

**Hashamomuck Cove
Southold, New York
Coastal Storm Risk Management
Integrated Feasibility Study/EA**

**Appendix A6
Clean Water Act
Section 404(b)(1)Evaluation**

**DRAFT CLEAN WATER ACT
SECTION 404(b) (1) GUIDELINES
EVALUATION**

**North Shore of Long Island, Hashamomuck Cove Coastal Storm Risk
Management Feasibility Study**

INTRODUCTION

This document presents a Section 404(b) (1) guidelines evaluation for the coastal storm risk management (CSRM) project at Hashamomuck Cove, in Southold, New York. The recommended plan includes beach fill using suitably sized sand. Best management practices will be fully utilized to ensure that turbidity and sedimentation are limited to the area immediately adjacent to the project site and minimized to the greatest extent possible. This evaluation is based on the regulations presented in 40 CFR 230, Section 404(b) (1): Guidelines for Specification of Disposal Sites for Dredged or Fill Material. The regulations implement Sections 404(b) and 401(1) of the Clean Water Act, which govern disposal of dredged and fill material inside the territorial seas baseline [§230.2(b)].

As stated in Section 230.10(a) (4): For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. The Integrated Feasibility Report and Environmental Assessment (FR/EA) for the Hashamomuck Cove CSRM project, provides the documentation necessary to attest that the project is fully in compliance with the Section 404(b) (1) guidelines. The FR/EA provides a full project description and location, description of existing conditions, alternatives analysis, and description of potential impacts as a result of the project and the project's construction. The analysis provided within the FR/EA, that will be also be used during the application process for the NYDEC State Water Quality Certificate under Section 401(1), documents that the implementation of this CSRM project will not cause or contribute to significant degradation of the waters of the United States, as is demonstrated in the following sections and tables.

PROJECT DESCRIPTION

Location: The Hashamomuck Cove study area is in Southold, New York on the north fork of Long Island on Long Island Sound. The study area extends from Soundview Road near the Southold Town Beach west about 1.5 miles. The majority of the properties within the Study Area are residential, with a restaurant and motel on the eastern end. There is a Town Beach on the

western end. The study area is made up of three coves separated by headlands referred to as West Cove (which is the location of Southold Town Beach), Central Cove, and East Cove. County Road 48 parallels the coast and intersects the coves.

The proposed plan for Hashamomuck Cove includes the placement of fill material at the West, Central, and East Coves to rebuild the beaches with a 25' wide beach and berm. The source of the initial sand for the beach fill will be from an upland off-site source. Periodic renourishment is anticipated during the 50 year project life, with the renourishment sand trucked in from a certified upland source. The West Cove will involve 164,000 square feet (SF) of intertidal disturbance and 69,000 (SF) of subtidal disturbance. The Central Cove will have 149,000 SF of intertidal disturbance and 172,000 SF of subtidal disturbance. The East Cove will result in 175,000 SF of intertidal disturbance and 210,000 SF of subtidal disturbance.

General Characteristics of Fill Material: The material that will be used for beach renourishment will have similar characteristics to existing conditions (grain size and color). The material will be free of debris and trucked from an upland sand source to the site.

Description of Proposed Discharge Site: All sand material will be placed on the project beach in pre-designated locations according to the project design.

Time and Duration of Disposal: The placement of fill material will take approximately one year to complete. Construction is estimated to begin in January and continue until the project is complete.

Disposal Method: Sand would be trucked to the site and the upland sand would be delivered to staging points where direct access to the beach could be gained by equipment needed to transport and spread sand on the beach. It is anticipated that articulated end-dump trucks would be used for transporting sand along the beach. These specially designed trucks are suitable for work directly on the beach. The articulated end-dumps would deposit loads at appropriate intervals, for subsequent spreading and regrading by bulldozers or front end loaders. The materials would be spread down to the mean low water line. Deposited materials between the mean low water and the mean high water would be redistributed by each tide cycle. This construction cycle would repeat until the design profile is achieved.

1. Review of Compliance – Section 230.10(a)-(d)

	YES	NO
a. The discharge represents the least environmentally damaging practicable alternative and, if in a special aquatic site, the activity associated with the discharge must have direct access or proximity to, or be located in the aquatic ecosystem to fulfill its basic purpose.	X	
b. The activity does not appear to: 1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of the CWA; 2) jeopardize the existence of Federally listed threatened and endangered species or their habitat; and 3) violate requirements of any Federally designated marine sanctuary.	X	
c. The activity will not cause or contribute to significant degradation of waters of the U.S. including adverse effects on human health, life stages of organisms dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic and economic values.	X	
d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.	X	

2. Technical Evaluation Factors (Subparts C-F)

	N/A	NOT SIGNIFICANT	SIGNIFICANT
a. Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C)			
1) Substrate		X	
2) Suspended particulates/turbidity		X	
3) Water column impacts		X	
4) Current patterns and water circulation		X	
5) Normal water circulation		X	
6) Salinity gradients		X	
b. Potential Impacts on Biological Characteristics on the Aquatic Ecosystem (Subpart D)			
1) Threatened and endangered species		X	
2) Fish, crustaceans, mollusks, and other organisms in the aquatic food web		X	
3) Other wildlife (mammals, birds, reptiles and amphibians)		X	
c. Potential Impacts on Special Aquatic Sites (Subpart E)			
1) Sanctuaries and refuges	X		
2) Wetlands		X	
3) Mud Flats	X		
4) Vegetated Shallows	X		
5) Coral reefs	X		
6) Riffle and pool complexes	X		
d. Potential Effects on Human Use Characteristics (Subpart F)			
1) Municipal and private water supplies	X		
2) Recreational and commercial fisheries		X	
3) Water-related recreation		X	
4) Aesthetic impacts		X	
5) Parks, national and historic monuments, national seashores, wilderness areas, research sites and similar preserves		X	

3. Evaluation and Testing – Subpart G

A. THE FOLLOWING INFORMATION HAS BEEN CONSIDERED IN EVALUATING THE BIOLOGICAL AVAILABILITY OF POSSIBLE CONTAMINANTS IN DREDGED OR FILL MATERIAL. (CHECK ONLY THOSE APPROPRIATE.)		
1) Physical characteristics		X
2) Hydrography in relation to known or anticipated sources of contaminants		
3) Results from previous testing of the material or similar material in the vicinity of the project		
4) Known, significant sources of persistent pesticides from land runoff or percolation		
5) Spill records for petroleum products or designated hazardous substances (Section 311 of CWA)		
6) Public records of significant introduction of contaminants from industries, municipalities or other sources		X
7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities		X
8) Other sources (specify)		X
List appropriate references – See Environmental Assessment		
	YES	NO
b. An evaluation of the appropriate information factors in 3a above indicates that there is reason to believe the proposed dredged material is not a carrier of contaminants, or that levels of contaminants are substantively similar at extraction and disposal sites and not likely to require constraints.		X

4. Disposal Site Delineation - Section 230.11(f)

A. THE FOLLOWING INFORMATION HAS BEEN CONSIDERED IN EVALUATING THE BIOLOGICAL AVAILABILITY OF POSSIBLE CONTAMINANTS IN DREDGED OR FILL MATERIAL. (CHECK ONLY THOSE APPROPRIATE.)		
1) Depth of water at disposal site		X
2) Current velocity, direction, variability at disposal site		X
3) Degree of turbulence		X
4) Water column stratification		X
5) Discharge of vessel speed and direction		N/A
6) Rate of discharge		X
7) Dredged material characteristics (constituents, amount, and type of material, settling velocities)		X
8) Number of discharges per unit of time		X
9) Other factors affecting rates and patterns of mixing (specify)		X
List appropriate references – See Environmental Assessment		
	YES	NO
b. An evaluation of the appropriate information factors in 4a above indicated that the disposal sites and/or size of mixing zone are acceptable.		X

5. Actions to Minimize Adverse Effects (Subpart H)

	YES	NO
All appropriate and practicable steps have been taken, through application of recommendation of Section 230.70-230.77 to ensure minimal adverse effects of the proposed discharge.	X	

6. Factual Determination – Section 230.11

A REVIEW OF APPROPRIATE INFORMATION, AS IDENTIFIED IN ITEMS 2-5 ABOVE, INDICATES THERE IS MINIMAL POTENTIAL FOR SHORT OR LONG- TERM ENVIRONMENTAL EFFECTS OF THE PROPOSED DISCHARGE AS RELATED TO:		
	YES	NO
a. Physical substrate at the disposal site (review Sections 2a, 3, 4 and 5 above)	X	
b. Water circulation, fluctuation and salinity (review Sections 2a, 3, 4 and 5)	X	
c. Suspended particulates/turbidity (review Sections 2a, 3, 4 and 5)	X	
d. Contaminant availability (review Sections 2a, 3 and 4)	X	
e. Aquatic ecosystem structure, function and organisms (review Sections 2b, 2c, 3 and 5)	X	
f. Proposed disposal site (review Sections 2, 4 and 5)	X	
g. Cumulative effects on the aquatic ecosystem	X	
h. Secondary effects on the aquatic ecosystem	X	

	YES	NO
The proposed disposal site for discharge of dredged or fill material complies with Section 404(b) (1) guidelines.	X	

7. Findings of Compliance or Non-Compliance

In summary, the implementation of the recommended plan to construct a coastal storm risk management project at Hashamomuck Cove:

Will have no adverse effects in regard to the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites;

Will have no significant adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

Will have no significant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability;

Will have no significant adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

DATE:	SIGNATURE BLOCK