<sup>th</sup> in any year** Project is will maintain this time of year restriction.
- (5) ....no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate species.....** Project is designed to have a positive effect and may improve habitat of any rare species



**Edgartown 10 Year Comprehensive Permit  
Edgartown, MA**

**USGS Edgartown Quadrangle**

# **Town of Edgartown Comprehensive Permit Project Description 10 year Update**

## **Introduction**

The following 10 year management and performance plan, updates areas that have benefited from being dredged and need to be maintained, those areas still needing dredging, and the beneficial reuse of dredged material as beach nourishment. The plan also proposes to update the permitting process, by combining all current permits into one 10 year comprehensive Town permit. This 10 year comprehensive permit would streamline the process of maintenance permit renewal. By combining projects, efficiencies of scale, reduction of mobilization and demobilization costs, and savings on sediment testing costs can also be achieved. Additionally, the need for dredging all areas can be met in a timely way with the least navigational and environmental disruption. 173,570 cy of material is currently permitted to be dredged for navigation. 1,853,344 sf of beach is permitted for renourishment.



## **Project Work**

Project work is maintenance dredging that will be conducted with use of the Town owned hydraulic dredge. Hydraulic dredging has the least environmental impact of the dredging methods. A pipe system will be connected to the dredge, through which dredge spoils will move in a slurry and be discharged directly onto permitted sites, as beach nourishment. There are currently 12 areas permitted for renourishment and 17 sites permitted for dredging.

## **I. Project History & Background**

The goal of the Dredging Management Plan Committee, now the Edgartown Dredge Advisory Committee, has been to implement and develop a long range master plan for dredging and dredging management. The Master Plan was completed in March 27, 1996. The plan was incorporated into the, *Edgartown Harbor Plan*, which was approved by the Secretary of Environmental Affairs on October 28, 1997. In 2003 the Dredge Advisory Committee updated and revised this valuable plan. Now, in 2009, the Committee is again updating and revising the Master Plan including a 10 year Comprehensive permit component.

The Dredge Committee had concluded that if the Town wants to accomplish its dredging goals with the least cost in a reasonable amount of time, it made fiscal and implementation sense to lease/purchase a dredge and conduct operations. After the Annual Town Meeting in April 1996, the voters overwhelmingly approved the establishment of the Edgartown Dredge program with the lease/purchase of its own Ellicott 370 dredge and related equipment.

The first project for the dredge program remains its largest, "*The Interim Shore Protection Along Beach Road Project, Oak Bluffs/Edgartown*", for the Massachusetts Highway Department. In addition to dredging an estimated 80,000 cubic yards (CY) of material to save Sylvia State Beach and State Road from erosion, the Town managed a subcontract to build the temporary groin field to further stabilize the beach. In its first year of operation the program leased and assembled a dredge plant, hired and trained a crew and obtained and completed a vital project to protect Beach Road valued at over \$800,000. This is a tremendous accomplishment for any undertaking whether public or private. As part of the Beach Road project the Town obtained a grant to retrain fishermen as dredge crew through the State and Federal Fishing Family Assistance Program. This program was used to train displaced fishermen again for the following two years, and the town continues to employ fishermen.

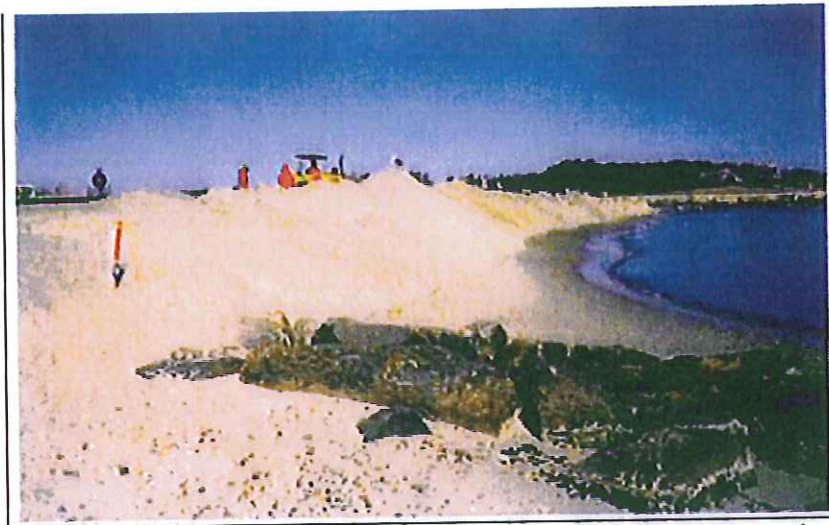
The inception of the dredge program showed the Town's commitment to fishermen and to improving the storm damage and flood control functions of beaches while restoring recreational values and endangered species habitat. This multiple benefit approach improves economics by providing opportunities, protecting resources that are the basis of existing economics, and restoring and enhancing our natural heritage. This approach is typical of all the projects of the dredge program. Miles of beach have been nourished. Navigation and mooring areas have been restored and need to be maintained. In addition, public access has been restored at three public boat ramps with one more scheduled for dredging. Finally, marine and herring habitat was restored at the Great Pond, Crackatuxet Cove, Herring Creek. All this is being done as the Town saves money by using its own dredge and pursuing project grants.

The Committee has sought to carry out dredging in the most cost effective and efficient manner. To that end the Committee has been successful in obtaining Mass Department of Environmental Management, Office of Waterways' grants, some private funding and public/private partnerships for many projects. In addition, the Town has provided dredging services to other Island towns funded by intergovernmental agreements, to maintain regional and local resources such as Sylvia State Beach and the Little Bridge Channel in Oak Bluffs, Vineyard Haven Harbor and Tashmoo Channel in Tisbury. The Committee makes Edgartown projects the top priority for the dredge and outside projects are only done secondarily and as the dredge is available. The Town will continue to seek partnerships in developing and implementing the dredge program.

In developing projects the most conservative approach is taken to protect natural habitats and the resources they produce, which are so valuable to the town. We believe this conservative approach continues to be the most effective in restoring our navigable waterways, nourishing our barrier beaches and protecting habitat. The information contained in this plan will be a guide for the Town's continuing efforts to maintain navigable waterways and the natural marine resources so important to seasonal and year round economies.

## **II. DESCRIPTION OF THE PROGRAM**

The waterways of Edgartown, including; the Harbor, Cape Pogue Bay, Katama Bay, Sengekontacket Pond,



Calebs Pond, Eel Pond and Edgartown Great Pond are the most active waterways on the Island of Martha's Vineyard. These bodies of water support commercial fisheries, including shellfishing, which are an important year round economic activity and a long standing way of life in Edgartown. The historic and scenic harbor is a major destination port for recreational vessels in the region, and home to 700 commercial and recreational vessels with over 1,000 vessels in the harbor on an average summer day. The Harbormaster and his staff are responsible for safe navigation and public and environmental health in these busy waterways. The Harbormaster also manages town moorings, and a marina. These activities generate municipal funds while vessel owners stimulate the local economy.

The Ponds, Bays, Harbors and Beaches of Edgartown are some of the great scenic treasures of the Island. Since the inception of the dredge program, access to these waterways and public beaches has now been improved. One or more dredge projects with beach nourishment have been completed in each of these waterways. The Town's heritage of marine economics and natural beauty and diversity has been partially restored through this program. The Committee has identified new projects to continue this effort.

The Ponds and Bays are, and have been for centuries, the location of commercially harvestable shellfish. Some of the highest populations of quahogs, scallops and soft-shell clams in the state are found in these waterways. This is both a commercial and a recreational fishery. As stated in the harbor economic development plan, "The commercial fishing fleet in Edgartown is generally a fleet of open boats, between 12 and 40 feet. These boats are used for scalloping in the winter, quahogging and clamming during the spring and summer months, and occasionally fishing for flounder or other summer species such as striped bass, bluefish and scup". Shoaling of navigational channels poses a great health and economic threat to the fishermen using these boats especially, during the winter when a grounding in frigid waters can be life threatening. The shellfishing industry continues to provide significant year round employment, an often stated goal of Town and regional plans. The dredge program ensures access for both recreational and commercial fishermen.

### **III. DEVELOPMENT OF PROGRAM**

The 1996 Dredging Master Plan cites the problem to be addressed, "present and future use of these unique New England waterways is now impaired. Shoaling in the harbor and all of the ponds is restricting access and threatening the safety of recreational vessels and shellfishermen." The Plan goes on to say, "Additionally, dredge material and its use at several sites will have multiple benefits for storm and flood control and wildlife habitat. A number of planning efforts have recognized the need for dredging and as a result the Town of Edgartown formed the Dredging Master Plan Committee." Finally, the Plan linked its goals to those of other Town, Island and State planning efforts," This plan provides long-term dredging planning, which will complement goals and policies as recognized in the Draft Edgartown Harbor Plan, the Edgartown Harbor Economic Development Plan, the Town's Master Plan and Open Space Plan, the Martha's Vineyard Commission's Regional Island Plan, the Massachusetts Coastal Zone Management Program Policies and Commonwealth tidelands policy as detailed in MGL Chapter 91 and regulations 310 CMR 9." Because, the Plan was consistent with State policies and programs it was approved by the Secretary of Environmental Affairs and was highly ranked for funding by the Department of Environmental Management's Office of

Waterways. In subsequent years project grants from the Office of Waterways and project funding by the Massachusetts Highway Department were key to paying for the dredge plant as well as project services and labor.

The Dredge Program goals and activities since 1996 have also included environmental restoration of the Town's salt ponds, lagoons and estuaries. Wetlands restoration supports economic activity that is based on sustainable natural systems. This goal and activity was encouraged by the National Oceanic and Atmospheric Administration, National Marine Fisheries Service and the Mass Division of Marine Fisheries.

Restoration activities have included dredging the Great Pond's opening delta (Flat Inside) which resulted in the longest opening in memory, 66 days. Improvements to the Great Pond as marine habitat were immediate with the variety and number of finfish species increasing significantly. Shad was seen in the Pond for the first time in memory. Improved tidal exchange increased salinity an important growth and health factor for the oysters and other shellfish in the Pond. It is hoped that improved growth rates could revitalize the Pond's oyster fishery. The long opening has had an immediate effect on other valuable commercial and recreational fish including herring and the top of the food chain species Striped Bass (see Attachment VIII, Vineyard Gazette Article).

The herring fish way in the Great Pond was also dredged as part of a larger project to rebuild the sluice gate and restore the Great Ponds and Herring Creek estuarine system. This effort has been supported with funds and technical partnerships with the National Oceanic and Atmospheric Administration's, National Marine Fisheries Service, The Fish America Foundation, The Great Pond Foundation, the Mass Division of Marine Fisheries and many Committees and Commissions in the Town of Edgartown (see partners list, Attachment XIII). The Great Ponds and Herring Creek

Dredging the fish run in the Great Pond was a critical first step in restoring the surface water connections from the Great Pond to the Herring Creek and ultimately the ocean. Now herring can find there way from the ocean to spawning habitat in both the Great Pond and Crackatuxet Cove. The link between oceanic and brackish waters is made complete with the restoration of this estuary. This link completes a cycle of life that sustains one of the most productive biomes in the world.

In addition dredged sand was pumped to South Beach a barrier beach. This beach nourishment improved the beaches functions of providing storm damage and flood control and improving endangered species habitat.

Another long term goal of the Dredge Program had been the Town owned Bend in the Road Beach Restoration and State Road Protection project. The Town entered into a successful public/private partnership with the Cow Bay Association which resulted in a project with multiple benefits for storm and flood control, creation of wildlife habitat, and restoration of a popular public beach, and improved navigation at the Sengecontactet Pond entrance.

Bend in the Road is a heavily used public beach and part of the barrier beach system which protects the State Highway, Sengecontacket Pond, and Trapps Pond. Cow Bay beach is part of this system and located adjacent to and south of Bend in the Road. The entire system had become badly degraded. Restoration of this beach system has maximized storm damage protection for the State Highway, the Ponds and upland infrastructure while balancing environmental issues and recreational value. This includes improved beach access ways, dune enhancement and improved beach width. Additional habitat for endangered species was created and enhanced. This project will require maintenance. The Committee has plans to continue the Cow Bay Dune Restoration Project by identifying this area as a site for beneficial reuse of material dredged from navigation maintenance projects.



The need to maintain navigational channels is particularly critical to an Island town which relies on its waterways for much of its economic base. In addition, these projects are important to public health and safety as well as water dependent recreational and commercial interests. In each project the Committee has chosen environmentally sound approaches to limit impacts to natural systems while enhancing their role in providing storm and flood control and natural habitat. Navigation channels in Eel Pond, Katama Bay, Cape Pogue and Caleb's Pond improved access for commercial and recreational shellfishermen. Increased flow may have enhanced shellfish habitat and now support Town shellfish nurseries. Eel Pond navigation channel has been identified as an area which will require additional improvement dredging due to continued severe shoaling, which is restricting recreational boaters and shellfishing access. This shoaling has restricted flow into Eel Pond resulting in poor water quality and shellfish harvesting closures.

Within the vicinity of these projects there are several public properties with water dependent uses. Some of the more important vessel support infrastructure and recreational locations include: Boulevard Landing; Eel Pond landing; Memorial Wharf; Cottage St. ramp; Katama boat ramp; and Wasque landing. The Katama and Eel Pond boat ramps and channels have been dredged and need regular maintenance. In addition the Wilson's Landing ramp is permitted for dredging.

The Committee has and will continue to pursue the most cost effective and efficient approach to dredging the harbor and ponds. To that end the Committee will continue its successful strategy of seeking private and public partnerships to implement projects. Funding partnerships have been successful with the State Department of Environmental Management's (DEM) Office of Waterways, the NOAA's National Marine Fisheries Service, the Fish America Foundation, the Great Pond Foundation, the Seaport Council and private



landowners. In addition the dredge has completed projects in Tisbury and Oak Bluffs. By combining projects, efficiencies of scale, reduction of mobilization and demobilization costs, and savings on sediment testing costs can be achieved. Additionally, the need for dredging all areas can be met in a timely way with the least navigational and environmental disruption.

As in the first management plan, the need for maintenance of these sites will be prioritized based on the Department of Environmental Management's twelve criteria for reimbursement for dredge projects, considerations of cost savings through combining projects, and permitting issues. Each attribute was given a score of one as applied to each project and were totaled to give a quantitative measure to each project. The attributes used in prioritization included:

1. Available funding;
2. Public property, public access;
3. Public access;
4. Town maintained;
5. Public safety;
6. Existing engineering, permits;
7. Urgency;
8. Water dependent;
9. Public purpose;
10. Multiple objectives;
11. Beach nourishment;
12. Local design/permitting funding.

The Committee is continuously monitoring all sites in order to set priorities.

The waterways of Edgartown have a continuing need for maintenance dredging. Big Flat in Sengekontacket needs to be dredged again for beach nourishment and other ponds and bays have not been dredged in over 25 years. Even with ongoing renourishment, pounding storms will continue to erode the Sengekontacket barrier beach from the Little Bridge to Trapps Pond, impairing its function for storm and flood control. State and federal Agencies have been working for years to manage the erosion on this beach. Their Draft Memorandum of Agreement includes beach nourishment of 80,000 cubic yards. The Committee has maintenance permits to protect even more of this barrier beach. This beach is monitored regularly following a recently developed Beach Management plan.

As a result of reduced depths there is a continuing need to dredge and maintain navigation projects. Established channels and ramps require maintenance to prevent commercial fishing vessels and recreational vessels to navigate safely. Maintenance dredging is needed for the shellfishing fleet to continue to safely navigate and maintain tidal exchange into Cape Pogue, Pocha Pond, Eel Pond, and Sengekontacket Pond. Shoaling in these channels and ponds also restricts recreational vessels. The federal project within the harbor has not been dredged since September 1939. As a result of surveys and depth soundings by the harbormaster, thirty areas were identified as needing dredging in 1996. Dredging is a continuous management option to maintain navigation and restore tidal exchange. Completed projects continue to shoal over time and require maintenance dredging, as will the projects not yet completed by the dredge program.

Edgartown Harbor is one of the busiest on Cape Cod and the Islands. Some shoaling areas in the harbor have been dredged, particularly near the Lighthouse, Inner Harbor and at Collins Beach, all requiring maintenance. Shoaling remains in a portion of the mooring areas and increases the potential for grounding and the possibility of collisions with other vessels. This danger is increased when one considers the narrow channel (400') that connects the outer harbor with the inner harbor where the Chappaquiddick ferry crosses. The combination of the increase in current velocity as a result of the Katama breach in 2007 and the increased rate of shoaling near the ferry crossing represent a threat to public safety and public health by:

- restricting vessels from using the established course;
- potential vessel damages from avoiding and/or coming in contact with the hazard
- jeopardizing safe turning and berthing in both the channel and anchorage areas;
- impairing clear line of site and access from anchorage areas to navigation channels

#### **IV. WATER DEPENDENCY & PUBLIC PURPOSE TO BE SERVED BY THE PROGRAM**

##### Constituency

The dredging completed to date has begun to restore access to the waterways, improve tidal exchange and renourish eroded beaches. With the continuation of this program Edgartown's need for dredging and beach nourishment will continue to be met and have a positive impact on the beaches and waterways enjoyed by the entire Island and visitors from all over the United States and abroad. A vast and diverse constituency is being served by the completed projects. The harbor's public access ramps have both been improved or restored by dredging projects at Katama boat ramp and Eel Pond. This provides boating opportunities to many other residents of the region who participate in the Town's and larger regional economy. Restoring tidal exchange and marine habitat restores shellfish and game fish both are fundamental to a way of life in Edgartown. There are approximately 1,000 vessels in the harbor on an average summer day. Perhaps, more important to the community is the year round fishing fleet which relies on open navigation channels and vessel infrastructure. Adequate depths in channels and at wharfs and ramps remain critical to this fleet and therefore the maritime character of the town.

##### Economics

The unmet demand for dredging would have a deleterious effect on the waterways' economic benefits at the local, regional and state levels. Edgartown's economy is fueled by its restaurants, shops marinas, and commercial fishing fleet in its downtown harbor area. Navigation channels and anchorages are the roadways of the water, and their management including dredging is critical for water dependent business and secondary businesses which provide jobs and tax revenues for the town and the state. The lure of a charming active harbor and coast is a unique New England asset that attracts tourists. Dredging helps maintain these waterways and therefore supports these businesses helping them to continue to be an important part of our economy helping support the tax base.

Commercial fisheries are dependent on Edgartown Harbor and access to the shellfish beds in the ponds. This fishery makes a significant contribution to the year round economy. The Harbor provides quick access to fishing grounds and fish buyers.

The dredge program has partners who are studying impacts from dredging on tidal exchange as a result of the Great Pond delta dredging. Various water quality factors, such as salinity, dissolved oxygen, water elevation, temperature and turbidity have been monitored. Arthur Gaines, Coast & Harbor, conducted the study for the Great Pond Foundation which concluded that the "inlet opening event demonstrated beyond question that in-pond geometry near the inlet site is crucial to the success (duration) of the opening", (See Gaines, A.G., (2001). An Assessment of Dredging Effects on Inlet Management in Edgartown Great Pond, Progress Report 1. Coast & Harbor, Woods Hole, MA. 10pp. Attachment X). The April 2001 opening remained open for 66 days the longest opening in memory. Ocean salinities (30 + ppt) were achieved in four days and remained for the duration of the opening. Thus, the dredging helped establish the conditions necessary for commercially and recreationally important fin fish and in this way supported businesses based on these fish (see, Lovewell, M.A. (2001) Along a New Pathway to the Sea: Barrier Beach Opening Restores Failing Health of a Great Pond, Vineyard Gazette, Edgartown, MA. 1pp. Attachment VIII). In addition, it is hoped that if this level of tidal exchange can be achieved during the shellfish growth season (summer) then oyster growth rates and catch can be increased. This oyster fishery is the most significant commercial fishery in the Pond. Its recovery would be a significant boost to the shellfishing industry and its supporting businesses. Although scientific certainty regarding

projects impacts to resources is not attainable the Committee will continue to seek partnerships and grants to provide scientific guidance for its project decisions.

Edgartown continues to be among the states leaders in shellfish catch. Conch remains a valuable fishery with landings of 555,000 pounds worth \$385,000 in 2001. These fisheries are particularly important to the town's and Island's economies as they seek to maintain economic diversity and year round employment opportunities. The state Division of Marine Fisheries uses an economic multiplier of four for calculating the value of fisheries in the larger economy. This means that the dollar value of fish landed is turned over in the community 4 times resulting in an overall value to the economy of \$4,420,880 for shellfish alone in 2001 (see Chart 1). Without dredging this centuries old lifestyle could vanish along with an important contribution to local, regional and state economies. The state and federal governments can support this industry by dredging and nourishing protective beaches.

## **V. MULTIPLE PROJECT BENEFITS**

The Committee has implemented projects with multiple benefits and future projects will continue that policy. Some of these benefits include vessel safety, flood control and storm protection, infrastructure protection, public beach enhancement and habitat restoration. The Town supports the public's access to these restored areas and has dredged three public boat ramps with two others scheduled for dredging. The town ensures equal opportunity and access for all to the ponds, bays and harbors.

While improving access the town is also improving and monitoring water quality. Water tests show the water within Edgartown Harbor is clean with very low traces of fecal coliform. A public boat pump-out program has been running in the harbor funded through the Clean Vessel Act. This program helps maintain and improve water quality and therefore water dependent uses. Dredging the entrances to Cape Pogue and Calebs Pond has improved water quality in the Ponds and resulted in successful shellfish propagation programs. Bacteria levels in Sengecontacket Pond are at an all time high and shellfishing is closed from June to September. Permits are being sought to dredge the inlets and an existing inside channel in an attempt to improve water quality.

It is apparent that dredging and beach nourishment will have multiple benefits and will ensure the vitality of Edgartown waterways well into the twenty-first century. To date miles of barrier and coastal beaches have been nourished and navigation channels and mooring areas restored or improved to design depths, three boat ramps are restored. In addition, endangered species habitat has been created and marine habitat restored.

The Town owned, dredge system has also provided a low cost dredging alternative for other towns on the island. Revenues from leasing the dredge for this purpose has helped pay the Town's equipment expenses and will secondarily help the Town pay for waterways improvements such as boat ramps, wharfs and other needs identified in the harbor comprehensive and economic plans. By "keeping up" with dredging needs this system leads to smaller maintenance dredging projects which are less disruptive to the environment.

Finally, the Committee will continue to explore the possibility of grant funds to study the impacts of maintenance dredging on shellfish production and habitats including eelgrass and barrier beach communities. Paul Bagnall, Shellfish Constable, is part of the Committee and the Committee will continue to work with, the Mass Division of Marine Fisheries, National Marine Fisheries, The Great Pond Foundation, the University of Massachusetts and Boston University and private consultants to understand the programs impacts and restore marine habitat.

## **VI. SUPPORT FOR THE PROGRAM**

The town of Edgartown strongly supports this program not only because it in turn supports important commercial and recreational interests within the town. Town Meeting voters have allocated funds for this

program on an annual basis for labor, capital plant maintenance and engineering and management and permitting services every year since 1996. The project is also supported because maintenance of Edgartown waterways and storm control is synonymous with supporting the character, history and future of the town.



The Town is prepared to provide its cost share for these projects through operation, maintenance and capital costs of its dredge and services.

## **VII. TOWN OWNED HYDRAULIC DREDGE SYSTEM**

As with any infrastructure project the cost of dredging is high. However, dredging is critical to maintaining navigation and our link to coastal resources. As an island community this transportation link provides us with access to the resources that help maintain our independence and define our character.

Dredging involves very specific scientific information and equipment that must be brought to the project location. Thus incurring mobilization and demobilization costs, often significant portions of the total project cost. Additional factors contributing to the high cost of dredging on the island include lack of competition in the private marketplace (there is no hydraulic dredging company on the island), and higher than average mobilization costs due to the distance to the mainland. Add to these conditions the fact that the Department of Environmental Management spends only an estimated \$1.5 million on the island every ten years and you begin to get a picture of why so many Island waterways are long overdue for dredging. In order to address this public need the Dredge Advisory Committee with Town Meeting approval established the Town dredge program.

Elements of the dredge system include capital equipment, management, and staffing. An Ellicott 370 hydraulic dredge with 3,000 ft. of pipe, a pipe fusing machine and two support boats are part of the system. In 2002 an additional 3,000 ft. of pipe was purchased with DEM funds. In 2008 an additional 1000' of pipe was purchased. The dredge plant is sized to meet the dredging needs of Edgartown and is useful to other towns and has been used along with crew by Tisbury and Oak Bluffs under intergovernmental agreements. This dredge pumps primarily clean fine to medium sand at depths less than 15 feet. The dredge draws only 4 ft. so it can access the many ponds and bays needing dredging. With the use of 12" discharge pipe and disposal primarily by direct pumping to nourishment sites, production can be expected at 100 cubic yards per hour. The Town does on occasion lease a booster pump, if it becomes necessary to pump material over 4000 feet.

### **VIII. Permitting**

Dredging remains a complicated and costly endeavor. Permitting on both the State and Federal levels has become more streamlined but is still not efficient. Each Dredging project requires permits from several agencies Local Con Com, DEP Wetlands & Waterways, DEP Chp91, 401 Water Quality Certificate, and the Army Corps of Engineers. Presently the town holds permits for 15 dredging and beach nourishment projects and each permit expires at a different time. It can be cumbersome when addressing immediate dredging needs.

A comprehensive Town Dredging maintenance permit will simplify the permitting process. By combining projects, efficiencies of scale, reduction of mobilization and demobilization costs, and savings on sediment testing costs can also be achieved. Additionally, the need for dredging all areas can be met in a timely way with the least navigational and environmental disruption.



Town of Edgartown Dredge  
Past and Projected Dredge Project Schedule

Location	Date Year Sched	Type New/ Yr Maint	Yr Last Done	Cubic Yardage Permit CY	Future CY
<b>Sengecontactet</b>					
Beach Nourish Proj	2013	N	1997	80,000	30,000
<i>Bridge to Trapps</i>	2013	N			80,000
<i>Blvd Chan</i>	2013	N			20,000
Bend in the Road	2009	N	2009	10,000	
	2016	M			
	2019	M			
Cow Bay Dunes	2009	N	2009	30,000	
	2019	M			
<b>Senge Oak Bluffs</b>					
Big Channel	2009	N/M		10,000	
Little Bridge		N	2002	3000	
<b>Cape Pogue</b>					
<i>Outside Flat</i>	2011	N			1,000
Gut, Narrows, Dyke Bridge		N	1998	1800	
		M	2003		
		M	2007		
	2011	M		1800	3000
	2014	M			
	2017	M			
<b>Eel Pond</b>					
Channel, Ramp, Allen		N	1999	7100	
		M	2000	7100	
		M	2004	7100	
		M	2007	7100	
	2010	M/N		7100	30,000
	2014	M			
	2017	M			
<b>Harbor</b>					
<i>Light House Pond</i>	2012	N			40000
<i>Light House Point</i>	2012	N			15000
LightHouse Culvert		N	1999	2000	
	2012	M			
Collins Beach		N	2001	2900	
		M	2002	2900	
		M	2003	2900	
		N	2002	8500	
Inner Harbor		N			
Collins Beach, Inner Harb	2013	M/N		11400	15000
	2016				

Town of Edgartown Dredge  
Past and Projected Dredge Project Schedule

Location	Date Year Sched	Type New/ Yr Maint	Yr Last Done	Cubic Yardage Permit CY	Future CY
<b>Calebs Pond</b>					
	2014	N	2006	8800	10000
	2017	M			
	2020	M			
<b>Katama</b>					
Boat Ramp & Channel		N	1999	9390	
		M	2005	9390	
Katama E/W Chan		N	2005	4000	
All Katama Projects		M	2007	14390	
	2013	M			
	2015	M			
	2018	M			
	2020	M			
<i>Matakeset</i>	2012	N			20000
<b>Great Pond</b>					
<i>Barrier Beach</i>	2010	N			15000
<i>Jacobs Pond</i>	2010	N			5000
<i>Swan Neck</i>	2010	N			10000
Wilson Boat Ramp	2010	N		500	
Opening/flat		N	2001	9800	
Sluiceway		N	2002	9800	
Opening and Sluiceway	2010	M	2004	19600	
	2013	M			
	2015	M			
HC Restoration		N	2004		
<b>Tisbury</b>					
Tashmoor		N	1998	8800	
		M	2002	10000	
		M	2004	5556	
	2009	M		10,000	
North Groin		N	2000	4300	
	2009	M		4300	
Back Channel	2009	M/N		15000	

Italics indicate Projects in the permitting process

Town of Edgartown  
Comprehensive Maintenance Permit  
Dredging and Nourishment Area Square Footage/ Cubic yardage estimates

Nourishment Areas	Total SF	Above HTL	MHW-HTL	MLW-MHW	Above MHW	Below MHW
Cape Pogue Elbow	148,000	148000				
Narrows (Trails/beach)	86000				86,000	
Dike Bridge (OVR Trails)	21000	21000				
Eel Pond Barrier Island, Beach	217,000	50000				167000
Eel Pond Froelich (Private)	29200	9700	19500			
Lighthouse (Fuller) Beach	82,000				74580	7420
Area "E" (Private)	68,500	50,000	5700	12800		
Area "A-"D", "F" (Private)	93230	27375	8575	20300		36710
Norton Point	153,500	153500				
South Beach	213,630	85640	72143	55,847		
Great Pond Ramp	10,270	10270				
Bend in the Road Beach	71874	23957				47917
Cow Bay Dunes (Private)	175113				175113	
Sylvia State Beach	484,027	464749				19278
<b>Nourishment Total SF</b>	<b>1,853,344</b>	1,044,191	105918	88947	335693	278325

Dredge Sites	Total SF	Total cy	Project areas
Borrow Area #1	720,000	68,000	Sengecontacket Pond (Edgartown)
Borrow Area #2	147,814	2500	Sengecontacket Pond (Oak Bluffs)
Great Pond	253186	19,600	Channel, Sluiceway,
Herring Creek Restoration	15000	5400	Herring Creek
Great Pond Ramp	3415	500	Wilson Landing
<b>Total Salt Pond</b>	<b>1,009,415</b>	96,000	

Little Bridge	12,000	4000	Sengecontacket Pond (Oak Bluffs)
Eel Pond (EP)	59000	4600	Ramp, Channel,
Cape Pogue	228500	14,800	Narrows, Gut, Dyke Bridge
Inner Harbor	239690	40805	Harbor, Lighthouse, Collins, Calebs Pond
Katama Bay	147834	13,365	Ramp and channel, Katama Bay
<b>Total Land under Ocean</b>	<b>705,325</b>	77570	
<b>Dredging Total SF/CY</b>		<b>1,714,740 SF</b>	<b>173,570c y</b>