



**US Army Corps  
of Engineers®**  
New York District

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**LAKE MONTAUK HARBOR, EAST HAMPTON, NEW YORK  
NAVIGATION IMPROVEMENTS**

**FINAL ENVIRONMENTAL ASSESSMENT  
OCTOBER 2020**

**APPENDIX A:  
Clean Water Act  
Section 404(b)(1) Guidelines Evaluation**

## Table of Contents

1. Introduction .....	4
2. Project Description .....	4
2.1. Location.....	4
2.2. General Description of Selected Plan: .....	5
2.3. Authority and Purpose:.....	5
3. General Construction and Material Descriptions: .....	5
3.1. General Characteristics of Fill Material: .....	6
3.2. Quantity of Material: .....	6
3.3. Sources of Dredged Material: .....	6
3.4. Description of Proposed Discharge Site: .....	6
3.5. Time and Duration of Disposal: .....	6
3.6. Disposal Method: .....	6
3.7. Construction Sequence:.....	6
4. Factual Determinations.....	7
4.1. Review of Compliance – Section 230.10(a)-(d).....	7
4.2. Technical Evaluation Factors (Subparts C-F) .....	7
4.3. Evaluation and Testing – Subpart G .....	8
4.4. Disposal Site Delineation - Section 230.11(f).....	9
4.5. Actions to Minimize Adverse Effects (Subpart H) .....	9
4.6. Factual Determination – Section 230.11 .....	9
4.7. Findings of Compliance or Non-Compliance .....	10

**List of Tables:**

Table 1: Review of Compliance - Section 230.10 (a) - (d)..... 7

Table 2: Technical Evaluation Factors (Subparts C-F)..... 7

Table 3: Evaluation and Testing (Subpart G) ..... 8

Table 4: Disposal Site Delineation - Section 230.11(f) ..... 9

Table 5: Actions to Minimize Adverse Effects (Subpart H)..... 9

Table 6: Factual Determination (Section 230.11)..... 9

Table 7: Findings of Compliance or Non-Compliance..... 10

## **1. Introduction**

This document presents a Section 404(b)(1) guidelines evaluation for the navigation project at Lake Montauk, East Hampton, New York. The recommended plan includes dredging sand from the channel and deposition basin. This dredged material (sand) will be placed upland (above the mean high water mark) on the upland portion (above high tide) eroded barren beach west of the inlet. The discharge to waters of the U.S. that may occur related to the project would be the placement of the fill material into shallow waters. 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 EA, to which this evaluation is an appendix, provides the documentation necessary to attest that the project is fully in compliance with the Section 404(b)(1) guidelines. The EA provides a full project description and location, description of existing conditions, full alternatives analysis, and description of potential impacts as a result of the project and the project's construction. The analysis provided within the EA along with the review that will be undertaken during the application process for the NYDEC State Water Quality Certificate under Section 401(1) will document that the implementation of this navigation 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.

## **2. Project Description**

### **2.1. Location**

The Lake Montauk Harbor Navigation Project, Montauk, New York, is intended to ensure safe and efficient navigation of the Federally-authorized channel. The study area, Lake Montauk Harbor, is located on the northern shore of the south fork of Long Island, within the Town of East Hampton, Suffolk County, New York. The study area is approximately 125 miles east of New York City, 21 miles southwest of New London, Connecticut, and about 3 miles west of Montauk Point. Lake Montauk Harbor is also situated about 4 miles east of Fort Pond Bay, the nearest harbor in its vicinity. Lake Montauk Harbor is approximately 2.0 miles long in a north-south orientation and .7 miles wide, on the average, and encompasses 1,037 acres with a mean depth of seven feet. The harbor is landlocked on the east, south, and west sides. To the north, it connects with Block Island Sound through an inlet, which is fronted by two rock jetties.

The study area, in its broadest sense, consists of the area bounded by Fort Pond Bay on the west and Shagwong Point on the east.

## **2.2. General Description of Selected Plan:**

## **2.3. Authority and Purpose:**

The Lake Montauk Harbor Federal Navigation Project was first authorized by the Rivers and Harbors Act of 2 March 1945, House Document No. 369, 76<sup>th</sup> Congress, 1<sup>st</sup> Session. It authorized construction of a channel 12 feet deep at MLW and 150 feet wide, extending from the 12 foot contour in Block Island Sound to the same depth in the existing yacht basin northeast of Star Island; for a boat basin 10 feet deep, 400 feet wide and 900 feet long, located northwest of Star Island. A further study for Lake Montauk Harbor was authorized by a Senate Committee resolution adopted October 17, 1991 to determine if further improvements for navigation are advisable. The complete history of the current study's authorization is located in the EA, Section 1.2.

## **3. General Construction and Material Descriptions:**

Components of the project design include deepening the Federal channel to -17 ft MLLW within both the inner and outer channels construction of the 100-ft wide deposition basin to -17 ft MLLW plus 2-ft overdredge. Future channel maintenance operations are assumed to include removal of material from the channel and deposition basin. Initial volume to complete the designated beach fill plan is approximately 188,000 cubic yards (cy) of suitable material. Construction of the deposition basin and channel deepening is expected to extend the maintenance dredging cycle from between 3-4 to 7- 8 years. Dredged channel and basin material would be placed on the upland portion of the downdrift beach. An over dredge depth of 2-ft was assumed for the length of the dredged channel and within the deposition basin.

Determination of maintenance dredging cycle lengths for this project assumed a minimum volume of dredging per operation of 14,000 cy. Maintenance dredging was assumed to take place only after at least 14,000 cy shoals into the channel. The maximum allowable cycle length was determined by assuming that maintenance dredging must take place when 60-70% of the initial construction volume has shoaled. Using these assumptions, maintenance dredging cycles of approximately 7 years are anticipated, assuming removal of approximately 56,000 cy per cycle.

The initial construction removal of approximately 188, 000 cy from the channel/deposition basin would be done using a hydraulic cutterhead dredge. A 50 year project life is assumed.

The length of the constructed placement site is approximately 3,000, which will be placed west of the inlet, with a berm width of approximately 46' (+8 NGVD).

### **3.1. General Characteristics of Fill Material:**

The material dredged from the inlet is approximately 90-99.0% sand, which eliminates concerns regarding the use of fine grain material from external sources, which would have to be tested for contaminants to ensure its acceptability for placement.

### **3.2. Quantity of Material:**

The estimate of the volume of material being dredged from all sources is approximately 188, 000 cubic yards.

### **3.3. Sources of Dredged Material:**

Lake Montauk Inlet Channel

Deposition Basin

### **3.4. Description of Proposed Discharge Site:**

All dredged material will be disposed of on the project site as described above in pre-designated locations according to the project design.

### **3.5. Time and Duration of Disposal:**

The dredging and placement of fill material will take place between 1 November and 1 January. General construction durations for the project is not likely to exceed 80 days.

### **3.6. Disposal Method:**

Excavated material will be moved via pipeline to the proper onsite beach disposal areas and re-distributed and regarded via the use of land based equipment.

### **3.7. Construction Sequence:**

The project construction sequence is most likely to be simultaneously constructed channel and basin.

## 4. Factual Determinations

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

Table 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	

### 4.2. Technical Evaluation Factors (Subparts C-F)

Table 2: Technical Evaluation Factors (Subparts C-F)

	N/A	NOT SIGNIFICANT	SIGNIFICANT
<b>a. Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C)</b>			
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>b. Potential Impacts on Biological Characteristics on the Aquatic Ecosystem (Subpart D)</b>			
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	
<b>c. Potential Impacts on Special Aquatic Sites (Subpart E)</b>			

	N/A	NOT SIGNIFICANT	SIGNIFICANT
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		
<b>d. Potential Effects on Human Use Characteristics (Subpart F)</b>			
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		

### 4.3. Evaluation and Testing – Subpart G

Table 3: Evaluation and Testing (Subpart G)

<b>A. THE FOLLOWING INFORMATION HAS BEEN CONSIDERED IN EVALUATING THE BIOLOGICAL AVAILABILITY OF POSSIBLE CONTAMINANTS IN DREDGED OR FILL MATERIAL. (CHECK ONLY THOSE APPROPRIATE.)</b>		
1) Physical characteristics		X
2) Hydrography in relation to known or anticipated sources of contaminants		X
3) Results from previous testing of the material or similar material in the vicinity of the project		X
4) Known, significant sources of persistent pesticides from land runoff or percolation		N/A
5) Spill records for petroleum products or designated hazardous substances (Section 311 of CWA)		N/A
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		N/A
8) Other sources (specify)		N/A
<b>List appropriate references – See Environmental Assessment</b>		
	<b>YES</b>	<b>NO</b>
<b>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</b>	<b>X</b>	



that levels of contaminants are substantively similar at extraction and disposal sites and not likely to require constraints.		
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#### 4.4. Disposal Site Delineation - Section 230.11(f)

Table 4: Disposal Site Delineation - Section 230.11(f)

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

#### 4.5. Actions to Minimize Adverse Effects (Subpart H)

Table 5: Actions to Minimize Adverse Effects (Subpart H)

	<b>YES</b>	<b>NO</b>
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	

#### 4.6. Factual Determination – Section 230.11

Table 6: Factual Determination (Section 230.11)

<b>A REVIEW OF APPROPRIATE INFORMATION, AS IDENTIFIED IN ITEMS 2-5 ABOVE, INDICATES THERE IS MINIMAL POTENTIAL FOR SHORT OR LONG-</b>		
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<b>TERM ENVIRONMENTAL EFFECTS OF THE PROPOSED DISCHARGE AS RELATED TO:</b>		
	<b>YES</b>	<b>NO</b>
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	

#### **4.7. Findings of Compliance or Non-Compliance**

*Table 7: Findings of Compliance or Non-Compliance*

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

In summary, the implementation of the recommended plan to deepen the navigation channel and widen and deepen the deposition basin, and place the dredged material on the beach:

Will have no adverse effects of 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.