

For Office Use Only
 Executive Office of Environmental Affairs
 MEPA Analyst: *Bill Gage*
 Phone: 617-626-1025

NPC

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name: Sengekontacket Pond Dredging, Beach Nourishment and Dune Restoration		EOEA #: 14138
Street: Sengekontacket Pond, southern end of Sylvia State Beach, Bend in the Road Beach, Cow Bay Beach		
Municipality: Edgartown	Watershed: Sengekontacket Pond	
Universal Transverse Mercator Coordinates:	Latitude: 041° 24' 43" N Longitude: 070° 32' 37" W	
Status of project construction: 0 %complete		
Proponent: Town of Edgartown, Attn: Lynn Fraker, Dredge Administrator		
Street: Town Hall, 70 Main St.		
Municipality: Edgartown	State: MA	Zip Code: 02539
Name of Contact Person From Whom Copies of this NPC May Be Obtained: Tara Marden		
Firm/Agency: Woods Hole Group, Inc.	Street: 81 Technology Park Dr.	
Municipality: East Falmouth	State: MA	Zip Code: 02536
Phone: 508-495-6232	Fax: 508-540-1001	E-mail: tmarden@whgrp.com

In 25 words or less, what is the project change? The project change involves reconstruction of the badly eroded frontal dune along the Cow Bay Beach as Phase I of the Sengekontacket Dredging project.

 See full project change description beginning on page 3.

Date of ENF filing or publication in the Environmental Monitor: ENF Filed November 14, 2007

Was an EIR required? Yes No; if yes,
 was a Draft EIR filed? Yes (Date:) No To be filed.
 was a Final EIR filed? Yes (Date:) No
 was a Single EIR filed? Yes (Date:) No

Have other NPCs been filed? Yes (on March 13, 2008) No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed:

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))
 Yes No; if yes, attach justification.

Change is insignificant because it does not expand the project, generate any further impacts, change project site, is not a new application for permit or financial assistance or Land transfer, does not delay environmental benefits but by phasing project, benefits will be realized closer to schedule.

Are you requesting that a Scope in a previously issued Certificate be rescinded?
 Yes No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate? Yes No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	27.5± Dredge area and Barrier beach	0	27.5± Dredge area and Barrier beach
Acres of land altered	13.3± dune replenishment and beach nourishment	0	13.3± dune replenishment and beach nourishment
Acres of impervious area	0	0	
Square feet of bordering vegetated wetlands alteration	0	0	
Square feet of other wetland alteration	13.9± acres dredging	0	13.9± acres dredging
Acres of non-water dependent use of tidelands or waterways	0	0	
STRUCTURES			
Gross square footage	N/A		
Number of housing units	N/A		
Maximum height (in feet)	N/A		
TRANSPORTATION			
Vehicle trips per day	N/A		
Parking spaces	N/A		
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A		
GPD water withdrawal	N/A		
GPD wastewater generation/ treatment	N/A		
Length of water/sewer mains (in miles)	N/A		

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? Yes No

4. impact on 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 No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes No

5. impact upon an Area of Critical Environmental Concern? Yes No

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

- (a) a brief description of the project as most recently reviewed
- (b) a description of material changes to the project as previously reviewed,
- (c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
- (d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

Project Description as Recently Reviewed

As described in the Environmental Notification Form, the most recently reviewed project consists of dune enhancement and beach nourishment on State, Town, and privately owned beaches thru the performance of navigation dredging within Sengekontacket Pond. A total volume of 85,000 to 90,000 cubic yards will be dredged over an area of 13.9 acres from the main channel, which is proposed to be 6,060 ft long by 100 ft wide and 6 ft deep. Proposed beach nourishment will cover 13.6 acres of Barrier and Coastal Beach, Coastal Dune, and nearshore areas of Land Under the Ocean.

Proposed Project Change

The Town proposes to phase this project by reconstructing the badly eroded frontal dune along the Cow Bay Corporation beach located on Nantucket Sound in Edgartown, as Phase I of the Sengekontacket Dredging Project. The proposed project requires the placement of 27,000 cubic yards of beach compatible sediment along a 3,140-foot stretch of beach/dune (4.02 acres) above mean high water for dune reconstruction. The work is shown on the attached plans entitled "Plan Accompanying Petition of Dune Design for Cow Bay Beach" by Woods Hole Group, Inc., Sheets 1-9, dated 10/2/2008.

Sediment cores that were collected during the EIR field data collection process revealed that the lower half of the proposed navigation channel contains sediments that are not compatible for beach nourishment. Therefore, an alternative source of sand for a portion of the previously reviewed project is necessary to meet the engineering design for the Cow Bay beach and dune. The Town of Edgartown currently has permits to dredge, dredge area #1 just inside the entrance

to the Big Bridge in Sengekontacket Pond. Periodic maintenance dredging of the borrow site helps to keep the main navigation channel into the Pond viable. The Town has agreed that dredging the previously permitted borrow site for the Cow Bay dune project will not only benefit the Town by improving navigation within the Pond, but will enhance the Bend in the Road (BITR) project by creating a contiguous dune from Sylvia State beach, updrift of BITR, across Bend in the Road Beach to the privately owned Cow Bay Beach. The Cow Bay project will provide additional sediment to the sand starved barrier system, helping to increase the longevity of the BITR project, which protects the State highway.

The proposed nourishment sediments will be pumped by the Town owned hydraulic dredge from the previously permitted dredge area #1 in Sengekontacket Pond (Corps permit number NAE-2006-3749, Chapter 91 Permit No.11859) with the use of a booster pump. This dredge area is outside of the limits of the current project under review and should be considered maintenance dredging. This dredging will maintain the navigation channel within the Pond that leads to the Big Bridge. The sand from the permitted dredge site will be pumped through a pipe to the beach nourishment site on Bend in the Road Beach, which recently received a Phase I waiver. The dredge pipe will run under the Big Bridge to Sylvia State Beach to avoid any impacts on salt marsh or other resource areas.

Per National Marine Fisheries Service (NMFS), the dredge slurry will be dewatered in a dewatering pit/trench constructed on Bend in the Road Beach to allow the suspended sediment (i.e. sediment slurry) to settle and the water to percolate through the sand back to Nantucket Sound. The scheduling of dredging and dewatering shall be such that the capacity of the dewatering pit/trench is not exceeded under any circumstances. This method will be used to reduce turbidity and sedimentation effects on Essential Fish Habitat (EFH). The dredge pipe will not run thru the Trapps Pond culvert for this Phase 1 project as it is proposed for the current project under review. The dewatered sediments will be transported via rubber-tired dump trucks from Bend in the Road beach to the Cow Bay dune, which abuts the Bend in the Road dune. The Cow Bay dune project will be entirely constructed above the position of mean high water. The combined project will result in a contiguous dune between Sylvia State Beach and Cow Bay. No beach nourishment will be placed between April 1st and August 31st and dredging will follow time of year restrictions to avoid impacts to winter flounder. The total area impacted by the Cow Bay dune reconstruction is 4 acres.

The Cow Bay dunes are slowly disappearing over time, and have been completely wiped out in some areas. Along the mid-section of the property, there is an 800-foot long stretch of beach where the dune has degraded significantly. Because of the poor condition of the barrier beach in this area, the resource provides little to no storm damage protection or flood control for the surrounding wetlands or upland properties. There continues to be a threat of overwash into Trapps Pond, which could adversely affect the marine, benthic, and plant life that makes up the Pond ecosystem. The existing dune is so narrow and low-lying, that it will provide essentially no storm damage protection or flood control during even a low energy storm. Continued loss of the recreational beach is also a likely scenario if erosion of the existing dune continues. Maintenance of a healthy dune system is imperative for sustaining a viable beach, as the two resources naturally exchange sediment as they respond to wind and wave activity. Without improved

management of this area, the barrier beach will continue to retreat landward and the dune and beach will become increasingly narrower over time. Loss of the sandy access road that runs across the backside of the dunes along entire length of the Cow Bay property is possible if the coastal dune is not restored and maintained. This road provides access to several Cow Bay properties and its viability is threatened if the dune is not restored.

The schedule for the Cow Bay portion of the project is ambitious, but achievable with the allotted dredging window. However, a Phase I waiver must be obtained as quickly as possible as the Edgartown Dredge has already been mobilized for the Bend in the Road project. Financial support provided by the Cow Bay Corporation for the dune project will provide much needed economic backing to the Edgartown dredge for the Bend in the Road project as well as future dredging projects. The total acreage between the Bend in the Road project and the Cow Bay dune project is 5.72 acres.

Alternatives Analysis:

1. **No build:** The no-build option for the Cow Bay dune project will eventually have devastating affects. The dune system will continue to erode and overwash, threatening the Trapps Pond ecosystem and the upland properties. The barrier is so narrow in spots, and the dune is virtually non-existent along certain stretches, with Trapps Pond just on the landward side. If the dune project is postponed, the thin barrier may eventually intersect with the seaward side of the Pond and access to the southern portions of the Cow Bay beach could be cut off. The recreational beach will continue to narrow, limiting and eventually eliminating it function and use.
2. **Dune reconstruction:** Dune reconstruction will provide much needed storm damage protection and flood control along the Cow Bay beach by increasing the height and width of the dune above the 25-year still water elevation. This will provide protection to the recreational beach and Trapps Pond for the interterm, while the larger beach nourishment project continues the regulatory review process through MEPA. This project will have minimal environmental impacts to water quality as the disposal site is completely above mean high water, and the dewatering pit located on Bend in the Road Beach will be used regardless of this project being approved. As is required by the existing permits for the borrow site, all of the dredging will be done during the winter months, when fisheries resources are known for being relatively inactive. The dredging will aid navigation and improve boating safety inside the entrance to the Pond. Financial support provided by the Cow Bay Corporation will provide much needed economic backing to the Edgartown dredge for the Bend in the Road project as well as future dredging projects.
3. **Dune reconstruction from an upland source:** Compatible beach and dune nourishment sediments are not available on the island of Martha's Vineyard, and therefore would have to be barged to the island from the mainland. The closest and perhaps the only facility on the Island where an appropriate barge could dock and unload a suitable quantity of sand is in Vineyard Haven, approximately 6 miles away. Using this facility would require transporting the sand to the Cow Bay site via dump truck in as many as 1800 loads, which

would have to traverse public roads in Vineyard Haven, Oak Bluffs and Edgartown. The sand would then be dumped on Bend in the Road Beach and transported up the beach to the Cow Bay dune, where it would be dumped and then graded with a front-end loader. The costs associated with barging from the mainland and rehandling of the sediments as many as four times, would cost approximately \$50.00 yard. This would be prohibitively expensive and the use of so many trucks would be more damaging to the environment and public roadways.



Preferred Alternative: **Alternative No. 2** - Dune Reconstruction with dredging conducted by the Town of Edgartown hydraulic dredge.

ATTACHMENTS & SIGNATURES

Attachments:

1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. 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
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

			
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing NPC (if different from above)
	Tara Marden for Lynne Fraker, Dredge Administrator		Tara Marden, Coastal Geologist
	Name (print or type)		Name (print or type)
	Town of Edgartown		Woods Hole Group, Inc.
	Firm/Agency		Firm/Agency
	70 Main St., PO Box 739		81 Technology Park Dr.
	Street		Street
	Edgartown, MA 02539		East Falmouth, MA 02536
	Municipality/State/Zip		Municipality/State/Zip
	508-989-5840		508-495-6232
	Phone		Phone