US Army Corps of Engineers®
New York District

U. S. Army Corps of Engineers
&
New York State Department of Environmental Conservation

PUBLIC INFORMATION MEETING

Navigation Improvements and Coastal Storm Risk Management Project

Lake Montauk Harbor Feasibility Study

5:30 – 6:30	Informal Poster Session
6:30 – 7:30	Presentation Q&A session
7:30 – 8:30	Poster Session

US Army Corps of Engineers®
New York District

U. S. Army Corps of Engineers
&
New York State Department of Environmental Conservation

PUBLIC INFORMATION MEETING

Meeting Purpose:

Alternative Analysis generated 2 plans which achieve the Study Objectives.

Local Sponsor Support is required to finalize the study.

This meeting is being held to invite public input for the Town's consideration in supporting a specific plan.

Meeting materials include:

- Data considered in Planning
- Alternatives evaluated
- Details for 2 potential plans, in addition to the No Action Plan

  Plan 1 – Addresses Navigation needs

  Plan 2 – Addresses Navigation needs and Erosion concerns

One of these 2 Plans will become a Recommended Plan in the Report based upon Local Input

US Army Corps of Engineers®
New York District

Lake Montauk Harbor Feasibility Study
Study Purpose

This dual-purpose study addresses two goals in the study area:

1) Provide more reliable navigation at Lake Montauk Harbor
2) Address the problems of coastal storm damage west of the Inlet

The following objectives have been developed.

Navigation Objectives :

1. Provide adequate channel depths to ensure reliable navigation for two-way traffic of existing and future fleet.
2. Provide for efficient navigation maintenance.
3. Efficiently utilize all beach quality material obtained from channel deepening and channel maintenance to reduce erosion on the shoreline between the west jetty and Culloden Point.

Coastal Storm Risk Management Objectives:

4. Provide some reasonable degree of protection against erosion for existing bulkheads, roadways, and properties downdrift of the west jetty.
5. Offset downdrift effects due to reduction of littoral transport caused by the inlet and jetties.
6. Ensure that the plan is sustainable, with a minimum of additional material required from upland or other sources. (i.e., use sand within the system, including the channel, fillet or with backpassing).

Storm Damages after the December 2010 Storm

Undermining of parking lot west of the inlet

Consequences of bulkhead failure

Bulkhead Failure as a result of the storm

Bulkhead Repairs after the storm

US Army Corps of Engineers®
New York District

Lake Montauk Harbor Feasibility Study
Existing Authorized Navigation Project

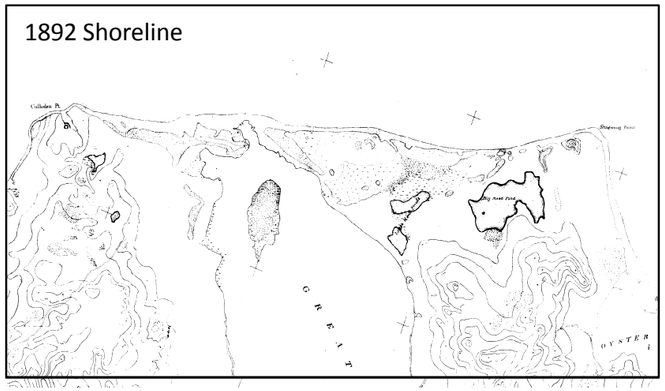
Existing Federal Navigation Project

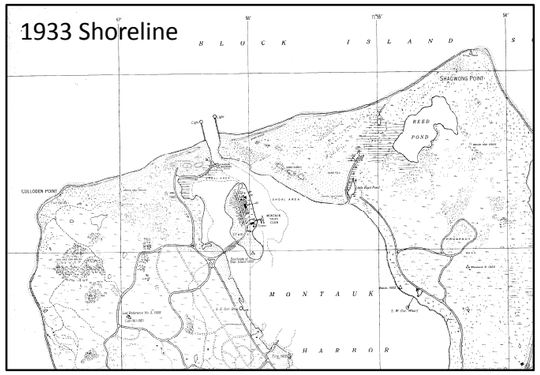
- Channel Authorized to a depth of -12 ft MLW
- Boat Basin Authorized to a depth of -10 ft MLW
- Channel, Deposition Basin, Boat Basin shown in Green
- Location of -12 ft MLW contour shown in Orange (Condition after the last dredge operation in Fall 2011)

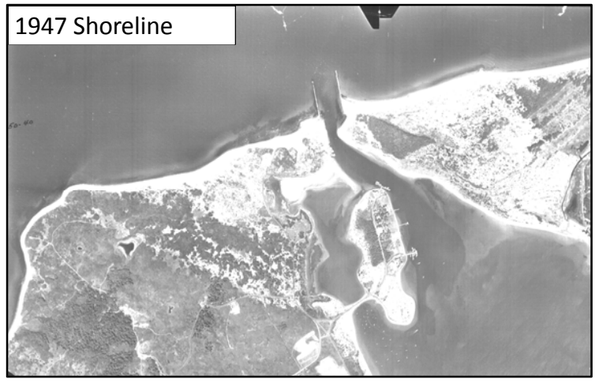
Dredging History Volume (cubic yards)		
Dates	**New Work**	**Maintenance**
Sep-Oct, 1942	19,381	
Dec, 1942 - Jan, 1943	57,020	
1945 (Navy funds)		14,900
Sep, 1949		41,818
Jul-Sep, 1955		34,546
Sep-Nov, 1958		45,433
Apr-May, 1962		36,205
Aug-Oct, 1965		28,541
15 Jul-4 Aug, 1969		41,874
5-21 Jun, 1972		36,219
Jun-27 Jul, 1976		25,933
9-17 Jan, 1984		32,236
1987		12,283
1991		15,307
1995		46,175
2000		50,221
2004		9,400
2008		3,695
2011		11,915
TOTAL	76,401	486,701

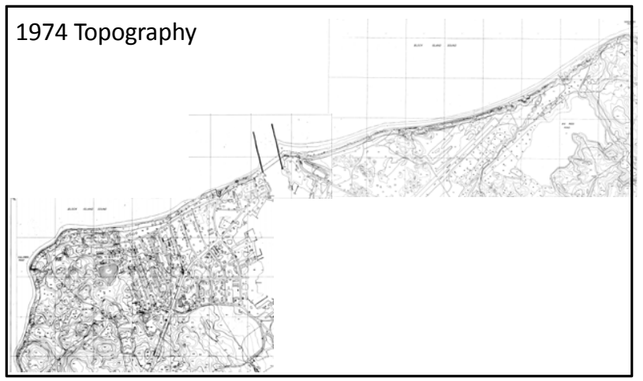
US Army Corps of Engineers
New York District

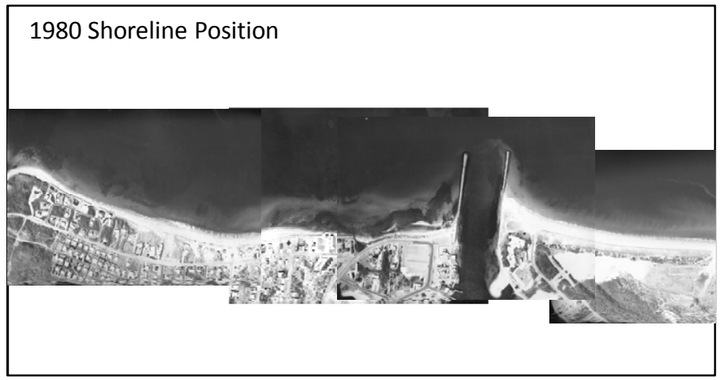
Lake Montauk Harbor Feasibility Study
Historic Shorelines in the Vicinity of Lake Montauk











Date	Historical Item
1914	Private interest constructs a timber bulkhead across the inlet
1926	Two parallel stone jetties constructed by private interests. An approximately 700' long west jetty and a 750' long east jetty are separated by a distance of 500 feet.
1927	Dredging of the entrance channel and yacht basin by private interests.
1935	River and Harbor Act directed a survey investigation of Lake Montauk Harbor
1939	Report prepared recommending the following improvements: a channel 12 feet deep at MLW, 150 feet wide, a boat basin 10 feet deep at MLW and 400 by 900 feet, northwest of Star Island, and the repair and extension shoreward of the east and west jetties.
1942	Federal extension of west jetty shoreward. The work was accomplished at the request of the Navy with Navy funds. The Army Corps of Engineers supervised the work. The west jetty was extended 280 feet with crest elevation at +8 ft MLW. The total length is 981 feet.
1942-43	Entrance Channel dredged to -12 feet MLW, and to a width of 150 feet. The work was accomplished at the request of the Navy with Navy funds. The Army Corps of Engineers supervised the work.
1945	The River and Harbor Act of 2 March 1945 authorized the recommended Federal project.
1949	The first dredging project authorized by Congress began.
1967	General Design Memorandum prepared. Work remaining from the authorized project included: dredging of the boat basin, extension of the east jetty, and repairs to the east and west jetties.
1968	East jetty extended shoreward 350 feet with crest elevation to +8 feet MLW. Length becomes 750+350=1,100 ft., Initial dredging of boat basin to -10 feet MLW. Repair of the east and west jetties.
1995	Rehabilitation of East Jetty

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study
Sediment Movement

Sediment in the Study Area generally moves from East to West.

The area west of the Inlet was erosive before the inlet was opened and stabilized.

The area west of the inlet is erosive since the area is losing more sand than is entering the system.

The inlet has an effect on sediment transport. Sand that is deposited in the inlet is dredged and placed on the west beach, which minimizes the inlet effects.

Although the inlet contributes to the problem, bypassing sand from the inlet will not completely address the erosion problem west of the inlet.

Since more sand is lost to the west, than entering from the east, providing for a stable beach west of the inlet requires one or more of the following:

1) the continual addition of extra sand from outside the system

2) Reducing the erosion rates west of the inlet (with structures)

3) Reusing sand that is available within the system

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study

Preliminary Identification of Impacts to Priority Resources

Resource	No Action: Future Without Projects (FWOP)	Impacts: Alternative 1- Navigation Only	Impacts: Alternative 2- Navigation and Shore Protection
Topography & Soils	Continued long term erosion, loss of elevation and width of beach, scarping of shoreline. High accretion in channels requiring frequent removal. Clean sand will be removed from the Channel and Basin increasing depth. Sand will be placed west of the inlet in a uniform manner but without a designed template. Where placed, the new beach will provide temporary protection as sediment moves offshore. To the extent of volume available, fill sand will cover previous areas of intertidal and subtidal, changing the sediments from cobble, gravel and sand to mostly sand.	→ Dredging related activities, volume removed and placed will be increased. Depth of channel and basin will be increased. Levels of temporary shore protection will be increased. Disturbance and insignificant impacts will occur at 5 year cycles.	→ Three (3) trapping groins will be installed to trap sand for backpassing. The area of each groin will cover natural sediments. Sand will be back passed according to projected cycle. Level of shore protection will be significantly increased. Periodic disturbance and insignificant impacts will occur at the projected dredging cycles.
Water Resources	No impacts to ground water. Increased input of fine sediment and possibly nutrients, into Block Island Sound from erosion. Increased nearshore/littoral turbidity, especially during storms. Potential for increased algal growth . Dredging may cause localized increases in turbidity in the vicinity of the inlet. Coarse materials expected to keep this localized with little impact.	→ The increase in dredging of the channel and basin and placement of sediments is not expected to significantly affect water quality.	→ Temporary minor impacts associated with groin construction and fillet dredging.
Land Use	Continuation of historic maintenance dredging is not expected to alter Land Use. Potential loss of residential structures and roadway under extreme conditions. Likely increase in bulkhead construction or other hardening techniques.	→ Continued threats to unprotected shoreline with potential loss of property. Addition of beach fill provides greater degree of protection where it is placed. Additional "fast land" has been created. Available for recreation.	→ No change in land use. Much greater level of storm protection. Loss intertidal/sound bottom to groin foot prints. No noticeable reduced level of storm protection on the beach east of the jetty
Aesthetic/ Scenic Resources	Changes in scenic resources due to: erosion of natural areas, weathering of hardened shoreline, construction of new hardened shoreline structures. In general these would have a negative aesthetic impact. Periodic beach fill from inlet maintenance would create positive beach views, although temporary.	→ The Navigation Alternative will periodically restore a larger section of beach than the FWOP. This would provide a larger area of beach view, better protect the back beach areas, and decrease the need for extensive hardening.	The Combined Project will establish a maintained beach template over the entire project reach. This will significantly decrease loss of existing habitats, and significantly reduce the need for hardening the shoreline. The groins can be viewed both + or -.
Recreation	Loss of beach, and access to water from erosion issues or due to hardening. Activities that may be lost or diminished include fishing, sunbathing, beach walking, swimming, launching of non-motorized craft. Recreational use would be temporarily restored to a portion of the beach periodically with channel dredging and sand placement. During construction, at least part of the shore front would be off limits, but this is most likely to occur outside the season of maximum use.	The Navigation Alternative will periodically restore a larger section of beach than the FWOP maintaining a larger area of accessible beach or recreational activities. This would provide a larger area of beach view, better protect the back beach areas, and decrease the need for extensive hardening.	The Combined Project will establish a maintained beach template over the entire project reach for the life of the project. Sand bypassing from the updrift beach will have minimal short-term impacts on recreation. Rock associated with hard structure groins will attract fish to the nearshore area, benefitting anglers.
Transportation	Potential loss of Sound View Drive from erosion. If land based equipment is needed during beach fill procedures, Sound View Dr. may experience traffic issues during construction.	→ A larger degree of protection for Sound View Drive, however it is still at risk.	→ Groin construction my cause additional temporary traffic disruptions.
Cultural/ Historic Resources	The are no cultural or historic resources within the project area other than the remains of the 18th century British Warship Culloden which lies in the nearshore waters of the western most portion of the project site. No impacts are expected from the FWOP.	The are no cultural or historic resources within the project area other than the remains of the 18th century British Warship Culloden, which lies in the nearshore waters of the western most portion of the project site. This Alternative will not impact the Culloden	A construction buffer will be established around the site of the Culloden to prevent any impact to this historical site. No impacts are anticipated.
NYS/ Coastal Zone Policies & East Hampton LWRP	USACE activities associated with the FWOP for the ongoing Channel maintenance are consistent with State Policies and LWRP.	Project is consistent with State policies and LWRP. Provides for safe navigation and a degree of storm protection, does not harden shoreline. Limited beach nourishment allows for better access to public beach, and maintains (temporarily) an increase of recreational area. Lack of containment of beach sediments allows sand to be off shore. Beach nourishment and associated disturbances may occur every 5 years	→ Groins add an element of hardened shoreline and construction means additional temporary WQ issues. The latter will be insignificant. Groins will help maintain the beach, increase shore protection, make renourishment less frequent via by passing. Groins would need to be reconciled with the Town LWRP

The impacts described above are for key resources. A more complete list of impacts will be addressed in the NEPA (National Environmental Policy Act) Document for this study.

**Yellow highlighted impacts (text) that are identical for different alternatives are represented by yellow arrows in the adjoining impact column.

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study

Preliminary Identification of Impacts to Priority Resources

Resource	No Action: Future Without Projects (FWOP)	Impacts: Alternative 1- Navigation Only	Impacts: Alternative 2- Navigation and Shore Protection
Vegetation	Erosion and salinity inundation stress and loss of terrestrial plants, general change of habitat. Scarping of shoreline eliminates transitional vegetative habitat.	→ Where there is no beach fill, vegetation loss will continue. Beach fill will provide better protection for back beach vegetation and fill may offer substrate for beach grass and other dune plants. Some seaweeds may be buried by fill. Not expected to be a significant impact.	→ Stable beachfill and groins will have a significant impact on existing vegetation including Sub-Aquatic Vegetation (SAV). Groins will serve as a substrate for several species of seaweed including kelp. Increased fill design will provide much higher level of shore protection. Dune will be anchored with beach grass etc.
Fin Fish	Long term natural processes will not significantly impact fin fish. Storm impacts, etc., will force mobile life stages to shelter in deeper water. Dredging will cause mortality to non mobile fish and fish life stages removed with the sand from the Channel. This mortality is not expected to be significant. Sand placement will cause temporary localized increases in turbidity. Non mobile life stages will be buried where fill is placed. Sandy interidal and subtidal bottom will replace gravel-cobble bottom in the near shore/intertidal. Recolonization of dredged areas and placement areas is expected to be rapid. Prey resources (benthic community) in the newly placed (sandy) areas is likely to be recolonized by different species than that of the previous benthic habitat.	→ Loss of fine sediments from erosion of the shoreline will be decreased by placement. The increase in dredging of the channel and basin, and placement of a greater volume of sand is not expected to significantly affect fin fish resources.	→ Additional temporary disturbance to fisheries resources from WQ impacts related to increased dredging and placement activities and groin construction. Groins will eliminate small area of foraging habitat. Benefit of structures to fishery resources (forage, refuge) will greatly outweigh loss of common benthic area. Groins will increase diversity and abundance in a limited space.
Benthos	Long and short term erosion of fine sediments may cause siltation/respiration issues to sessile fauna. Bulkheading may change the nature of the intertidal zone due to reflected wave energy and loss of unconsolidated sediments. Periodic maintenance dredging will cause mortality of sessile and slow moving benthic organisms as will the placement of sand into the intertidal and subtidal west of the inlet.	→ Loss of fine sediments from erosion of the shoreline will be decreased by placement of sand resulting in smaller siltation impacts to benthic invertebrates. The increase in dredging of the channel and basin, and placement of a greater volume of sand will cause greater mortality to sessile invertebrates but it is not expected to significantly affect benthic resources.	→ A beach template and increased protection will greatly decrease amount of siltation in the nearshore. Sandy beach and intertidal will reestablish transition habitat and be recolonized by those organisms that favor that habitat. Additional loss of benthic area including associated mortality due to groin will not be significant. There will be an associated gain in 3-D habitat, beneficial to many species of sessile and motile invertebrates.
Birds	Limited vegetation especially beach shrubs offers little in the way of passerine habitat, except as part of residential property. Loss of woody vegetation through erosion of residential property would be further detrimental to these species. Shoreline erosion resulting in scarping and new bulkheads means further loss of sandy transition habitat and elimination of foraging and resting areas for many species of shorebirds. Disturbance associated with dredging and fill cycles will occur but is not a significant impact. Many species of birds will benefit from the scavenging prey trapped in the fill. Beach fill will have partially restore transition habitat along the reach and provide multiple benefits for species dependent on a beach environment. Typically this will be a temporary enhancement.	→ A greater volume of beach fill further buffers erosion of landward areas and helps protect vegetation preserving these habitats beneficial to passerine birds. Additional protection is likely only temporary. Benefits of additional reestablished sandy beach and transition habitat to shore birds is also likely to be temporary.	Maintaining this beach template established by the methods of this Alternative significantly increases the shore protection level and protects landward vegetation. The Alternative also establishes beneficial vegetated transition habitat. This Alternative will have a longer duration of initial disturbance, and a greater frequency of periodic disturbance. These events are not expected to significantly impact any bird species. Additional disturbance may occur from land based equipment during groin construction. Initial groin construction will use geo-tubes. These may eventually be replaced by hard groins which would provide additional resting and foraging areas for shore birds .
State/ Federal Threatened/ Endangered Species	The project area is not known to be utilized by any T&E species but, the Atlantic Sturgeon is known to be present in LIS. However, the method of dredging (Cutterhead) has not been implicated in the past as dangerous to this highly mobile species. The piping plover might be found in the project area foraging or during migratory periods but no nesting occurs on this beach. No significant impacts to ESA species are expected.	→ No significant impacts are expected due to implementation of the Navigation Alternative.	Additional non-significant disturbance impacts may occur to transient ESA species, previously listed, due to increased duration and frequency of project activities. Some additional disturbance impacts could occur to Atlantic Sturgeon during groin construction but none are expected to be significant. This would include minor loss of foraging habitat or direct disturbance from construction.

The impacts described above are for key resources. A more complete list of impacts will be addressed in the NEPA (National Environmental Policy Act) Document for this study.

**Yellow highlighted impacts (text) that are identical for different alternatives are represented by yellow arrows in the adjoining impact column.

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study
Measures Considered and Carried Forward

A summary of the measures that were considered to address the problems in the study area and the screening results are shown below.

NAVIGATION IMPROVEMENT MEASURES CONSIDERED

Measure	Carried Forward	Eliminated
1. Unconventional drafts		X
2. Highwater Transit (waiting for high tide to traverse the inlet for deeper draft vessels)		X
3. Relocation of the existing fleet		X
4. Channel extensions east and west of Star Island		X
5. Channel widening		X
6. Channel realignment		X
7. Deepening of boat basin		X
8. Sand bypassing	X	
9. Jetty rehabilitation / landward extension	X	
10. Deepening of the federal navigation channel	X	
11. Removal of shoal at the inshore end of the east jetty	X	
12. Advance maintenance dredging outside the channel limits as a deposition basin	X	

COASTAL STORM RISK MANAGEMENT / SHORE PROTECTION MEASURES CONSIDERED

Measure	Carried Forward	Eliminated
1. Disposal of dredged material on the western shoreline	X	
2. Periodic sand bypassing	X	
3. Dunes and beach berms by upland trucking	X	
4. Levees and floodwalls		X
5. Offshore breakwaters		X
6. Jetty modification		X
7. Increased toe protection for existing bulkheads		X
8. Groin Field		X
9. Terminal groin with and without intermediate groins	X	

US Army Corps of Engineers®
New York District

Lake Montauk Harbor Feasibility Study
Alternative Development

Measures recommended to be carried forward were combined to form Alternatives.

The Alternatives were developed, to address Navigation needs first, and then Shore Protection Components
These Alternatives were considered at different scales, to identify the optimal plan for Navigation and Shore Protection

Navigation Alternatives:

Alt	Measures Included	Depths Considered, ft
N1	Deepening of the Federal Navigation Channel, Removal of the inner shoal	14,15,16,17
N2	Deepening of the Federal Navigation Channel, Removal of the inner shoal, **Deposition Basin**	14,15,16,17
N3	Deepening of the Federal Navigation Channel, Removal of the inner shoal, Deposition Basin, **Fillet Removal**	14,15,16,17
N4	Deepening of the Federal Navigation Channel, Removal of the inner shoal, Deposition Basin, Fillet Removal, **Jetty Rehabilitation / landward extension**	14,15,16,17

The evaluation and comparison of navigation alternatives showed:

- The Optimal depth for reliable navigation is -17 ft MLW
- **Alternative N2 is the optimal NAVIGATION Solution (Carried Forward as Alternative 1)**
- Alternative N3 is effective and provides the greatest volume of sand for shore protection
- Navigation solutions alone do not provide a managed beach condition west of the inlet

Coastal Storm Risk Management (Shore Protection) Alternatives:

The Navigation Alternatives were combined with options to provide a defined, managed beach condition. The Options include:

1) Renourishment by trucking in sand from a quarry (approximately 50,000 CY every 5 years)
2) Backpassing with low-profile groins, to allow for capture and redistribution of sand (approximately 50,000 CY every 5 years)
3) Trucking in additional sand during initial construction to provide a larger protective beach

Alt	Measures Included	Beach Width to MHW (ft)
N2, C1	Navigation Plan with renourishment on a 5-yr cycle by trucking	100
N2, C2	Navigation Plan with backpassing groins, and renourishment by backpassing	100
N3, C1	Larger Navigation Plan with renourishment on a 5-yr cycle by trucking	120
N3, C2	Navigation Plan with backpassing groins, and renourishment by backpassing	120
N3, C3	Navigation Plan extra sand trucked in for a wider beach, backpassing groins, and renourishment by backpassing	140

The evaluation and comparison of combined alternatives showed:

- **Alternative N3, C2 is the optimal COMBINED Solution (Carried Forward as Alternative 2)**
- Backpassing, with backpassing groins are more effective than trucking
- Groins can be constructed in a fashion to be adaptable
- A beach with a width of 120 ft to MHW offers reasonable protection

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study
Alternative 1- Navigation Only Plan (N2)

N

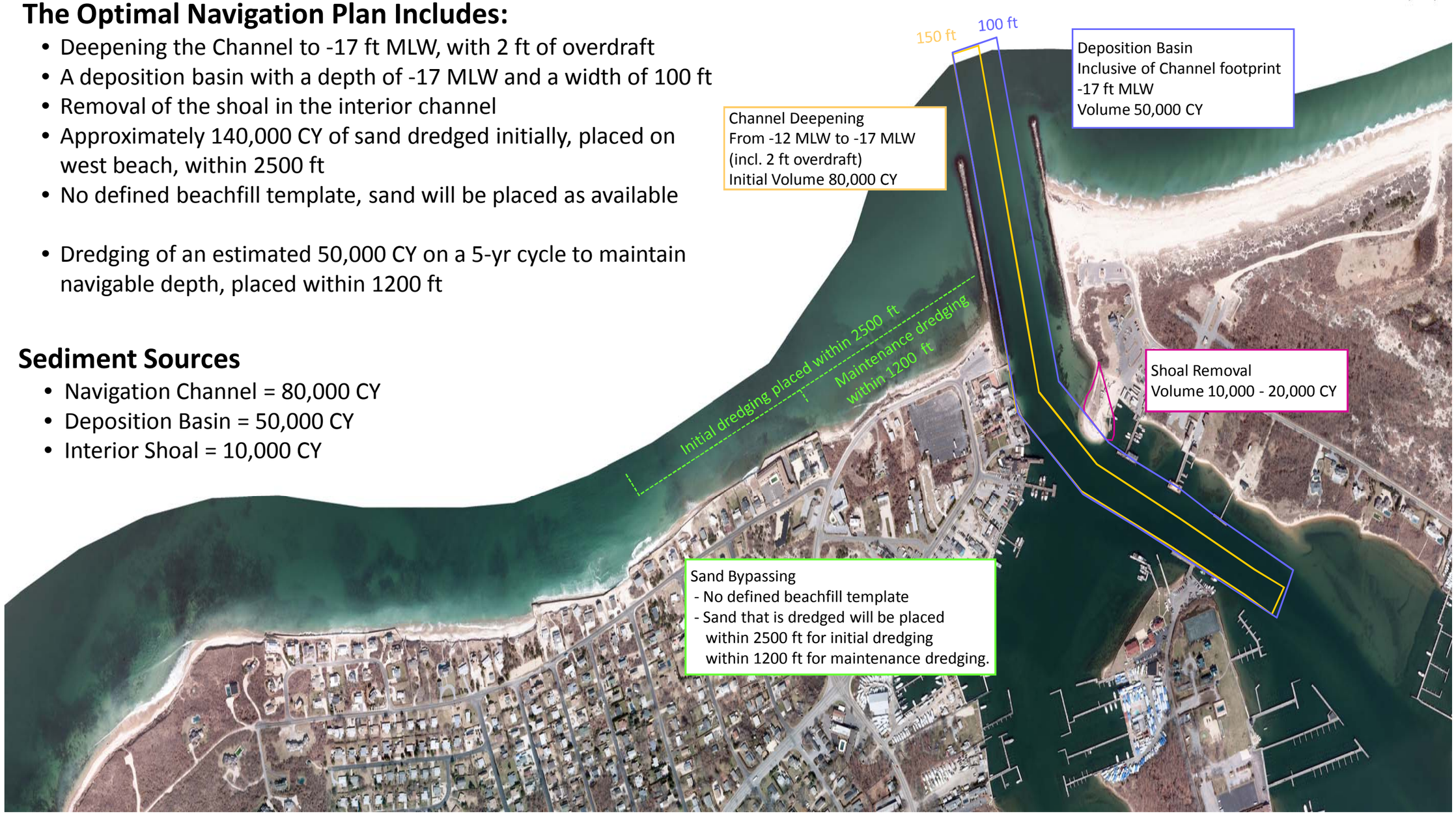
The Optimal Navigation Plan Includes:

- Deepening the Channel to -17 ft MLW, with 2 ft of overdraft
- A deposition basin with a depth of -17 MLW and a width of 100 ft
- Removal of the shoal in the interior channel
- Approximately 140,000 CY of sand dredged initially, placed on west beach, within 2500 ft
- No defined beachfill template, sand will be placed as available

- Dredging of an estimated 50,000 CY on a 5-yr cycle to maintain navigable depth, placed within 1200 ft

Sediment Sources

- Navigation Channel = 80,000 CY
- Deposition Basin = 50,000 CY
- Interior Shoal = 10,000 CY



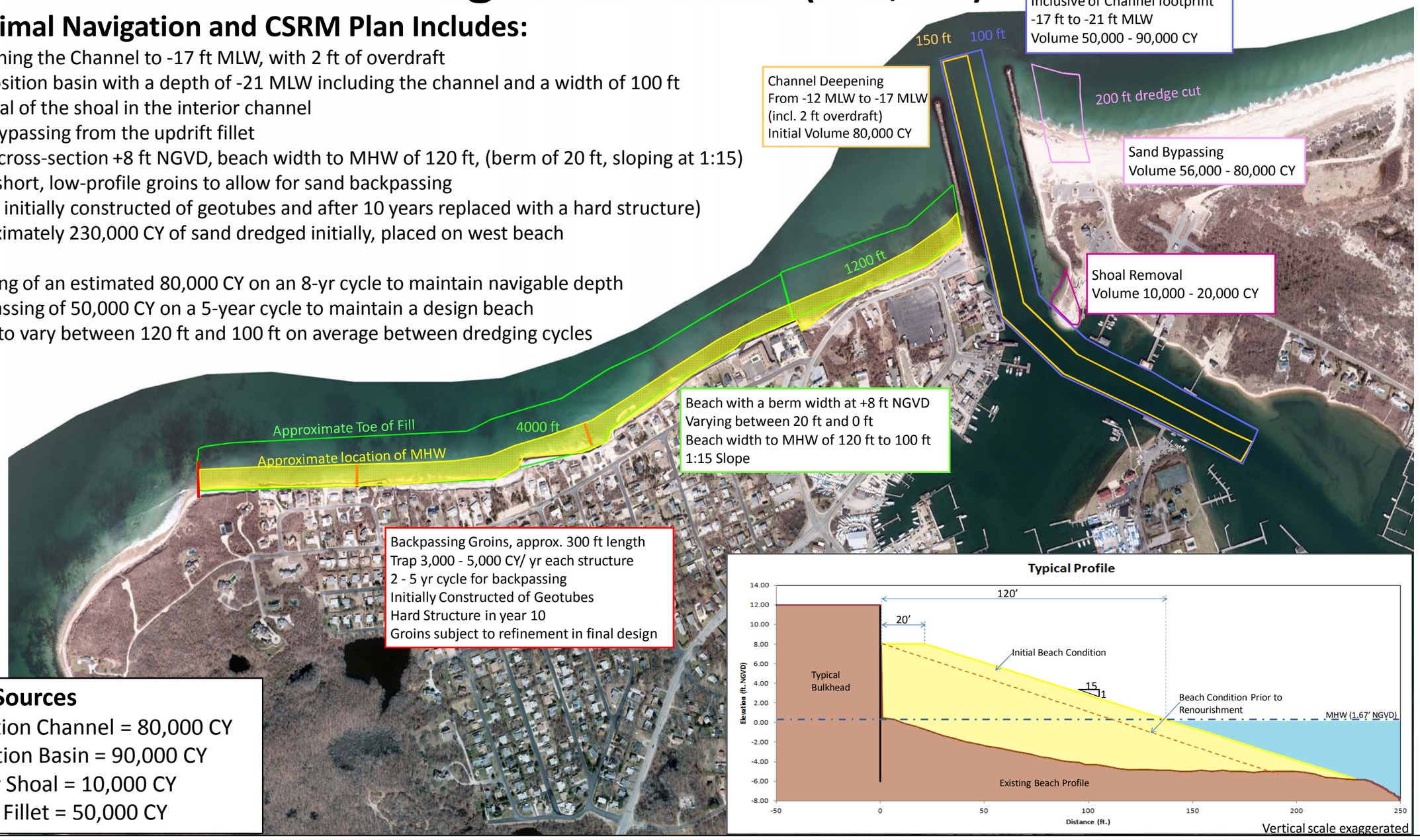
US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study
Alternative 2- Navigation and Coastal Storm Risk Management Plan (N3,C2)

The Optimal Navigation and CSRM Plan Includes:

- Deepening the Channel to -17 ft MLW, with 2 ft of overdraft
- A deposition basin with a depth of -21 MLW including the channel and a width of 100 ft
- Removal of the shoal in the interior channel
- Sand bypassing from the updrift fillet
- Beach cross-section +8 ft NGVD, beach width to MHW of 120 ft, (berm of 20 ft, sloping at 1:15)
- Three short, low-profile groins to allow for sand backpassing
  (groins initially constructed of geotubes and after 10 years replaced with a hard structure)
- Approximately 230,000 CY of sand dredged initially, placed on west beach

- Dredging of an estimated 80,000 CY on an 8-yr cycle to maintain navigable depth
- Backpassing of 50,000 CY on a 5-year cycle to maintain a design beach
- Beach to vary between 120 ft and 100 ft on average between dredging cycles



Vertical scale exaggerated

Sediment Sources

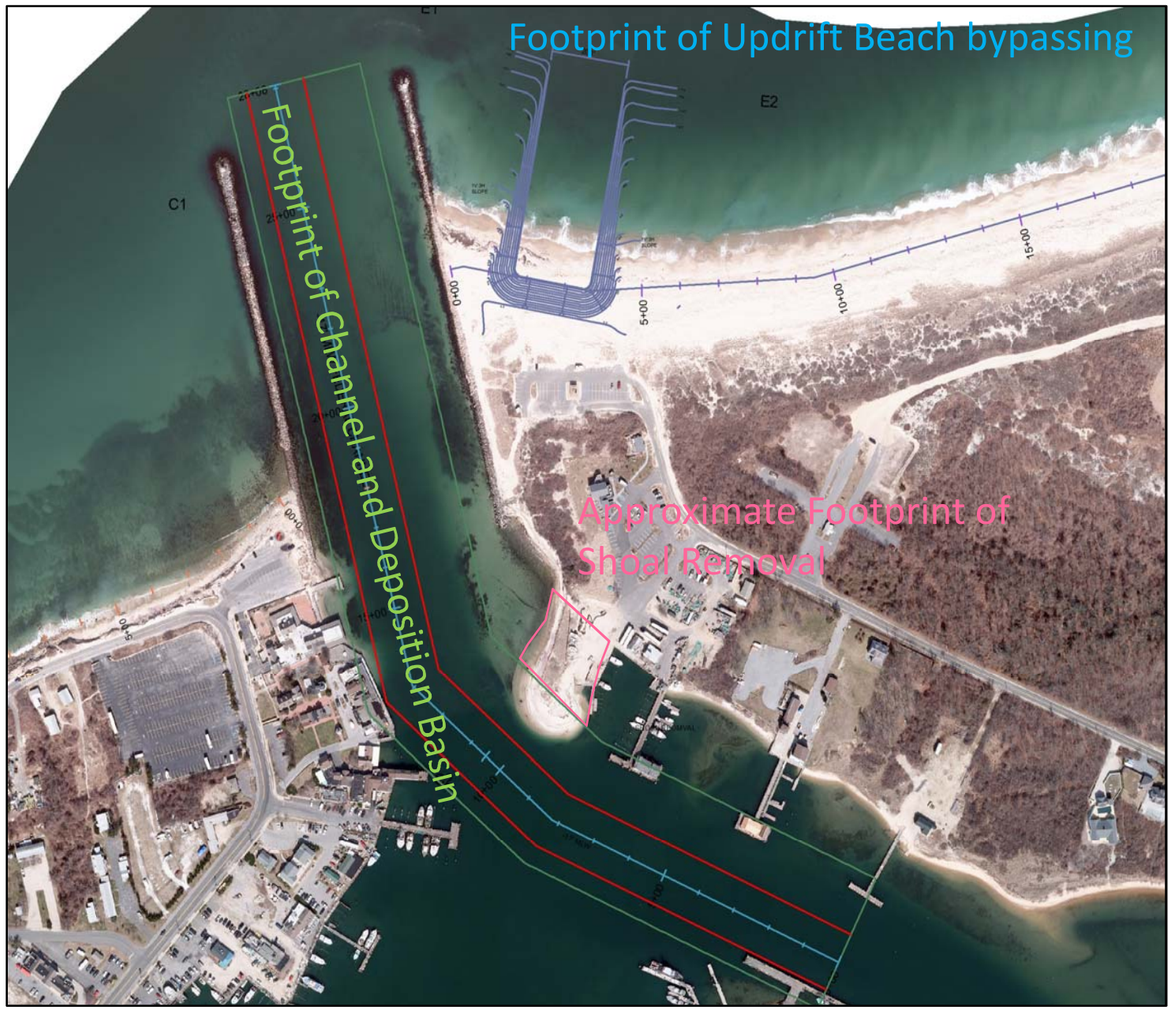
- Navigation Channel = 80,000 CY
- Deposition Basin = 90,000 CY
- Interior Shoal = 10,000 CY
- Updrift Fillet = 50,000 CY

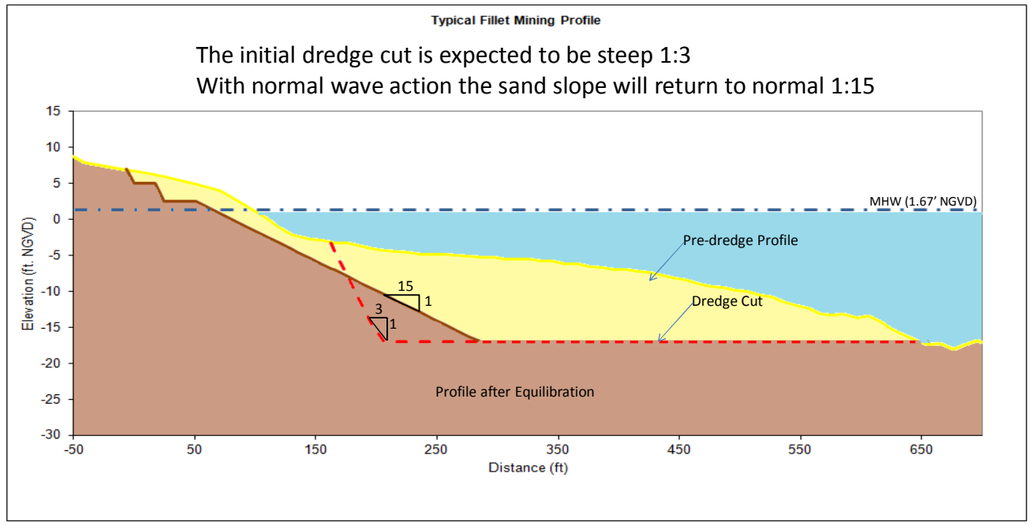
US Army Corps of Engineers®
New York District

Lake Montauk Harbor Feasibility Study
Dredging Details

Why Sand Bypassing?

- A significant volume of sand has accreted on the East Beach
- Removal of some sand provides storage for sand moving from the east, and can reduce dredging frequency
- Use of some sand provides additional protection to the west beach
- Sand bypassing increases the adaptability of the project





Description of dredging and bypassing

- Sand for the combined project would come from the channel, deposition basin, Interior Shoal and updrift beach
- A small cutterhead dredge is expected to do the work for this project
- The same equipment would dredge the channel and the updrift beach
- The dredge will make a cut into the beach with a 200 ft width
- The dredge cut has been designed to minimize the footprint of impact
- The updrift beach dredge cut has been designed to have no noticeable reduction in storm protection
- It is expected the cut will fill quickly, two passes of the cut will be made, each cycle to provide the sand needed
- Shoal Removal details are still being refined; shoal removal decreases the frequency of dredging

US Army Corps of Engineers
New York District

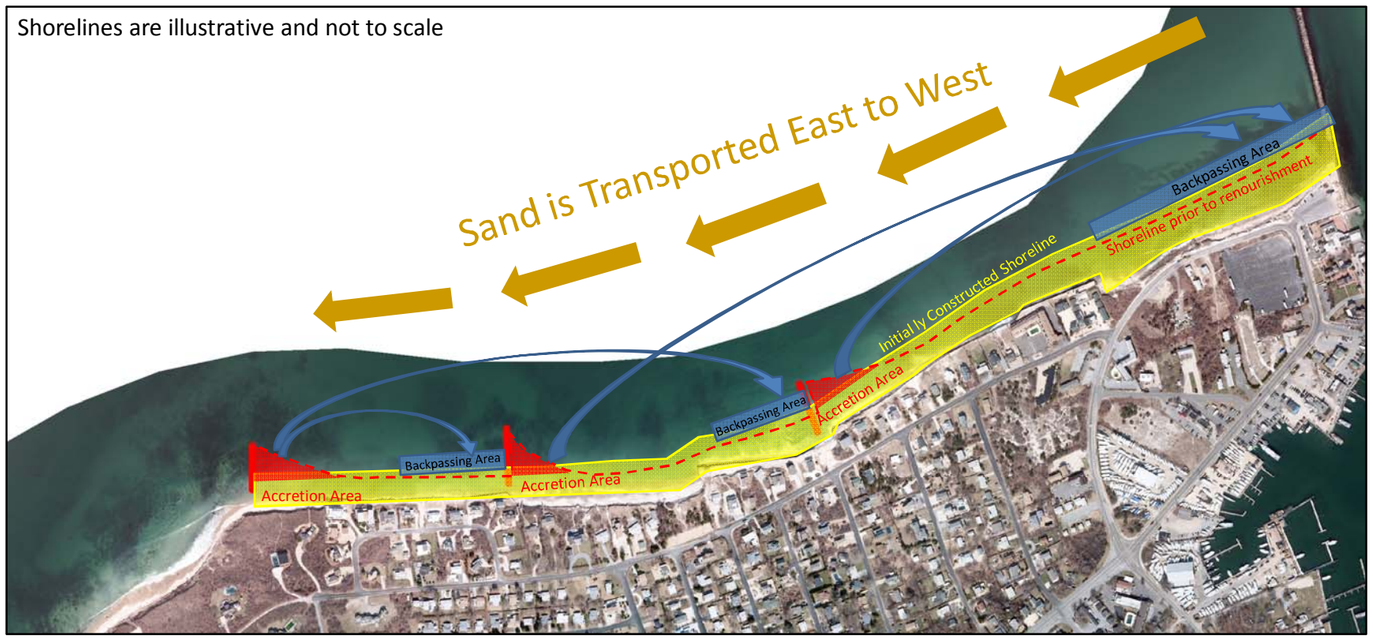
Lake Montauk Harbor Feasibility Study
Backpassing Groin Details

Why Sand Backpassing?

- Sand in the Study Area naturally moves from east to west
- Each year, less sand comes in from the inlet than is lost to the west
- To maintain a stable beach, extra sand is needed each year
- Backpassing is designed to capture 10,000 CY of sand each year, and reuse it in the system
- Sand backpassing increases the adaptability of the project
- Sand backpassing is more cost-effective than trucking-in sand from a quarry

Example of a single tube, geotube groin

Shorelines are illustrative and not to scale



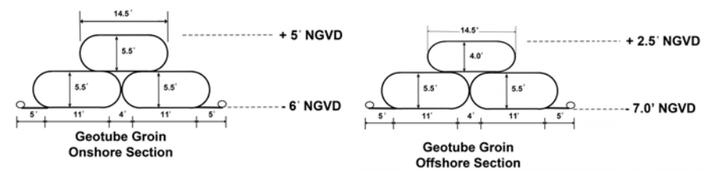
Low-Profile Backpassing Groins

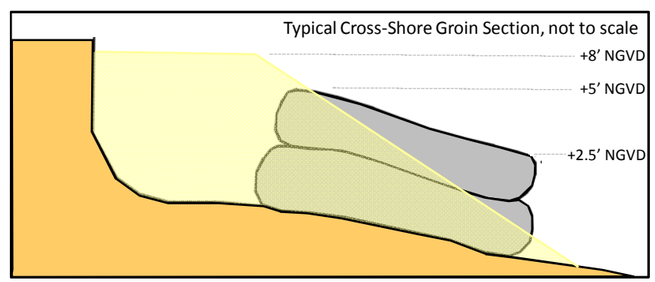
The backpassing groins are not a typical design.
Groins are designed to have minimal effect (short, low-profile).
Low profile means that they are below the height of the beach.
Plan is to construct groins with geotubes and monitor for 10 yrs.
After 10 years, if performing satisfactorily, groins would be replaced with a hard structure.

Backpassing (Moving Sand Back from West to East)

- Sand will accrete on the updrift side of the groins, over a 5-yr period
- Sand that has accreted above the MHW Line will be transported east with land based equipment (front-end loader, and trucks)
- Backpassing can be done more frequently, if conditions warrant
- Sand can be bypassed to the west over the groin, if conditions warrant

Typical Geotube Groin Sections





US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study

Local Sponsor Requirements

Local Sponsor Support is required for the Corps to recommend a plan.

The local sponsor must be able to fulfill their requirements , which vary by plan.

For Both Plans

- Local Sponsor must be willing to Cost-Share the Plan

For the Combined Navigation and CSRM Plan there are additional requirements

Key Real Estate Requirements

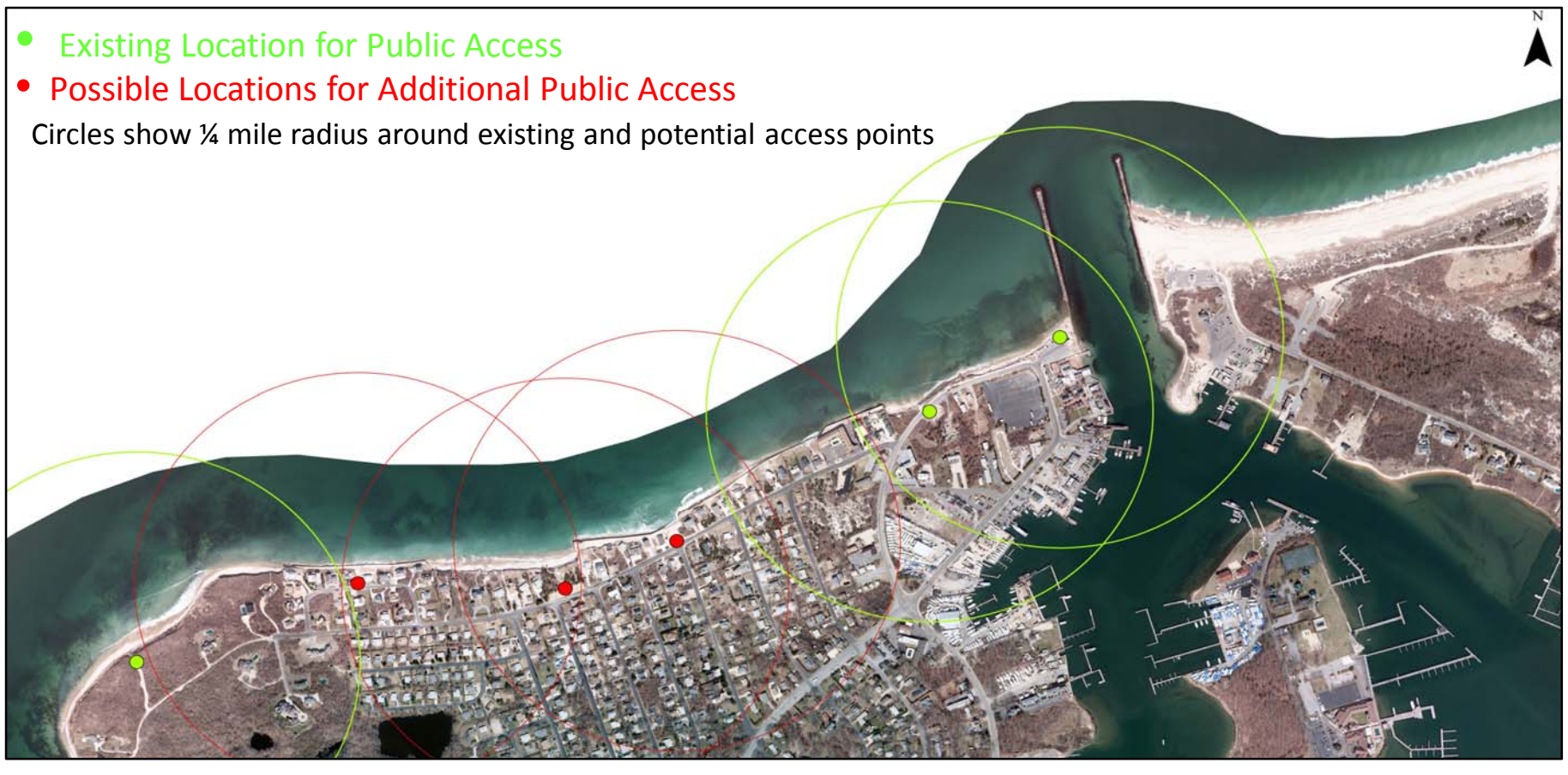
- Location of Sand Placement requires a permanent easement
- Location of Groin Construction must be in Town ownership
- Location of Public Access Points must be in Town ownership

Public Access Requirements

- Town is responsible for preparing a Public Access Plan as part of the Study
- General Requirements:
  - Access points to the beach, open to the public every ½ mile
  - Adequate parking for expected usage (or alternate provisions)
  - Open to All Visitors, regardless of origin
- Presently, access points exist at west end and east end of the study area
- Additional access is required in the middle of the study area (shown below)

Local Waterfront Revitalization Plan (LWRP) Requirements

- Ensure groin construction is consistent with East Hampton's LWRP



The **Town of East Hampton** is responsible for acquiring the Real Estate and meeting the Public Access requirements if the **Combined Navigation and CSRM Plan** is selected.

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study
Preliminary Costs and Cost-Sharing

The Recommended Plan would be cost-shared between a combination of Corps, NYSDEC, and Town

Navigation Plan – cost shared between Corps and Town of East Hampton (No State Participation)

Combined Navigation and CSRM Plan – cost shared by all 3 Parties (Cost-sharing depends upon Public Access)

	Alternative 1 Navigation Plan				Alternative 2 Combined Navigation and CSRM Plan			
	Total	**Fed**	**State**	**Town**	**Total**	**Fed**	**State**	**Town**
Initial Construction Costs	**$4,009,700**	**$3,207,800**	**$0**	**$801,900**	**$8,940,808**	**$7,103,336**	**$1,286,230**	**$551,242**
Navigation Features	$4,009,700	$3,207,800	$0	$801,900	$4,009,790	$3,207,832	$561,371	$240,587
Coastal Storm Risk Management Features	NA	NA	NA	NA	$4,931,019	$3,895,505	$724,860	$310,654
Future Costs	**$21,955,000**	**$21,955,000**	**$0**	**$0**	**$32,346,000**	**$28,907,536**	**$2,406,999**	**$1,031,571**
Navigation Features	$21,955,000	$21,955,000	$0	$0	$20,406,000	$20,406,106	$0	$0
Coastal Storm Risk Management Features	NA	NA	NA	NA	$11,940,000	$8,501,430	$2,406,999	$1,031,571
Total Lifecycle Costs	**$25,964,700**	**$25,162,800**	**$0**	**$801,900**	**$41,286,808**	**$36,010,872**	**$3,693,229**	**$1,582,813**

Costs shown are preliminary estimates, shown in 2010 dollars, and are subject to change

Costs do not include all monitoring, compliance or emergency costs that will be included in the final plan

Costs include a contingency of 20%

Cost-sharing shown is subject to Corps policy review, and assumes that public access is provided

Town-share for CSRM features would increase significantly if public access is not provided.

Existing maintenance dredging (No Action Alternative) is 100% Federal

Cost Sharing Percentages	**Fed**	**State**	**Town**
Initial Construction Costs			
Standalone Navigation Features	80%	0%	20%
Navigation Features in a Combined Plan	80%	14%	6%
Coastal Storm Risk Management Features *	79%	14.7%	6.3%
Future Costs			
Navigation Features	100%	0%	0%
Coastal Storm Risk Management Features *	70%	21%	9%

* Assumes that public access is provided. Town costs would increase if the shoreline is not accessible

US Army Corps of Engineers
New York District

Lake Montauk Harbor Feasibility Study

Next Steps

The following schedule depends upon local support of a recommended plan

Study Initiation	2003
Scoping Meetings	2006
Alternative Comparison	2010
Provide Comments as Input on the Alternatives	**Today**
Local Sponsor Concurrence on Recommended Plan	**August 2012**
Draft Report (Alternative Formulation Briefing)	October 2012
Approval to Release Draft Report	April 2013
Public Review	May 2013
Final Report Submitted	August 2013
Chief's Report to Congress	April 2014
<u>Implementation:</u>	
Authorization	TBD (WRDA)
Execute Project Partnership Agreement	3 months
Design Phase	6 months
Construction Phase	3-6 months

Variable Federal funding impacted the schedule to 2009;
Construction schedule is contingent upon available funding

Comment cards are available at the entrance.
Comments can be provided
through August 3, 2012 to:

Mr. Brian Frank
Town of East Hampton
bfrank@EHamptonNY.gov

At: **Town of East Hampton**
Planning Department
300 Pantigo Place
East Hampton, NY 11937

Electronic Version of Posters Available at:
www.nan.usace.army.mil/project/newyork/montauk/index.php

Additional Contacts:

Mr. John Beldin-Quinones is the USACE Project Manager
John.A.Beldin-Quinones@usace.army.mil

Ms. Sue McCormick, P.E. is the NYSDEC Program Manager
sdmccorm@gw.dec.state.ny.us