FIRE ISLAND INLET TO MONTAUK POINT, NY

OVERALL PROJECT BRIEFING

New York District
US Army Corps of Engineers
November 2022

File Name



US Army Corps of Engineers



OVERVIEW



The Fire Island Inlet to Montauk Point, NY (FIMP) Reformulation Study was completed in July 2020.

- Authorized for construction in December 2020, in WRDA 2020
- Design and construction now underway

Funds are available from the Hurricane Sandy Disaster Relief Appropriations Act of 2013, which provides 100% Federal funding for initial construction of the project.

In order to proceed into construction, a Project Partnership Agreement (PPA) was entered into between the Corps and non-federal sponsor, State of New York, in August 2021. The State executed similar agreements with Suffolk County and five towns (Babylon, Islip, Brookhaven, Southampton, East Hampton).

The current PPA covers the initial construction phase of FIMP. The continued construction of FIMP, over 50 years, (with 30 years of renourishment) will be covered in a separate agreement with 50/50 cost-sharing.

Construction began in September 2021 under Contract 1, which included dredging of Fire Island Inlet, and placement of sand on adjacent beaches. Contract 2, including dredging Moriches and Shinnecock Inlets, was recently awarded with construction to start in December 2022.

The following slides provide an overview of the project; for additional details please go to the FIMP website, www.nan.usace.army.mil/FIMP

FIMP PROJECT AREA



- Purpose: To reduce storm damage while maintaining or enhancing natural resources.
- Scope: 83 miles of ocean shoreline, 220 miles of bay shoreline, 3 Federal navigation inlets functioning as an interconnected system of ocean shoreline, inlets and estuaries **US Army Corps**



of Engineers

ONGOING STRUCTURAL & NONSTRUCTURAL EFFORTS



STRUCTURAL (S)

- Dredging Fire Island Inlet and Shoals with Sand Placement on Gilgo Beach and Robert Moses State Park
- Dredging Moriches & Shinnecock Inlets and Shoals with CPF Sand Placement
- Dredging Offshore Borrow Sites and Sand Placement (Tiana and Montauk Beaches)
- Dredging Offshore Borrow Sites and Sand Placement (Westhampton Beach)
- · Groin Modification at Ocean Beach Remove Groins after Well Relocation is functional
- Initial Coastal Process Features when Renourished (4,5 and 6)

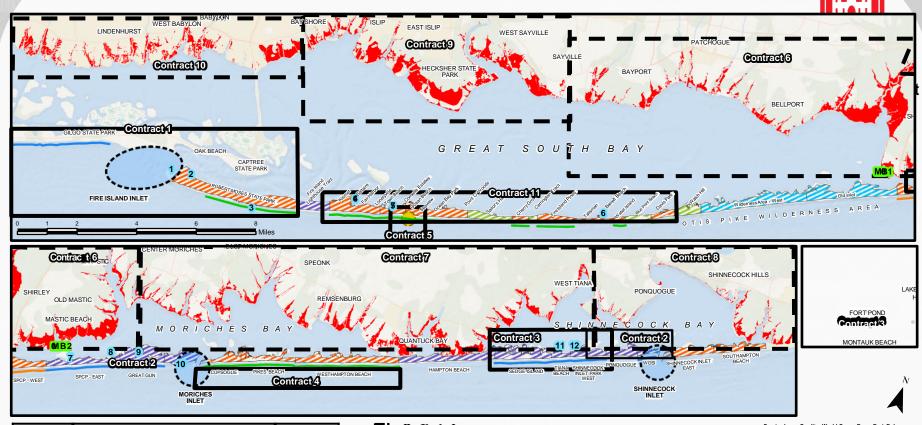
NONSTRUCTURAL (NS)

- Year 1 Non-Structural Measures Data collection
- Year 3 Non-Structural Measures Pilot Program
- Years 4 6 Continue Non-Structural Measures

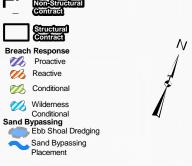
MAMP/ADAPTIVE MANAGEMENT TEAM

ONGOING – BIANNUAL MEETINGS CONTINUE





Contract Number	Description	Timeline
Contract 1	Dredging Fire Island Inlet and shoals with sand placement on	Fall 2021
	Gilgo Beach and Robert Moses State Park	
Contract 2	Dredging Moriches & Shinnecock Inlets and shoals with CPF	Award Sep 2022
	sand placement	
Contract 3	Dredging at offshore borrow sites and sand placement	Award Jan 2024
Contract 4	Dredging at offshore borrow sites and sand placement	Award Sep 24
Contract 5	Groin Modification at Ocean Beach	FY24
Contract 6	Year 1 - Non-Structural measures	FY25
Contract 7	Year 2 – Non-Structural measures (1,000 structures)	TBD
Contract 8	Year 3 – Non-Structural measures (1,250 structures)	TBD
Contract 9	Year 4 – Non-Structural measures (1,250 structures)	TBD
Contract 10	Year 5 - Non-Structural measures (432 structures)	TBD
Contract 11	Initial Coastal Process Features when renourished (4,5,6)	TBD



Non Structural

Non Structural

Coastal Process Features

Barrier Island Features

MB# Mainland Features

Beach Nourishment

Dune +15 ft, Berm 90 ft

No Dune, Berm 90 ft

Groin Modification

Sediment Management

Management

FIRE ISLAND TO MONTAUK POINT
Scale - 1:120,000

Contract Extents,
CPFs, Inlets, Shoals,
Groins, and
Design Measures
Map

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FIMP TOTAL FIRST COST ESTIMATE (FY20 PRICE LEVEL)



First Cost - \$1,541,981,000 (100% Federal)

Fully Funded Cost - \$1,759,459,000 (100% Federal)

NON-FED O&M Costs - \$677,000

LERRDs - \$153,277,000*

*Responsibility of Non-Fed Sponsor and reimbursable by Federal Funds after review of costs.



Near Term Path Forward

Contract 2 (Moriches and Shinnecock Inlet Sand Bypassing,
 Placement at Coastal Process Feature Sites)

► Awarded: Sep 2022

► Construction Start: Dec 2022

Contract 3 (Dredging at offshore borrow sites and sand placement)

► Award: Jan 2024

► Construction Start: Spring 2024

NONSTRUCTURAL EFFORTS

PLAN FEATURES

Feasibility-level plan includes 4,432 structures within the 10 year floodplain

• Elevation: 3,675 structures

Floodproofing: 650 structures

Acquisition: 14 structures

Ringwalls*: 93 structures

* structural measure, but included in nonstructural analysis and summary

IMPLEMENTATION PROCESS

CONFIRM → IDENTIFY → DESIGN → CONSTRUCT

CURRENT WORK

- Leveraging national USACE and non-USACE experts
- Phase I Data Collection: Verifying structures included in plan
 - Coordinating with state and local government for datasets
 - · Virtual (Google Earth) survey and on-site

UPCOMING WORK

- Phase 2 Data Collection: Individual structure assessments
- Developing Pilot Program for selected communities
 - Mastic Beach (Brookhaven) & Frederick shores (Babylon)
 - Specific details still being worked out, prior to outreach
 - including Real Estate Process
 - temporary lodging (WRDA 22 considerations)



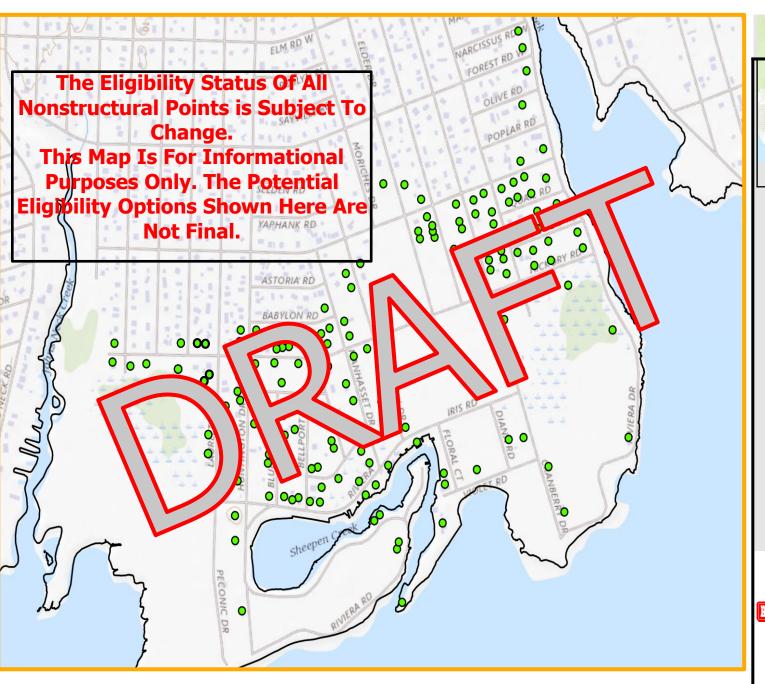
DISTRIBUTION OF NON-STRUCTURAL

Town	Structures	% Structures
Babylon	1,523	34%
Islip	942	21%
Brookhaven	1,249	28%
Southampton	704	16%
Total	4,418	

Based on GRR data set, additional updates being prepared during PED phase











> Elevation Program, Geographic Names Information System. National Hydrography Dataset, National Land Cover Distalase, National Structures Dataset, and National transportation Dataset: USSG Global Ecosystems; U.S. Census Bureau TIGERLine data; USFS Road Data; National Earth Data; U.S. Department of State Humaristian U.S.

and NOAA National Centers for Environmental Information,
U.S. Coastal Relief Model. Data refreshed May, 2020

Reference Map:

Information Unit-

MASTIC BEACH MAINLAND CPF

Mastic Beach 1 ALT 2 Buildings Below 2.97 Feet







MASTIC BEACH MAINLAND CPF





Structures ALT2 3.27 Feet

Private Owned Parcel
Public Owned Parcel

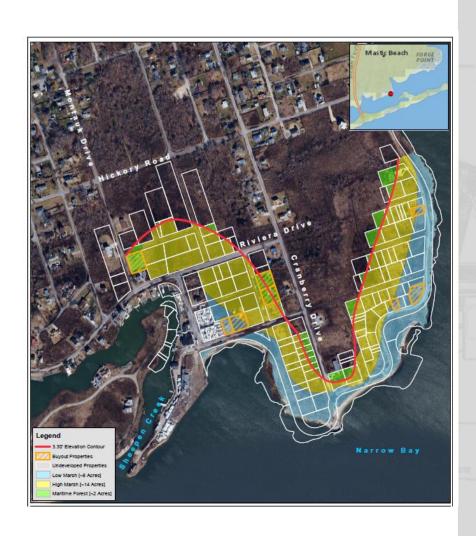
Mastic Beach 2 Revised Restoration ALT2 Boundary

High astronomic tide (HAT) anticipated in year 2050 under an intermediate sea level change scenario



FIMP Mastic Beach CPF's within the FIMP GRR

- Plans include the acquisition of homes below elevation 3.3 NGVD (2.2 NAVD)
- Home raisings would not be sustainable in this area, would be below MHHW in 30 years with intermediate RSLC
- The areas of acquisition would be restored to allow for floodplain function
- The restoration would provide high ground to reduce frequent flooding to adjacent properties
- Two locations identified in Mastic Beach, requiring a total of 14 structures for acquisition.
- Town agreed to acquire these properties, using condemnation, if needed.
- Design and construction is 100% Federal
- Town is responsible for property acquisition, would be reimbursed by the Corps.

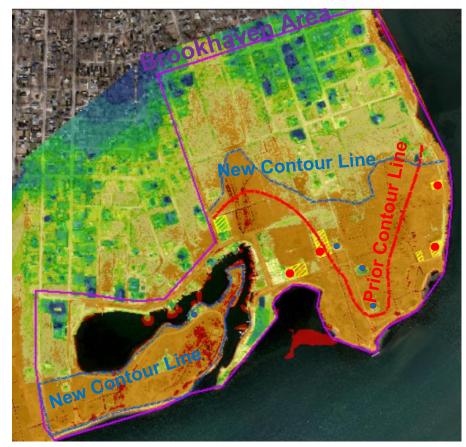






Changes Since GRR Approval

- Brookhaven continues to acquire properties in the area.
- Brookhaven was awarded a grant for design of a restoration project in the area of Mastic Beach CPF 1
- Brookhaven Restoration Plan covers a larger area than the original Corps Plan.
- Corps and Brookhaven have been working together to identify opportunities to mesh plans.
- New survey information indicates a larger area below elevation +2.0 NAVD, recommended for acquisition.
- Survey illustrates there are homes that would be surrounded by hightide, even if ground elevation under the house is slightly higher



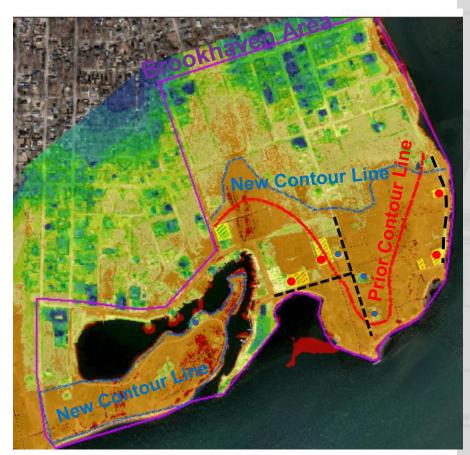
- Existing buildings previously identified for acquisition in GRR
- Existing buildings being considered for acquisition with new information





Mastic Beach 1 CPF Path Forward

- Opportunity to adapt the Corps' proposed CPF to mesh with Brookhaven's Plans based upon new survey information.
- Brookhaven design would need some modifications to be consistent with the intent of the GRR plan, to acquire vulnerable structures as a precursor to land restoration.
- Additional acquisitions provide a more complete project, and could allow for reduced service infrastructure in the area (roads)
- Require concurrence from Brookhaven on required acquisitions, and willingness to condemn if needed.
- With concurrence would complete this analysis, update designs, formally document the change in the FIMP Plan, and formally identify the RE requirements for the town.
- Corps is prepared to use Brookhaven's contractor (Ramboll) and work with Brookhaven to continue design of the project



- Existing buildings previously identified for acquisition in GRR
- Existing buildings being considered for acquisition with new information





THANK YOU.



