1. Introduction

The Fire Island to Montauk Point (FIMP) project was first authorized by the River and Harbor Act of July 14, 1960. This authorization has been modified by Section 31 of the Water Resources Development Act (WRDA) of 1974, and Sections 103, 502, and 934 of the WRDA of 1986 (P.L. 99-662). The Final Environmental Impact Statement (EIS) and General Reevaluation Report (GRR) were published in 2020. The recommended plan included sand bypassing and dredging, renourishment, breach response plans, mainland nonstructural measures, removal of Ocean Beach groins, and coastal process features for 12 barrier islands and 2 mainland locations.

The Final EIS broadly assessed the nonstructural portion of the recommended plan based on the limited level of detail available at the time and additional in-depth assessment is required. A Supplemental Environmental Assessment (SEA) is being prepared as a supplement to the Final EIS to evaluate the significance of potential environmental impacts of the first nonstructural contract, referred to as the pilot program. Additional SEAs and relevant coordination will be completed for future nonstructural contracts as needed.

The pilot program is the first of the nonstructural contracts to be constructed under FIMP and is intended to be the subject of lessons learned so that future construction contracts can fine-tune the implementation of the home elevation process. The pilot communities selected are Mastic Beach, in the Town of Brookhaven, and Frederick Shores, in the Town of Babylon.

The Endangered Species Act compliance for the FIMP project FEIS is available online. The District determined in the project's Biological Assessment (updated March 29, 2019) that the project may affect but is not likely to adversely affect red knot and roseate tern, and likely to adversely affect piping plover and seabeach amaranth. The PBO received by the service on March 29, 2019 concluded that the FIMP project "is not likely to jeopardize the continued existence of piping plover or seabeach amaranth". Several species were identified as potentially present within the nonstructural pilot areas (see Section 4) that were not previously assessed due to recent listing (tricolored bat and monarch butterfly) or were discussed in the FEIS and not the PBO (northern long-eared bat and sandplain gerardia). This supplemental assessment reviews the likelihood of these species presence, potential impacts as a result of the proposed nonstructural action and reexamines the previously assessed species within the pilot areas.

2. Proposed Action

The proposed action includes the elevation of up to 70 structures within the pilot areas to two feet above the base flood elevation. In general, the elevation process consists of shutting off utilities, excavating the area surrounding the property to install lifting beams, lifting the structure with jacks, demolishing the existing foundation/substructure, installation of new foundation/substructure, lowering the structure and reconnecting the utilities. Construction will be limited to the areas in the immediate vicinity of the eligible structures and within the parcel boundaries. No in-water work is proposed. The impacted parcels are highlighted in Figure 1 and Figure 2.

3. Description of Habitat

Frederick Shores:

The Frederick Shores pilot area is highly developed, and land use is classified as medium- and high-density residential areas. There are no State-regulated freshwater wetlands within the Frederick Shores pilot area. The waters surrounding the pilot area are classified as littoral zone, which is regulated as tidal wetlands by NYSDEC. The NWI mapper classified the waters surrounding the pilot area as riverine or estuarine/marine deepwater. Vegetation within this pilot area is largely mowed lawns and ornamental species commonly found in residential areas.

Mastic Beach:

The Mastic Beach pilot area contains more open space and has a larger variety of vegetation present, in addition to the grass lawns and ornamental species commonly found in residential areas. Ecological community mapping was conducted in the southeastern portion of the pilot area in 2022 for the Town of Brookhaven (Great Ecology and Ramboll, 2022). The species identified in this effort are listed in Table 1 and are assumed to be representative of the undeveloped portions of the pilot area. There is one mapped NYSDEC freshwater wetland (identified as M-11) within the Mastic Beach pilot area. There are also several areas of mapped NYSDEC tidal wetlands that intersect with the Mastic Beach area, including high marsh, intertidal marsh, and one patch of salt marsh. The NWI mapper identified estuarine and marine deepwater, estuarine wetlands, marine wetlands, freshwater emergent wetlands, and freshwater forested shrub wetland habitats as present.

Common Name	**Scientific Name**
Upland Community	
Red maple	*Acer rubrum*
Oak	*Quercus* spp.
Common reed	*Phragmites australis*
Tree of heaven	*Ailanthus altissima*
Japanese knotweed	*Polygonum cuspidatum*
Japanese honeysuckle	*Lonicera japonica*
Sweet autumn clematis	*Clematis terniflora*
Mugwort	*Artemisia vulgaris*
Garlic mustard	*Alliaria petiolate*
Salt Marsh Community	
Marsh elder	*Iva frutescens*
Saltmeadow cordgrass	*Spartina patens*
Spikegrass	*Distichlis spicata*
Blackgrass	*Juncus gerardii*
Smooth cordgrass	*Spartina alterniflora*
Common reed	*Phragmites australis*

Table 1: Species identified in the ecological mapping of upland and salt marsh communities within Mastic Beach (Great Ecology and Ramboll, 2022).

4. Species Presence and Assessment

The Information for Planning and Consultation (IPaC) identified the following species as potentially present in the action area. The species marked with an asterisk were not identified in the previous ESA coordination.

- *Northern Long-eared Bat (*Myotis septentrionalis*) - Endangered
- *Tricolored Bat (*Perimyotis subflavus*) – Proposed Endangered
- Piping Plover (*Charadrius melodus*) – Threatened
- Roseate Tern (*Sterna dougallii dougallii*) – Endangered
- Rufa Red Knot (*Calidris canutus rufa*) – Threatened
- *Monarch Butterfly *(Danaus plexippus*) – Proposed Threatened
- *Sandplain Gerardia (*Agalinis acuta*) - Endangered

No critical habitat was identified.

Northern Long-Eared Bats (*Myotis septentrionalis*):

During the summer, northern long-eared bats roost singly or in colonies of 30-60 bats underneath tree bark, in tree crevices and cavities, or dead trees (USFWS, 2015). Roosting northern long-eared bats are typically associated with intact interior forest habitat, although bats may roost in built structures and behind building shutters. These bats typically give birth late-May to early-June/late-July. During winter, northern long-eared bats hibernate in caves or abandoned mines, called hibernacula. This species is insectivorous and feed on flying insects.

Based on data available from the USFWS New York Ecological Services Field Office, northern long-eared bats are known to roost in Mastic Beach and the Town of Brookhaven. There are no known hibernacula in the vicinity of the action area. The NY Natural Heritage Program identified Northern Long-eared Bats (maternity colony and nonbreeding locations) as documented at several locations within 1.25 miles of the Mastic Beach Pilot area and at more locations within 3 miles; individuals may travel 3 miles from documented locations. It was noted that the main impact of concern for the species is the removal of potential roost trees. There is potential for bats to roost in structures or behind building shutters within the Mastic Beach pilot area. The species is not expected to be present within the Frederick Shores pilot area, as neither Frederick Shores nor the Town of Babylon are included on the USFWS list of roosting locations, and there are limited intact forested habitats nearby the Frederick Shores pilot area that could support roosting.

Prior to construction, surveys will be conducted for structures to be elevated within the Mastic Beach pilot area during the summer occupancy season. These surveys will be done using the most recent version of the USFWS Rangewide Northern Long-Eared Bat Survey Guidelines, currently the 2024 version. If it is determined during the surveys that bats are present in structures to be elevated, then construction for these structures will be scheduled outside of the summer occupancy season for Long Island (March 1 – September 30). Adjacent structures will also follow this window to avoid indirect impacts from noise/vibration due to nearby construction activities. If it is determined during the surveys that bats are not present in structures to be elevated, then construction may occur without observing the summer occupancy season window.

There is a potential need for tree pruning or removal during structure elevation to allow for access by construction equipment in the immediate vicinity of the structures. Tree removal or pruning activities will not be allowed during the pupping season (June 1 – August 15) for any structures.

With the implementation of the pre-construction survey and proposed construction and tree removal windows, the District has determined that the proposed action may affect but is not likely to adversely affect the northern long-eared bat.

Tricolored Bat (*Perimyotis subflavus*):

Tricolored bats are one of the smallest bats in North America. They exhibit tricolored fur that appears dark at their base and tip and lighter in the middle, hence their name (USFWS, 2024). During winter, tricolored bats are found hibernating in caves, mines, and to a lesser extent, road culverts. During the non-hibernating season, tricolored bats roost in forest trees, primarily among clusters of live and dead leaves. Alternative roosting locations may be selected, such as buildings, barns, and rock crevices (NYNHP, 2024a). Mating occurs in the fall, followed by hibernation in the winter, emergence in the spring, and the formation of maternity colonies in the summer when young are born. Tricolored bats are insectivores.

The Mastic Beach pilot area has buildings and intact forest habitat nearby that could support roosting. Frederick Shores is more densely developed than Mastic Beach and has limited intact forest habitat that could potentially support roosting. There are no known hibernacula in either pilot area. The NYNHP did not identify documented occurrences of tricolored bat in either pilot area.

Pre-construction surveys for bats will be conducted for the Mastic Beach pilot area. The USFWS Rangewide Northern Long-Eared Bat Survey Guidelines are applicable to tricolored bats. With the implementation of the pre-construction survey and proposed construction and tree removal windows, the District has determined that the proposed action may affect but is not likely to adversely affect the tricolored bat.

Piping Plover *(Charadrius melodus*):

Piping plovers are small migratory shorebirds that prefer to nest on dry, sandy, open beaches above mean high water. Mating generally begins in early/mid-March and continues into late June/July. Most nesting activity ceases by mid-August to September, when the birds begin to migrate south for winter. Piping plovers predominantly feed on invertebrates within intertidal areas and along the shorelines of coastal ponds, lagoons, and salt marshes.

The NYNHP noted that piping plover have been documented in the vicinity of the Mastic Beach pilot area. The Third Edition of the NYS Breeding Bird Atlas (BBA) (last accessed 09 July 2024) and available eBird data (last accessed 2 April 2025) was used to identify occurrences of piping plovers near each pilot area. BBA data documented confirmed breeding, probable breeding, and non-breeding observations of piping plover at Democratic Point, the Atlantic Ocean beaches, and the Fire Island Inlet shoreline within Robert Moses State Park (approx. 3.5 miles from the Frederick Shores pilot area). Non-breeding observations were also made at Oak Beach, the sore thumb at Gilgo State Park, and Fire Island Inlet (approx. 3 miles from Frederick Shores). On eBird, recent observations of piping plover are limited to the barrier beaches fronting the Frederick Shores pilot area. Near Mastic Beach, confirmed breeding and non-breeding observations have been made

along the beaches of Smith Point County Park, Fire Island Wilderness East, and Fire Island Old Inlet (ranging from 1-3 miles from the pilot area). On eBird, recent observations of piping plover are also limited to the barrier beaches fronting the Mastic Beach pilot area.

There is no nesting habitat within either pilot area and no known shorebird nests at either site. The Frederick Shores pilot area is highly developed and does not have habitat suitable for foraging. The Mastic Beach pilot area includes intertidal areas that may be used for foraging. Occurrences of plovers would be limited to the occasional transient flyover. As construction would occur within previously developed lots and there is low likelihood of piping plovers within the pilot areas, the District determined that there would be no effect to piping plovers as a result of the proposed action.

Roseate Tern (*Sterna dougallii dougallii*):

Roseate terns are medium-sized terns that typically nest in sandy areas with 80% vegetative cover, on small islands, or at the ends of barrier beaches in colonies. Roseate terns can arrive in Long Island as early as late-April and typically depart by October or November (USFWS, 1989). Roseate terns forage for small schooling fish in areas within approximately 1.25 miles offshore. Over 95% of roseate terns in New York breed at a single coastal island over 50 miles from the pilot areas (NYNHP, 2024b). Historically, the roseate tern has occasionally been observed breeding on the islands within Great South Bay and Moriches Bay (USACE and USFWS, 2018).

BBA data documented confirmed breeding, probably breeding, and non-breeding observations of roseate tern at Democrat Point, within Robert Moses State Park (approx. 3.5 miles from Frederick Shores). Within 3-4.5 miles of Frederick Shores, non-breeding observations were made at Oak Beach, Fire Island Inlet, and Captree Marina, and observations of probable breeding were made at Captree Island (approx. 4 miles away). Near the Mastic Beach pilot area, non-breeding observations have been made at Smith County Park, Fire Island Wilderness East, and Fire Island Old Inlet (approx. 1-3 miles away). On eBird, past observations are limited to the barrier islands fronting both pilot areas.

Roseate tern are not expected to be present at either pilot area and occurrences would be limited to the occasional transient flyover at most. As a result, the District determined that there would be no effect to roseate tern as a result of the proposed action.

Rufa Red Knot (*Calidris canutus rufa*):

Red knots are stocky, medium-sized shorebirds that utilize stopover areas along the Atlantic Coast of New York during their annual migration between breeding grounds in the Arctic and wintering areas as far south as Tierra del Fuego. The red knot's northbound migration through Long Island is roughly May 1 – June 15 and the southbound migration is roughly July 15 – November 30. During migration and in winter, red knots are typically found in very large flocks in intertidal marine habitats, on tidal flats, rocky shores, and beaches, especially near coastal inlets, estuaries, and bays. Red knots eat shallow-buried prey such as mollusks, horseshoe crab eggs, marine worms, and other invertebrates.

Near Frederick Shores, red knots have been observed approximately 0.75 miles west at Santapogue Creek, 3 miles southeast at Oak Beach, and 3.5 miles south at Robert Moses State Park. Near

Mastic Beach, red knots have been observed 1 mile south at Smith Point County Park, 1.5 miles south at Fire Island Wilderness East, and 3 miles southwest at Fire Island Old Inlet (NYSBBA, 2025). eBird was referenced for both areas and past observations were largely limited to the barrier islands fronting the pilot areas.

The Frederick Shores pilot area is highly developed and does not have habitat suitable for foraging. The Mastic Beach pilot area includes intertidal areas that may be used by red knots for foraging. However, as the eligible structures are within previously developed lots, there would be no direct disturbance to foraging individuals. At most, the noise from construction would result in individuals leaving the Mastic Beach pilot area for adjacent foraging habitat during active construction at structures nearest the intertidal areas. Once construction is complete, individuals are expected to continue their previous use of the area. Therefore, the District determined that the proposed action may affect but is not likely to adversely affect the red knot.

Monarch Butterfly (*Danus plexippus)*:

Monarch butterflies are large, brightly colored insects. Monarchs in eastern North America are predominantly migratory, traveling from summer breeding habitats in northern U.S. and Canada to overwintering habitat in Mexico, where they reside from October to late-March. Monarch butterflies can be found in a wide range of habitats across Long Island and rely on milkweeds (*Asclepias* spp.) and flowering plants for reproduction and feeding, respectively. As the species is highly mobile and there is ample habitat nearby that is the same or higher quality, no impacts to monarchs are anticipated. Therefore, the District determined that the proposed action would have no effect on monarch butterfly.

Sandplain Gerardia (*Agalis acuta*):

Sandplain gerardia is a small pink or purple blossomed annual that grows in open grassland habitats along coastal Long Island. Significant remnant populations remain only at Sayville, the Hempstead Plains, and Montauk (USACE 2020). The species requires prairie grassland habitat dominated by native bunchgrass, especially little bluestem (*Schizachyrium scoparium*) (Jordan, 2004). There are no known occurrences of sandplain gerardia within the pilot areas. This species is not expected to be present within the construction areas, which is limited to previously developed lots of eligible structures. Therefore, the District determined that the proposed action would have no effect on sandplain gerardia.

5. Conclusion

The District determination for each listed species identified as potentially present in the action area is summarized in Table 2.

Species	Impacts	District Determination
Northern Long-Eared Bat	Potential direct impacts if roosting in structures. Indirect impacts from noise/vibration during construction. Both mitigated with surveys to determine presence and	May affect, not likely to adversely affect.

	implementation of summer roosting window as nefeded.	
Tricolored Bat	Same as NLEB.	May affect, not likely to adversely affect.
Piping Plover	None	No effect.
Roseate Tern	None	No effect.
Red Knot	Temporary noise impacts from nearby construction would result in leaving area to use adjacent foraging habitats.	May affect, not likely to adversely affect.
Monarch Butterfly	None	No effect.
Sandplain Gerardia	None	No effect.

Table 2: Summary of District determination for each species

Figure 1: Frederick Shores Pilot area and limits of disturbance

Figure 2: Mastic Beach Pilot area and limit of disturbance

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