

APPENDIX O

PERTINENT CORRESPONDENCE



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

MAY 3 2016

Peter Wepler, Chief
Environmental Analysis Branch
Planning Division
New York District
U.S. Army Corps of Engineers
26 Federal Plaza
New York, NY 10278-0900

RE: Fire Island Inlet to Montauk Point Reformulation Study

Dear Mr. Wepler:

We have reviewed the essential fish habitat (EFH) assessment dated December 17, 2015, and the information in your October 13, 2015, letter summarizing the Fire Island to Montauk Point Reformulation Study. The project area extends from Fire Island Inlet east to Montauk Point in Long Island, New York. This area includes the entire Atlantic coast of Suffolk County covering an ocean shoreline length of approximately 83 miles and over 200 miles of additional shoreline within the estuary system. The proposed action includes beach and dune restoration, inlet modifications, groin modifications, a breach response plan, and other non-structural measures, as well as, the continuation of the authorized dredging in Fire Island, Moriches and Shinnecock Inlets and the ebb shoals outside of the inlets with the placement of the dredged material in down drift areas. You previously consulted with us on a portion of this project under the Fire Island Inlet to Moriches Inlet; Fire Island Stabilization Project – Hurricane Sandy Reevaluation Report. We provided conservation recommendations for this Hurricane Sandy Reevaluation project in our letter dated May 14, 2014.

The Fish and Wildlife Coordination Act (FWCA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA) require federal agencies to consult with one another on projects such as this that may affect EFH and other aquatic resources. Because this project affects EFH, this process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments, lists the required contents of EFH assessments, and generally outlines each agency's obligations in this consultation procedure.

Fish and Wildlife Coordination Act

The inlets of the project area provides access to the Great South Bay, Moriches Bay, Shinnecock Bay and their freshwater tributaries for many aquatic species including both state and federally managed species and their forage including bluefish (*Pomatomus saltatrix*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristis striata*), Atlantic butterfish (*Peprilus triacanthus*), winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*), weakfish (*Cyanoscion regalis*), striped bass (*Morone saxatilis*), tautog (*Tautoga onitis*), spot (*Leiostomus xanthurus*), Atlantic croaker



The project area is also EFH for several highly migratory species including common thresher shark (*Alopias vulpinus*), white shark (*Carcharodon carcharias*), tiger shark (*Galeocerdo cuvieri*), basking shark (*Cetorhinus maximus*), blue shark (*Prionace glauca*), dusky shark (*Carcharhinus obscurus*), sandbar shark (*Carcharhinus plumbeus*), sand tiger shark (*Odontaspis taurus*), shortfin mako shark (*Isurus oxyrinchus*), bluefin tuna (*Thunnus thynnus*), skipjack tuna (*Katsuwonus pelamis*), and yellowfin tuna (*Thunnus albacares*). Sand tiger and dusky sharks have also been listed as Species of Concern by NOAA.

The EFH assessment evaluates some of the potential impacts to EFH that could result from the implementation of the Tentative, Federally-Supported Plan (TFSP), but it lacks any discussion of the specific details of the project components including the areal extent of the sand placement below the high tide line and the amount and extent of dredging within the inlets and ebb shoals. The offshore borrow areas are not identified and there are no estimates on the amount of material that will be removed or the frequency of the disturbance of each borrow area or inlet. Detailed, site specific information on the borrow areas and inlet ebb shoals is also lacking. The absence of these details prevents a full evaluation of the direct, indirect, individual and cumulative effects of the actions proposed. As a result, we can only provide general comments and EFH conservation recommendations. Additional consultation will be necessary for each individual action or dredging event undertaken as part of this project, so that site specific EFH conservation recommendations can be developed. We can work with your staff to complete a programmatic consultation for this entire project to reduce the need for individual consultations, but the additional information discussed above will be needed as part of any programmatic consultation.

The dredging of sand for beach nourishment and to construct feeder beaches has the potential to impact both the EFH of a particular species as well as the organisms themselves in a variety of ways. Dredging can result in the impingement of eggs and larvae in the dredge plant and create undesirable suspended sediment levels in the water column. Increased suspended sediment levels can reduce dissolved oxygen, can mask pheromones used by migratory fishes, and can smother immobile benthic organisms and newly-settled juvenile demersal fish (Auld and Schubel 1978; Breitburg 1988; Newcombe and MacDonald 1991; Burton 1993; Nelson and Wheeler 1997). Sustained water column turbulence can reduce the feeding success of sight-feeding fish such as winter flounder and summer flounder.

The inlets within the project area provide a hydrologic connection between the marine and estuarine environments, and are responsible for regulating local salinity regimes, and serve as the conduit for planktonic exchange and related movements of diadromous species, estuary dependent fishes, and invertebrates between the ocean and inland bays. Dredging within the inlet can impede the movements of fish into and out of the back bays. Dredging can also remove the substrate used by federally managed species as spawning, refuge and forage habitat. Benthic organisms that are food sources for federally managed species may also be removed during the dredging. These impacts may be temporary if the substrate conditions return to preconstruction condition and benthic community recovers with the same or similar organisms. The impacts may be permanent if the substrate is altered in a way that reduces its suitability as habitat, if the benthic community is altered in a way that reduces its suitability as forage habitat or if the dredging occurs so often that the area does not have time to recover.

as feeding habitat and the definition of EFH includes waters and substrate necessary to fish for feeding. Therefore, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat may also be considered adverse effects on EFH.

Stemile et al. (2000) report that winter flounder diets include the siphons of surf clams. Buckel and Conover (1997) in Fahay et al. (1999) reports that diet items of juvenile bluefish include *Alosa* species. As a result, activities that adversely affect the surf clams or the spawning success and the quality of the nursery habitat for anadromous fish can adversely affect the EFH for winter flounder juvenile and bluefish by reducing the availability of prey items. Water quality degradation, increased turbidity, noise and vibrations from dredging operations may impede the migration of anadromous fish through the inlets to their upstream spawning grounds.

The Mid-Atlantic Fisheries Management Council (MAFMC) has developed policy statements on beach nourishment activities that may affect federally managed species under their purview including summer flounder, scup, black sea bass, monkfish and butterfish. These policies are intended to articulate the MAFMC's position on various development activities and facilitate the protection and restoration of fisheries habitat and ecosystem function. The MAFMC's policies on beach nourishment are:

1. Avoid sand mining in areas containing sensitive fish habitats (e.g., spawning and feeding sites, hard bottom, cobble/gravel substrate, shellfish beds).
2. Avoid mining sand from sandy ridges, lumps, shoals, and rises that are named on maps. The naming of these is often the result of the area being an important fishing ground.
3. Existing sand borrow sites should be used to the extent possible. Mining sand from new areas introduces additional impacts.
4. Conduct beach nourishment during the winter and early spring, when productivity for benthic infauna is at a minimum.
5. Seasonal restrictions and spatial buffers on sand mining should be used to limit negative impacts during fish spawning, egg development, young-of-year development, and migration periods, and to avoid secondary impacts to sensitive habitat areas such as SAV.
6. Preserve, enhance, or create beach dune and native dune vegetation in order to provide natural beach habitat and reduce the need for nourishment.
7. Each beach nourishment activity should be treated as a new activity (i.e., subject to review and comment), including those identified under a programmatic environmental assessment or environmental impact statement.
8. Bathymetric and biological monitoring should be conducted before and after beach nourishment to assess recovery in beach borrow and nourishment areas.

We look forward to our continued coordination with your office on this project as it moves forward. As stated above, because the EFH assessment provided lacks sufficient detail on each action proposed as part of the TFSP, individual consultations are needed prior to the initiation of each activity so that site specific conservation recommendations can be developed. We can work with your staff to complete a programmatic consultation to reduce the need for individual consultations. If you have any questions or need additional information, please do not hesitate to contact Karen Greene at karen.greene@noaa.gov or (732) 872-3023.

Sincerely,



Louis A. Chiarella,
Assistant Regional Administrator
for Habitat Conservation

cc: NYD Corps – R. Smith
PRD Daniel Marrone
NEFMC – T. Nies
MAFMC – C. Moore

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Weinstein MP, Weiss SL, Hodson RG, Gerry LR (1980) Retention of three taxa of postlarval fishes in an intensively flushed tidal estuary, Cape Fear River, North Carolina. *Fishery Bulletin* 78(2):419-436



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

January 26, 2016

Mr. Peter M. Wepler
Chief, Environmental Analysis Branch
U.S. Army Corps of Engineers
26 Federal Plaza
New York, NY 10278-0900

Dear Mr. Wepler:

This is in response to the U.S. Army Corps of Engineers' (Corps) October 1, 2015, request (received via electronic mail) for the U.S. Fish and Wildlife Service (Service) to identify information that would be pertinent to the Endangered Species Act (ESA) of 1973, consultation (87 Stat., 884., as amended; 16 U.S.C. 1531 *et seq.*) for the Corps' Fire Island Inlet to Montauk Point Reformulation Study (FIMP). This response is also provided pursuant to the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*).

The Corps' October 1 request for information to assist in the ESA consultation followed guidance the Service provided to the Corps at the September 15, 2015, FIMP interagency coordination meeting. Specifically, the Service recommended that the Corps initiate informal consultation to extend discussions relative to conservation measures that could be incorporated into the project description and included in the formal consultation process.

In this letter, we provide recommendations and request information that would assist both our agencies in the ESA and FWCA consultations. The information that is requested for the FWCA consultation will assist us in moving forward on or analysis of the impacts of the project on fish and wildlife resources, identifying fish and wildlife resource concerns and opportunities, evaluating mitigation alternatives, and making recommendations to avoid, minimize, and compensate for loss of fish and wildlife species and or their habitats. The ESA recommendations will assist the Corps in meeting its section 7(a)(2) of the ESA responsibility of ensuring any project that it authorizes, carries out, or funds does not jeopardize the continued existence of listed species.

We would appreciate your immediate attention and written response so that we can continue to make progress on these consultations. Please note that we may have additional information needs as both consultations proceed.

ESA Recommendations/Information

- 1) Since 1999, we have recommended that the Corps undertake a comprehensive regional approach to listed species management for this project due to its geographical and temporal scope as part of the FIMP planning process. At that time, we indicated that a plan addressing protection and conservation of listed species and their habitat, experimental investigations into artificial habitat creation, and identification and protection of locations within the barrier island system where processes of overwashing and breaching could occur in as natural a setting as possible would greatly facilitate the formal ESA consultation. Specifically, we recommended, and continue to recommend, that the Corps incorporate a Long-term Regional Comprehensive Management Plan (LTRCMP) for Threatened and Endangered Species into the FIMP project description. During the early 2000s, both our agencies worked collaboratively on the initial phases of the LTRCMP, but the Corps discontinued the effort in 2004. We were encouraged to learn in your October 15, 2014, correspondence that the Corps would be re-engaging with us on its development, but we have not been approached to date. Our recommendations related to aspects of the LTRCMP are provided below.
- 2) We continue to recommend the inclusion of "Land Manager Protection Plans," which would address the project-induced effects of increased recreational disturbance (U.S. Fish and Wildlife Service 2001) in the FIMP study area. They would include, but not be limited to, intensive protection of breeding plovers on all habitats (natural, artificially enhanced, and stabilized) in the planning area from human disturbance and predation. Incorporation of these overall plans, would also assist in offsetting impacts of habitat degradation on the plover population's vulnerability by maximizing productivity on the remaining habitat.
- 3) We recommend that the Corps include a list, map, and detailed plans of habitat restoration activities in the FIMP project description, that directly benefit listed species and their habitats, so the Service can review and provide input on their viability and potential benefit to listed species. We reference the Corps' 2008 document entitled, "*Restoration Opportunities in Conjunction with Breach Response Alternatives*," as an early effort to undertake and incorporate this into the FIMP project description, but have seen no advancement of this effort. Habitat restoration will be key to addressing adverse effects to listed species and their habitat due to barrier island and inlet stabilization and loss of early successional habitat formation from overwashing and breaching events, or development spurred by the proposed plan.
- 4) Please provide your agency's plans for the distribution of naturally functioning and artificially-enhanced habitat areas across the planning area. Distribution of highly productive habitats and birds among multiple sites reduces a species' vulnerability to environmentally-driven variance due to predation, weather, etc. These might include not only undeveloped areas, but the potential "buy-out" of developments in areas that are sparsely-developed and/or have high potential habitat value (e.g., proximity to feeding areas, prone to overwashes, etc. (see U.S. Fish and Wildlife Service 2001);

- 5) Please provide breach fill profiles for the Breach Response Plans that foster natural habitat creation and maintenance for piping plover (*Charadrius melodus*), seabeach amaranth (*Amaranthus pumilus*), and red knot (*Calidris canutus*), as well as other shore-dependent species.
- 6) Section 7(a)(1) of the ESA directs each federal agency to carry out programs for the conservation of threatened and endangered species in consultation with the Service. We recommend that the Corps include in the ESA consultation a list of section 7(a)(1) activities that the Corps has undertaken for the conservation of threatened and endangered species in the study area as part of its general civil works program. We also recommend that the Corps review the Service's conservation recommendations provided for prior federal projects and provide a report to the Service which summarizes the status and outcomes of their implementation.
- 7) Information related to the creation, restoration, or enhancement of habitat will be important in evaluating the project and developing the Biological Assessment and Biological Opinion. Please provide detailed reports on Corps' projects which created artificial and high quality plover habitats. Planning considerations for habitat creation and/or enhancement must include avoidance of hazards posed to plovers when habitats are bisected by a road (see U.S. Fish and Wildlife Service 2001);
- 8) Please provide maps which show planned implementation of the Corps' FIMP Restoration Framework, *i.e.*:

“The five key physical processes that need to be sustained, restored, or enhanced to re-establish protective features are: 1. Longshore sediment transport; 2. Cross-shore sediment transport; 3. Dune growth and evolution; 4. Bayside shoreline processes; 5. Circulation and water quality,” with particular attention to cross-shore sediment transport. (see U.S. Army Corps of Engineers 2009b)

- 9) Please provide plans which illustrate the Corps' planning criteria which states,

“Preference will be given to measures that protect and restore coastal landforms and natural habitats, aid in recovery of threatened and endangered species, enhance public recreation and use, and ensure perpetuation of essential physical and biological processes.” (see U.S. Army Corps of Engineers 2009a)

FWCA Comments

The Service has initiated the preparation of the a Draft FWCA report, however, in order for the Service to be able to fully assess the project's impacts to fish and wildlife resources, additional information, as listed below, is requested.

- 1) In order to fully assess the direct, indirect, and cumulative impacts of the nonstructural alternatives on fish and wildlife resources and their habitats, including an assessment of

sensitive habitats within or adjacent to the immediate project areas, please provide the following:

- a) the techniques that will be used to elevate the roadways;
- b) the footprint of the proposed road dikes;
- c) the locations of all public and private structures to be elevated,
- d) the area of jurisdictional wetlands filled, if any;
- e) specific wetlands and upland areas to be acquired along with their final disposition (federally-, state-, or locally-owned);
- f) the land uses that will be allowed on acquired properties; and
- g) the area of coastal zones, wetlands, and uplands that may be indirectly impacted by the construction of the road dikes.

The Corps has indicated via electronic mail that separate environmental assessments will be conducted as non-structural components are developed. Please confirm if that is how the Corps plans on developing these components.

- 2) In order to assess the impacts of this offshore dredging and beach nourishment on nearshore and barrier island flora and fauna that may be directly impacted by construction activities, or indirectly impacted by increased recreational activities or reduction in overwash and breaching processes, please provide the following:
 - a) cross-sections of proposed beach nourishment/fill;
 - b) a detailed description and location of the proposed borrow areas;
 - c) any studies regarding use of the borrow areas by avian species;
 - d) beachfill volumes; volumes of sediment to be dredged from federal navigation channels at Fire Island, Moriches and Shinnecock Inlets;
 - e) the maintenance depths of these inlets; and
 - f) and the specifications for proposed beach grass plantings and sand fence placement (if proposed).
- 3) It is well established that the overwash and breaching regime on the south shore barrier islands has influenced back barrier saltmarsh development and that saltmarsh growth and development are important components to barrier island resiliency and occur over a significant portion of the barrier islands in the project area. In order to understand the measures the Corps is taking to address barrier island resiliency, which includes conservation and restoration of backbay saltmarshes, please provide a detailed assessment on how the rate and areas of saltmarsh development will be mitigated under the scenario of barrier island stabilization over 50 years.
- 4) In order to assess whether the habitat evaluation procedures (HEP) alternatives that create or restore wetlands are viable measures and will not result in a net loss of wetland functions and values in the project area, please provide any supporting research undertaken by the Corps or others that examines the ecological and functional roles of artificial wetland creation as a surrogate for natural marsh creation.

- 5) Implementation of the mitigation alternatives is necessary to address the attendant impacts of any alternative. In order to understand whether the construction and mitigation alternatives will actually be implemented across the project area, as described in the Corps' project description, and to better evaluate the project as whole, and more accurately determine whether a proposed alternative will be beneficial, adverse, or neutral in terms of its environmental impacts, please provide letters from the local cost share sponsor, the New York State Department of Environmental Conservation, and other jurisdictional landowners and environmental regulators that illustrate their position on wetland creation or sand filling in the back bays to mitigate for the prevention or reduction of barrier island breaching and overwashing.
- 6) In order to accurately assess impacts to backbay fish and wildlife resources, including invertebrate and vertebrate colonizing species, and submerged aquatic and terrestrial plants, please quantify the volumes and area and design for sub- and supra-tidal areas that would be created in the back bays as mitigation for the prevention of breaches.

Thank you for the opportunity to assist you in these consultations. We look forward to our continued participation in the consultation. If you have any questions, please have your staff contact Steve Papa (ESA consultation), and Steve Sinkevich (FWCA consultation), of the Long Island Field Office, at (631) 286-0485, extensions 2120 and 2121, respectively.

Sincerely,

for Patricia Cole
David A. Stilwell
Field Supervisor

Literature Cited

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Environmental Branch

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
JACOB K. JAVITS FEDERAL BUILDING
26 FEDERAL PLAZA
NEW YORK NY 10278-0090

October 13, 2015

Mr. Jeffrey Zappieri
Consistency Review Unit
Office of Planning and Development
New York Department of State Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001

Subject: Fire Island Inlet to Montauk Point Reformulation Study (FIMP)

Dear Mr. Zappieri:

This letter is in reference to the Fire Island Inlet to Montauk Point, New York Reformulation Study. This letter has been prepared to summarize our approach to conduct Coastal Zone Management (CZM) coordination and then to finalize the FIMP Reformulation Study and associated Environmental Impact Statement (EIS).

In March 2011, the U.S. Army Corps of Engineers (Corps), the U. S. Fish and Wildlife Service (USFWS) and the National Park Service (NPS) jointly signed and transmitted a letter to the New York State Department of Environmental Conservation (NYSDEC), identifying the Tentative, Federally Supported Plan (TFSP) as the basis for moving forward with the Project. New York State, by letter in June 2013, agreed in concept with the TFSP. This agreement noted the details that required refinement, which include the breach response, life-cycle management of the project, alignment, and nature-based features.

The Corps finds that the best course of action to resolve these remaining plan details is through the Corps' formal report review process, the National Environmental Policy Act (NEPA) process, and necessary regulatory coordination. The formal review process is an efficient means to formally describe the alternative plan in its entirety, and to finalize a mutually agreeable plan that has local sponsor support. The Corps intends to move forward with what we will identify as the Tentatively Selected Plan (TSP) in our EIS.

A description of the TSP is provided as an enclosure. The adjustments that have been made to the TFSP include the following:

- The TFSP recommended a conditional breach response plan in the portion of Smith Point County Park east of the pavilion and TWA Flight 800 Memorial, with a conventional beachfill plan for the remainder of Smith Point County Park. The updated TSP recommends a proactive breach response plan for this area, to more closely match the plan features, and level of risk reduction that has been provided by



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US ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
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October 13, 2015

Mr. David Stilwell
Field Supervisor
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, New York 13045

Subject: Fire Island Inlet to Montauk Point Reformulation Study (FIMP)

Dear Mr. Stilwell:

This letter is in reference to the Fire Island Inlet to Montauk Point, New York Reformulation Study. This letter has been prepared to summarize our approach request a Fish and Wildlife Coordination Act Report (FWCAR) and start the Section 7 coordination and then finalize the FIMP Reformulation Study and associated Environmental Impact Statement (EIS).

In March 2011, the U.S. Army Corps of Engineers (Corps), the U. S. Fish and Wildlife Service (USFWS) and the National Park Service (NPS) jointly signed and transmitted a letter to the New York State Department of Environmental Conservation (NYSDEC), identifying the Tentative, Federally Supported Plan (TFSP) as the basis for moving forward with the Project. New York State, by letter in June 2013, agreed in concept with the TFSP. This agreement noted the details that required refinement, which include the breach response, life-cycle management of the project, alignment, and nature-based features.

The Corps finds that the best course of action to resolve these remaining plan details is through the Corps' formal report review process, the NEPA process, and necessary regulatory coordination. The formal review process is an efficient means to formally describe the alternative plan in its entirety, and to finalize a mutually agreeable plan that has local sponsor support. The Corps intends to move forward with what we will identify as the Tentatively Selected Plan (TSP) in our EIS.

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- The TFSP recommended a conditional breach response plan in the portion of Smith Point County Park east of the pavilion and TWA Flight 800 Memorial, with a conventional beachfill plan for the remainder of Smith Point County Park. The updated TSP recommends a proactive breach response plan for this area, to more closely match the plan features, and level of risk reduction that has been provided by



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October 13, 2015

Melissa D. Alvarez, PWS
Marine Habitat Resource Specialist
Habitat Conservation Division
National Marine Fisheries

Subject: Fire Island Inlet to Montauk Point Reformulation Study (FIMP)

Dear Ms. Alvarez:

This letter is in reference to the Fire Island Inlet to Montauk Point, New York Reformulation Study. This letter has been prepared to summarize our approach to conduct Essential Fish Habitat (EFH) coordination under the Magnuson-Stevens Fishery Conservation and Management Act and then finalize the FIMP Reformulation Study and associated Environmental Impact Statement (EIS).

In March 2011, the U.S. Army Corps of Engineers (Corps), the U. S. Fish and Wildlife Service (USFWS) and the National Park Service (NPS) jointly signed and transmitted a letter to the New York State Department of Environmental Conservation (NYSDEC), identifying the Tentative, Federally Supported Plan (TFSP) as the basis for moving forward with the Project. New York State, by letter in June 2013, agreed in concept with the TFSP. This agreement noted the details that required refinement, which include the breach response, life-cycle management of the project, alignment, and nature-based features.

The Corps finds that the best course of action to resolve these remaining plan details is through the Corps' formal report review process, the National Environmental Policy Act (NEPA) process, and necessary regulatory coordination. The formal review process is an efficient means to formally describe the alternative plan in its entirety, and to finalize a mutually agreeable plan that has local sponsor support. The Corps intends to move forward with what we will identify as the Tentatively Selected Plan (TSP) in our EIS.

A description of the TSP is provided as an enclosure. The adjustments that have been made to the TFSP include the following:

- The TFSP recommended a conditional breach response plan in the portion of Smith Point County Park east of the pavilion and TWA Flight 800 Memorial, with a conventional beachfill plan for the remainder of Smith Point County Park. The updated TSP recommends a proactive breach response plan for this area, to more closely match the plan features, and level of risk reduction that has been provided by the Fire Island Stabilization Project.



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
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August 10, 2015

Planning Division

Mr. Alan A. Fuchs, P.E.
Director, Bureau of Flood Protection and Dam Safety, Division of Water
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-3504

Dear Mr. Fuchs:

This letter is in reference to the Fire Island Inlet to Montauk Point, New York Reformulation Study. Identical copies of this letter have been provided to New York State DEC, Suffolk County, US Fish and Wildlife Service, and National Park Service. This letter has been prepared to summarize our approach to bring the FIMP Reformulation Study to a conclusion.

In March 2011, the Corps, USFWS and NPS jointly signed and transmitted a letter to NYSDEC, identifying the Tentative, Federally Supported Plan (TFSP) as the basis for moving forward with the Project. We recognize this as a significant milestone in advancing this Reformulation Study. New York State, by letter in June 2013, agreed in concept with the TFSP. This agreement noted the details that required refinement, which include the breach response, life-cycle management of the project, alignment, and nature-based features.

Following Hurricane Sandy, we have continued to work collaboratively to refine the TFSP to address the agency missions and respond to lessons learned during Hurricane Sandy. Participating agencies have coordinated their response to storm impacts and the breaches that occurred, to implement the stabilization efforts, and to advance the overall Reformulation Study. We have collectively recognized that adjustments to the TFSP were necessary for the stabilization efforts, and will be necessary to implement the overall Reformulation Plan.

Multiple meetings have convened to finalize the FIMP plan details, and it has become apparent that the interrelationship of the features within the recommended alternative and the level of risk tolerance acceptable to each agency impedes a multi-agency consensus on specific features. Therefore, the Corps finds that the best course of action to resolve these remaining plan details is to through the Corps' formal report review process, the NEPA process, and necessary regulatory coordination. The formal review process is an efficient means to formally describe the alternative plan in its entirety, and to finalize a mutually agreeable plan that has local sponsor support. Rather than ending the ongoing coordination between our respective offices, we find the formal review process allows for a thoughtful evaluation of the interrelated features and their contributions to coastal storm risk reduction in a more formal, open process.

The Corps intends to move forward with what the Corps will identify as the Tentatively Selected Plan (TSP) in our General Reevaluation Report and Environmental Impact Statement.

MEMORANDUM OF UNDERSTANDING
between the
THE UNITED STATES ARMY
and
THE DEPARTMENT OF THE INTERIOR

I. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to provide a foundation for collaboration between the United States Army (Army), represented by the United States Army Corps of Engineers (Corps) and the Department of the Interior (DOI), for purposes of developing a plan that is mutually acceptable for hurricane and storm damage reduction, including identifying and evaluating natural and nature-based measures that contribute to coastal storm damage risk reduction, in the general reformulation study for the Fire Island to Montauk Point, New York project (FIMP).

II. BACKGROUND

The Corps and DOI stipulate that:

- A. Congress authorized the FIMP for beach erosion control and hurricane protection in section 101 of the Rivers and Harbors Act of 1960, Public Law 86-645;
- B. Section 8 of the Act establishing the Fire Island National Seashore, Public Law 88-587 directed that the authority of the Corps to undertake or contribute to shore erosion control or beach protection measures on lands within the Fire Island National Seashore lands shall be exercised in accordance with a plan that is mutually acceptable to the Secretary of the Army and the Secretary of the Interior;
- C. The Corps initiated a reformulation study of the FIMP in 1980;
- D. In 2004, the Corps, DOI, and other partners adopted a Vision Statement for the reformulation study that acknowledged a preference for measures that protect and enhance natural processes and minimize adverse environmental impacts;
- E. In 2011, the Corps in consultation with the DOI developed a Tentatively Federally Selected Plan in the FIMP reformulation study that included a combination of soft structural, nonstructural, and nature based solutions as well as monitoring and adaptive management components to address uncertainties;
- F. In 2012, Hurricane Sandy damaged portions of the FIMP project area, increasing risk and vulnerability of coastal developments in the project area to flooding; and,
- G. Congress provided funding in the Disaster Relief Appropriations Act of 2013, Public Law 113-2 to reduce future flood risk in ways that will support the long-term

- E. This MOU may be modified as necessary, by mutual agreement of both parties, by a written amendment signed and dated by an authorized representative of each party.
- F. Either party may terminate this MOU by providing 45 days written notice to the other. Otherwise this MOU will remain in force through completion of the GRR/EIS for the FIMP project and during the period of initial construction of the project.

V. **POINTS OF CONTACT.** The following individuals will be the points of contact for this MOU:

CORPS

Mr. Joe Vietri
Chief, Planning and Policy, North Atlantic Division
Building 301, General Lee Avenue
Fort Hamilton Military Community
Brooklyn, New York 11252
Joseph.R.Vietri@usace.army.mil
917-613-3873

FISH AND WILDLIFE SERVICE

Mr. David Stilwell
Field Supervisor, New York Field Office
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045
607-753-9334

NATIONAL PARK SERVICE

K. Christopher Soller, Superintendent
Fire Island National Seashore
120 Laurel St.
Patchogue, NY 11772
631-687-4752

Mary Foley, Regional Chief Scientist
Northeast Region
National Park Service
15 State St.
Boston, MA 02109
617-223-5024

USGS

Walter Barnhardt
Center Director, Woods Hole Coastal and Marine Science Center
384 Woods Hole Road

INTERAGENCY AGREEMENT BETWEEN U.S. ARMY CORPS OF ENGINEERS AND USDA-APHIS-WILDLIFE SERVICES

WORK PLAN

Introduction

The U.S. Department of Agriculture (USDA) is authorized to protect American agriculture and other resources from damage associated with wildlife. The primary authority for Wildlife Services (WS) is the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426c) as amended.

Wildlife Services activities are conducted in cooperation with other Federal, State and local agencies; private organizations and individuals. This interagency agreement will be a reimbursable agreement and the US Army Corps of Engineers will only be billed for costs of work performed, not to exceed \$44,060.00.

The WS program uses an Integrated Wildlife Damage Management (IWDM) approach (sometimes referred to as IPM or "Integrated Pest Management") in which a series of methods may be used or recommended to reduce wildlife damage. IWDM is described in Chapter 1, 1-7 of the Animal Damage Control Program Final Environmental Impact Statement (USDA 1994). These methods include the alteration of cultural practices as well as habitat and behavioral modification to prevent damage. However, controlling wildlife damage may require that the offending animal(s) are killed or that the populations of the offending species be reduced.

Long Island Shoreline from Democrat Point to South Hampton

The shoreline between Democrat Point, NY and South Hampton, NY is approximately 30 miles and serves as an important nesting site for the New York State Endangered and Federally Threatened Piping Plover in addition to other shorebirds and colonial water birds. One factor that contributes to reduced recruitment levels in these species is predation by mammalian and avian predators. The US Army Corps of Engineers has a plan for restoration of Piping Plover populations and other bird populations along this 30-mile span of Long Island shoreline. Predation management is an important component of this plan.

In addition to the work listed below, any location between these two geographical points will be worked as needed or requested by the US Army Corps of Engineers.

At the request of the US Army Corps of Engineers, USDA WS will be conducting predator management activities specifically along the six miles of the Smith Point Beach location during the fall months in 2015. USDA WS will target the species listed below.

Red fox, coyote, and raccoons prey on the nests, young, and adults of Piping Plovers, other shorebirds, and colonial water birds nesting on Long Island's shoreline. The occurrence of one

Resources Required

Wildlife Services employees will conduct the fox, coyote, raccoon, gull, and crow removal work. Cooperating agency personnel will provide Wildlife Services staff with technical assistance on working in and around the various nesting bird species and colonies to minimize disturbances of these species. Housing may also be provided on site if available.

Procurement

Purchase of supplies, equipment and miscellaneous needs including salaries will be made by Wildlife Services as outlined under the Financial Plan of the Inter-agency Agreement. All expenditures will be processed through Wildlife Services' administrative system and charged to the US Army Corps of Engineers as described in the Inter-agency Agreement.

Stipulations and Restrictions

Wildlife Services' activities under this cooperative effort will be limited to New York State. Techniques will be environmentally sound, safe, and selective. If applicable, both Federal and State permits will be secured by the resource owner to perform wildlife damage management activities, and these activities will be within the policy guidelines of US Army Corps of Engineers and USDA-APHIS-Wildlife Services. All program activities will be conducted within Federal and State regulations.

Reports

Wildlife Services will be responsible for the preparation of a final report on activities conducted under this Inter-agency Agreement, submitted to the US Army Corps of Engineers by September 30, 2015 through September 30, 2020.

Effective Dates

The cooperative agreement shall commence in April 20, 2015 and shall expire on April 20, 2020.



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF
Environmental Analysis Branch

December 17, 2015

Melissa D. Alvarez, PWS
Marine Habitat Resource Specialist
Habitat Conservation Division
National Marine Fisheries

Subject: Fire Island Inlet to Montauk Point Reformulation Study (FIMP)

Dear Ms. Alvarez:

This letter is in reference to the Fire Island Inlet to Montauk Point, New York Reformulation Study. This letter has been prepared to submit our official Essential Fish Habitat (EFH) coordination under the Magnuson-Stevens Fishery Conservation and Management Act in order to finalize the FIMP Reformulation Study and associated Environmental Impact Statement.

I look forward to working with you and your staff on finalizing this project. The District appreciates your continued cooperation in expediting this process. If you should have any questions, please contact Mr. Robert J. Smith of my staff at 917-790-8729.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Weppler".

Peter Weppler
Chief, Environmental Branch

Attachments



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF
Environmental Analysis Branch

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Sincerely,

Peter Wepler
Chief, Environmental Branch

Attachments

A handwritten signature, possibly "P. Wepler", is written in a circular scribble. Below it, the initials "CSA" are written in a simple, blocky font.



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK NY 10278-0090

30 September 2013

REPLY TO
ATTENTION OF
Commander

Honorable Joseph J. Martens
Commissioner
New York State Department of Environmental Conservation
Albany, New York 12233-1010

Dear Commissioner Martens:

Thank you for your letter of September 5, 2013, expressing New York State support of the new dune alignment for the Fire Island to Montauk Point (FIMP) Reformulation project, and affirming Suffolk County's role in project implementation. We also appreciate the State's continued attention to the breach at Old Inlet.

In your letter, you also requested that the Corps take the lead to acquire the approximately 39 properties impacted by the new alignment and obtain the other perpetual easements required to construct and maintain the project. Although real estate acquisition remains the responsibility of the non-Federal sponsor under the Project Partnership Agreement, the Corps of Engineers is willing to provide technical assistance to the State and County. The real estate requirements for this project are complex, and timely completion of the real estate acquisition is critical to the success of the project.

The New York District Real Estate leadership has already initiated contact with real estate representatives from both your office and Suffolk County for project requirements, staff capabilities and available resources. These discussions will assist in determining the best way to proceed, which may include Corps technical assistance with preliminary activities such as title, appraisal, and mapping. If necessary, it may also include assistance with property acquisition; however, at this time, the Corps of Engineers will not pursue acquisition of any properties required for the Fire Island to Montauk Point Project through eminent domain proceedings in Federal court. Once a plan is developed it will be memorialized in a Memorandum of Agreement, which must be executed prior to beginning the work.

In reference to the existing Old Inlet Breach, we are positioning ourselves to close this breach as was done last year for the other two Sandy breaches. However, we cannot complete any significant steps until after the property owner, the U.S. Department of the Interior, National Park Service, issues the required written permission to perform the actual work. We understand that they have concluded they will produce a National Environmental Policy Act Environmental Impact Statement and Record of Decision in order to issue that permission.



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

DISTRICT COMMANDER

August 16, 2013

Honorable Joe Martens, Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Dear Mr. Martens:

Thank you for letter dated 14 June, 2013, that supports the implementation of the Fire Island to Montauk Point (FIMP) Project. In response, I am providing documentation to support the recommendation that the beachfill component of the plan for Fire Island be implemented along a more landward alignment than the original, more seaward alignment proposed prior to Hurricane Sandy.

The attached document compares the quantities of sediment required for initial construction and subsequent periodic maintenance over the fifty year study period for the more seaward, pre-Sandy minimum real estate alignment proposal and the more recent, post-Sandy, more landward alignment.

The analysis confirms that the sediment requirements for the more landward alignment are lower than those of the more seaward alignment. Further, the attachment demonstrates that even with the cost estimate for the necessary real estate acquisitions to allow construction of the more landward alignment combined with initial construction and maintenance costs, the new proposed alignment is considerably less expensive than the more seaward, original minimum real estate proposal.

This more landward alignment is more economical, resilient and sustainable over the 50 year project life. Accordingly, your concurrence with the Tentative Federal Selected Plan (TFSP) implementation in the revised alignment is expected, as the 14 June letter indicated concurrence once the revised alignment was proven to achieve these goals.

An accelerated schedule has been developed to provide emergency stabilization within the next construction window. Therefore, it is the District's intent to immediately proceed with analysis of the TFSP along this more landward alignment and seek higher authority approvals by each Federal Agency. Without immediate indication to the contrary, your support of the TFSP is assumed from the statements in the 14 June letter and the supporting analysis provided in this response. Please contact Mr. Anthony Ciorra, Chief of Coastal Restoration and Special Projects Branch at (917) 790-8208 or Mr. Frank Verga, Project Manager, at (917) 790-8212, should you have any questions.

Sincerely,

Paul E. Owen
Colonel, U.S. Army
Commander

Enclosure



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

July 29, 2013

Mr. Leonard Houston
Chief, Environmental Analysis Branch
U.S. Army Corps of Engineers
26 Federal Plaza
New York, NY 10278

Dear Mr. Houston:

This response to your letter dated July 15, 2013, requesting consultation with the U.S. Fish and Wildlife Service (Service) pursuant to the Fish and Wildlife Coordination Act (FWCA) of 1958 (48 Stat. 401, as amended; 661 *et seq.*) for the U.S. Army Corp of Engineers' (Corps) proposed emergency stabilization projects on Fire Island and Montauk Beach, Suffolk County, New York. These projects are being proposed to address shoreline erosion associated with Hurricane Sandy, and are part of the Corps' 83-mile Fire Island Inlet to Montauk Point Reformulation Study.

The Service requests that the Corps submit detailed project plans to our office as soon as possible so that we may begin to provide feedback on the draft scopes of work that your office submitted to us for review concerning preparation of Fish and Wildlife Coordination Act 2(b) Reports for each of these projects. In addition, please inform us as to whether the Corps will be requesting formal consultation with the Service pursuant to the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) and Coastal Barrier Resources Act (CBRA) of 1982, as amended (16 U.S.C. 3501 *et seq.*). Listed species that occur in the proposed project areas include the piping plover (*Charadrius melodus*; threatened), roseate tern (*Sterna dougallii dougallii*; endangered), sandplain gerardia (*Agalinus acuta*; endangered), and seabeach amaranth (*Amaranthus pumilus*; threatened). The red knot (*Calidris canutus rufa*), a candidate species for protection under the ESA, may also be present in the Fire Island project area.

If you have any questions or require further assistance, please have your staff contact Steve Papa of the Long Island Field Office at (631) 286-0485.

Sincerely,

David A. Stilwell
Field Supervisor

ANDREW M. CUOMO
GOVERNOR



JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

June 14, 2013

Colonel Paul E. Owen
District Commander
United States Army Corps of Engineers
New York District
26 Federal Plaza
Room 2109
New York, NY 10278

Dear Colonel Owen:

I am pleased to inform you that New York State supports implementation of the fully federally funded Fire Island to Montauk Point (FIMP) project, including the United States Army Corps of Engineers' (Corps) proposal to expedite the implementation of elements of FIMP, such as the immediate restoration of dunes and beaches damaged by Hurricane Sandy on Fire Island and downtown Montauk. This support is based on the overall concepts of the FIMP project subject to the items further described in this letter.

On March 11, 2011, representatives of the Corps and the United States Department of Interior sent a letter to me outlining the potential plan of improvement for the Fire Island to Montauk Point ("FIMP") Reformulation Study. This "Tentative Federal Supported Plan" ("TFSP") was proposed as the basis to move forward with Reformulation Study efforts for the entire FIMP study area – encompassing approximately 83 miles of Atlantic Ocean coastal and bay areas of Suffolk County, New York. As noted in the federal letter, New York State must find the general plan of improvement acceptable before its attributes can be finalized through a collaborative process. New York's approval at this stage, I understand, would allow the Corps and State to move forward with a final analysis of the TFSP, including such matters as plan formulation, engineering, economics, environmental assessment, model certifications and formal agency policy-level approvals.

After a series of discussions, on December 29, 2011, DEC sent a letter to the Army Corps presenting information requests aimed at better understanding some of the basic elements of the TFSP so that DEC would be in a position to accurately explain project elements, costs, maintenance obligations and impacts of the TFSP to the required local community sponsor(s). While further discussions were taking place, Hurricane Sandy arrived – altering the physical and fiscal landscape in a variety of ways. On May 16, 2013 the Corps responded to the Department's letter which addressed a number of the concerns raised by the Department, but deferred a response on a few issues that are currently under review based on the impacts from Sandy.



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Project Management Division

16 MAY 2013

Mr. Alan A. Fuchs, P.E.
Director, Bureau of Flood Protection and Dam Safety
New York State Department of Environmental Conservation
Division of Water
Bureau of Flood Protection and Dam Safety, 4th Floor
625 Broadway
Albany, New York, 12233-3504

Dear Mr. Fuchs:

Thank you for your letter dated December 29, 2011 regarding the Fire Island Inlet to Montauk Point (FIMP) Reformulation Study, which requested additional information on the Tentative Federal Supported Plan (TFSP). This was in response to the March 11, 2011 jointly signed letter from both the U.S. Army Corps of Engineers and the U.S. Department of Interior (DOI) which requested New York State's review and verification of acceptability of the TFSP.

We recognize there have been significant changes since the exchange of this correspondence, most notably Hurricane Sandy, the passage of PL 113-2 (The Disaster Relief Appropriations Act; 2013) which includes provisions that establish a framework for proceeding with Sandy affected authorized and unconstructed projects, and the increased support to bring the FIMP Reformulation Study to a conclusion.

Prior to Hurricane Sandy, the Corps was coordinating proposed responses with both your office and the DOI, as well as in the process of developing the requested information. As we are currently in the process of updating this information to account for necessary changes due to Hurricane Sandy, we have attached preliminary responses to your comments for your immediate review.

Since Hurricane Sandy, our offices have also been engaged in a number of discussions regarding appropriate revisions to the TFSP, and the evaluation of alternatives which properly reflect the post-Sandy condition. The revisions to the TFSP that are currently under consideration include the following:

Fire Island Inlet to Montauk Point, New York
Fire Island Alignment
Post-Sandy Considerations

BACKGROUND:

The Corps and the DOI had agreed to a Tentative Federally Selected Plan (TFSP) as part of the Fire Island Inlet to Montauk Point Reformulation Study that includes a beachfill along Fire Island, prior to Hurricane Sandy. Agreement upon the beachfill plan was reached following evaluation of a number of alternatives, and coordination of these alternatives with the local municipalities.

Alternatives varied the scale of beachfill alternatives, the alongshore extent of fill, and the alignment (cross-shore placement of fill). The TFSP was identified based upon what was cost-effective, economically justified, supported by the NPS policies, and locally acceptable.

The TFSP generally consisted of a beachfill plan with a dune at elevation +15 ft, a berm with a width of 90 ft placed in front of the communities, and aligned seaward of the existing buildings to minimize real estate acquisition requirements.

The Corps, NPS, and NYS have agreed to review components of the TFSP to determine if changes to the selected plan are warranted in light of the changes in the beach and dune condition on Fire Island that occurred as a result of Hurricane Sandy. This analysis considered changes in the alongshore extent of beachfill, and also in the alignment of the beachfill (cross-shore placement of fill). The beachfill dimensions are based upon performance of similar projects, and do not require revision.

EVALUATION CRITERIA OF DIFFERENT ALIGNMENTS:

- 1) Cost calculation to construct a dune and beachfill project generally include:
 - The initial costs associated with dredging and placing the initial quantity of sand required for construction, which vary with the alignment and alongshore extent;
 - The upfront costs associated with acquiring the necessary Real Estate for construction of the beachfill project, which vary based upon the alignment;
 - The long-term, life-cycle costs associated with dredging and placing sand required to maintain the design condition over a period of 50 years which vary based upon the erosion rate.

- 2) Tradeoffs are often considered when comparing possible alignments between the quantity of sand required both up-front and over time, and the up-front cost of Real Estate acquisition for more landward alignments.
 - An alignment constructed south, more seaward, of the existing development would require a large volume of sand and incur a relatively high cost for initial construction, but requires limited Real Estate acquisition and low Real Estate costs for initial construction. This plan would also

is estimated to be \$47 M. Based upon this preliminary estimate, the acquisition cost is nearly offset by the savings in the initial cost of sand.

Renourishment of the more landward alignment would require approximately 30% less sand over the project life, which translates to approximately 13 Million CY of less sand over 50 years and is equivalent to savings of an additional \$160 Million over the project life.

CONCLUSIONS:

These costs are based upon current survey data, and real estate data, that are still under review for the FIMP report. This analysis clearly indicates that the project that is more closely aligned to the current dune position is clearly less expensive over the project life. This project requires significantly less fill volume, and is clearly more sustainable, and environmentally preferable.

ATTACHMENTS:

Detailed costs and figures which present the derivation of these quantities are costs are attached.



and safe load, area of borrow site, distance to borrow site, and current fuel, labor, and equipment costs, etc.

2.2 Construction Schedule and Mobilization / Demobilization Costs

The Corps has developed a preliminary construction schedule for the initial construction of the MREI and MIDU plan. The schedule for both plans assumes that the initial construction may be completed with three contracts:

- Contract 1: Smith Point County Park (MB-1A, MB-1B, MB-2A);
- Contract 2: Lonelyville to Robert Moses State Park (GSB-1A, GSB-1B, GSB-2A);
- Contract 3: Davis Park to Town Beach (GSB-2B, GSB-2C, GSB-2D, GSB-3A, GSB-3C, GSB-3E, GSB-3G).

Mobilization and demobilization costs for each contract have been shared between design reaches. The cost of Mob/Demob is \$4 million and is distributed proportionately to each design reach based on the volume of fill within each design reach. The same construction schedule and Mob/Demob costs are to the Renourishment Costs as well.

2.3 First Costs

First costs include dredging, mobilization, and demobilization for the initial fill volumes estimated. First cost estimates also include a 15% contingency on costs. Engineering and design (E&D) costs are assumed to be 7% of the construction cost. Supervision and administration (S&A) costs are also assumed to be a percentage of the construction cost, which was computed according to the Corps formula:

$$\% = \frac{17 - \log\left(\frac{\text{subtotal}}{1000}\right)}{100}$$

Where *subtotal* is the total construction cost for the entire project. Note that the total construction cost does not include contingency, E&D costs, or S&A costs.

2.4 Renourishment Costs

Renourishment costs include dredging, mobilization, and demobilization; the same dredging unit costs are assumed for both initial fill and renourishment fill. Renourishment costs include a 15% contingency, 7% for E&D, and the S&A percentage computed as given in Section 2.3.



**TABLE 1-1. FIRST COSTS - OPTIMIZED
 MREI MINIMUM REAL ESTATE BASELINE AND MEDIUM DESIGN TEMPLATE
 FIRE ISLAND INTERIM**

Design Reach	Reach Name	DREDGING			MOB/DEMOB Cost	Total Construction Cost	Contingency Cost	E&D Cost	S&A Cost	Total Cost
		Total Initial Fill CY	Unit Price \$/CY	Placement Cost						
GSB-1A	RMSP	898,860	\$ 16.36	\$ 14,705,344	\$ 1,864,010	\$ 16,569,354	\$ 2,485,403	\$ 1,333,833	\$ 1,226,894	\$ 21,615,484
GSB-1B	FILT	389,349	\$ 17.77	\$ 6,918,723	\$ 807,412	\$ 7,726,135	\$ 1,158,920	\$ 621,954	\$ 572,089	\$ 10,079,098
GSB-2A	Kismet to Lonelyville	640,664	\$ 12.61	\$ 8,078,777	\$ 1,328,578	\$ 9,407,355	\$ 1,411,103	\$ 757,292	\$ 696,577	\$ 12,272,327
GSB-2B	Town Beach to Cornelle Estates	645,301	\$ 11.67	\$ 7,530,663	\$ 614,731	\$ 8,145,394	\$ 1,221,809	\$ 655,704	\$ 603,133	\$ 10,626,041
GSB-2C	Ocean Beach to Seaview	484,775	\$ 11.24	\$ 5,448,868	\$ 461,809	\$ 5,910,677	\$ 886,602	\$ 475,810	\$ 437,662	\$ 7,710,750
GSB-2D	OBP to POW	668,653	\$ 10.86	\$ 7,261,572	\$ 636,977	\$ 7,898,549	\$ 1,184,782	\$ 635,833	\$ 584,856	\$ 10,304,020
GSB-2E	Sailors Haven	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3A	Cherry Grove	25,511	\$ 11.74	\$ 299,497	\$ 24,302	\$ 323,799	\$ 48,570	\$ 26,066	\$ 23,976	\$ 422,411
GSB-3B	Carrington Tract	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3C	Fire Island Pines	1,182,187	\$ 10.66	\$ 12,602,116	\$ 1,126,183	\$ 13,728,299	\$ 2,056,245	\$ 1,105,128	\$ 1,016,525	\$ 17,909,197
GSB-3D	Talisman to Water Island	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3E	Water Island	25,974	\$ 8.95	\$ 232,463	\$ 24,743	\$ 257,206	\$ 38,581	\$ 20,705	\$ 19,045	\$ 335,537
GSB-3F	Water Island to Davis Park	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3G	Davis Park	1,166,516	\$ 9.31	\$ 10,860,260	\$ 1,111,254	\$ 11,971,514	\$ 1,795,727	\$ 963,707	\$ 886,442	\$ 15,617,390
GSB-3H	Watch Hill	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-4A	Bellport Beach	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-4B	Old Inlet	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MB-1A	SFPCP-TWA	326,589	\$ 11.44	\$ 3,736,182	\$ 750,744	\$ 4,486,926	\$ 673,039	\$ 361,198	\$ 332,239	\$ 5,853,401
MB-1B	SFPCP	744,675	\$ 12.87	\$ 9,583,971	\$ 1,711,815	\$ 11,295,786	\$ 1,694,368	\$ 909,311	\$ 836,407	\$ 14,735,872
MB-2A	MB-2A	668,819	\$ 11.49	\$ 7,684,726	\$ 1,537,441	\$ 9,222,166	\$ 1,393,325	\$ 742,384	\$ 682,864	\$ 12,030,740
MB-2B	MB-2B	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total		7,867,872		\$ 94,943,162	\$ 12,000,000	\$ 106,943,162	\$ 16,041,474	\$ 8,608,325	\$ 7,918,708	\$ 139,512,269



TABLE 1-3. O&M COSTS - OPTIMIZED - (Costs Per 2 Year Cycle)
MREJ - MINIMUM REAL ESTATE BASELINE AND MEDIUM DESIGN TEMPLATE
FIRE ISLAND INTERIM

Design Reach	Reach Name	Berm Maintenance		Fill Maintenance		Contingency Cost	E&D Cost	S&A Cost	Total Cost
		Length of Fill ft	Unit Price \$/ft	Length of Fill ft	Unit Price \$/ft				
GSB-1A	RMSP	12,000	\$ 15.00	12,000	\$ 2.00	\$ 61,200	\$ 32,844	\$ 45,848	\$ 547,892
GSB-1B	FILT	5,400	\$ 15.00	5,400	\$ 2.00	\$ 27,540	\$ 14,780	\$ 20,632	\$ 246,552
GSB-2A	Kismet to Lonelyville	9,000	\$ 15.00	9,000	\$ 2.00	\$ 45,900	\$ 24,633	\$ 34,386	\$ 410,919
GSB-2B	Town Beach to Cornelle Estates	4,400	\$ 15.00	4,400	\$ 2.00	\$ 22,440	\$ 12,043	\$ 16,811	\$ 200,894
GSB-2C	Ocean Beach to Seaview	3,800	\$ 15.00	3,800	\$ 2.00	\$ 19,380	\$ 10,401	\$ 14,519	\$ 173,489
GSB-2D	OBP to POW	7,200	\$ 15.00	7,200	\$ 2.00	\$ 36,720	\$ -	\$ -	\$ 328,735
GSB-2E	Sailors Haven	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-3A	Cherry Grove	3,000	\$ 15.00	3,000	\$ 2.00	\$ 15,300	\$ 8,211	\$ 11,462	\$ 136,973
GSB-3B	Carrington Tract	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-3C	Fire Island Pines	6,400	\$ 15.00	6,400	\$ 2.00	\$ 32,640	\$ 17,517	\$ 24,452	\$ 282,209
GSB-3D	Talisman to Water Island	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-3E	Water Island	2,000	\$ 15.00	2,000	\$ 2.00	\$ 10,200	\$ 5,474	\$ 7,641	\$ 91,315
GSB-3F	Water Island to Davis Park	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-3G	Davis Park	4,200	\$ 15.00	4,200	\$ 2.00	\$ 21,420	\$ 11,495	\$ 16,047	\$ 191,762
GSB-3H	Watch Hill	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-4A	Bellport Beach	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
GSB-4B	Old Inlet	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
MB-1A	SPCP-TWA	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
MB-1B	SPCP	6,400	\$ 15.00	6,400	\$ 2.00	\$ 32,640	\$ 17,517	\$ 24,452	\$ 292,209
MB-2A	MB-2A	13,000	\$ 15.00	13,000	\$ 2.00	\$ 66,300	\$ 35,581	\$ 49,689	\$ 593,550
MB-2B	MB-2B	4,600	\$ 15.00	4,600	\$ 2.00	\$ 23,460	\$ 12,590	\$ 17,575	\$ 210,025
		0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -
Total		81,400		81,400		\$ 415,140	\$ 222,792	\$ 311,004	\$ 3,716,536



**TABLE 2-1. FIRST COSTS - OPTIMIZED
 MIDU - MIDDLE UPDATED BASELINE AND MEDIUM DESIGN TEMPLATE
 FIRE ISLAND INTERIM**

Design Reach	Reach Name	DREDGING									
		Total Initial Fill CY	Unit Price \$/CY	Placement Cost	MOB/DEMOB Cost	Total Construction Cost	Contingency Cost	E&D Cost	S&A Cost	Total Cost	
GSB-1A	RMSP	898,837	16.36	\$ 14,704,970	\$ 2,343,970	\$ 17,048,940	\$ 2,557,281	\$ 1,372,408	\$ 1,330,557	\$ 22,308,786	
GSB-1B	FILT	366,609	17.77	\$ 6,514,840	\$ 955,873	\$ 7,470,713	\$ 1,120,577	\$ 601,376	\$ 583,038	\$ 9,775,504	
GSB-2A	Kismet to Lonelyville	268,687	12.61	\$ 3,388,141	\$ 700,957	\$ 4,089,098	\$ 613,305	\$ 329,140	\$ 319,103	\$ 5,350,246	
GSB-2B	Town Beach to Cornelle Estates	378,793	11.87	\$ 4,420,511	\$ 1,050,925	\$ 5,471,435	\$ 820,715	\$ 440,451	\$ 427,019	\$ 7,159,621	
GSB-2C	Ocean Beach to Seaview	188,920	11.24	\$ 2,123,466	\$ 524,142	\$ 2,647,608	\$ 397,141	\$ 213,132	\$ 206,633	\$ 3,464,515	
GSB-2D	OBP to POW	176,802	10.86	\$ 1,920,068	\$ 490,520	\$ 2,410,588	\$ 361,588	\$ 194,052	\$ 188,135	\$ 3,154,363	
GSB-2E	Sailors Haven	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-3A	Cherry Grove	9,623	11.74	\$ 112,979	\$ 26,699	\$ 139,678	\$ 20,952	\$ 11,244	\$ 10,901	\$ 182,775	
GSB-3B	Carrington Tract	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-3C	Fire Island Pines	334,628	10.66	\$ 3,567,135	\$ 928,394	\$ 4,495,529	\$ 674,329	\$ 361,890	\$ 350,855	\$ 5,882,604	
GSB-3D	Talisman to Water Island	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-3E	Water Island	12,674	8.95	\$ 113,430	\$ 35,162	\$ 148,592	\$ 22,289	\$ 11,962	\$ 11,597	\$ 194,439	
GSB-3F	Water Island to Davis Park	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-3G	Davis Park	340,310	9.31	\$ 3,168,285	\$ 944,158	\$ 4,112,442	\$ 616,866	\$ 331,052	\$ 320,956	\$ 5,381,317	
GSB-3H	Watch Hill	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-4A	Beilport Beach	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GSB-4B	Old Inlet	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
MB-1A	SPQP-TWA	0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
MB-1B	SPQP	326,589	11.44	\$ 3,736,182	\$ 750,744	\$ 4,486,926	\$ 673,039	\$ 361,198	\$ 350,183	\$ 5,871,346	
MB-2A	MB-2A	744,675	12.87	\$ 9,583,971	\$ 1,711,815	\$ 11,295,786	\$ 1,694,368	\$ 909,311	\$ 881,582	\$ 14,781,047	
MB-2B	MB-2B	668,819	11.49	\$ 7,684,726	\$ 1,537,441	\$ 9,222,166	\$ 1,383,325	\$ 742,384	\$ 719,746	\$ 12,067,622	
		0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total		4,715,966		\$ 61,038,503	\$ 12,000,000	\$ 73,038,503	\$ 10,955,775	\$ 5,879,599	\$ 5,700,306	\$ 95,574,184	



Design Reach	Reach Name	Berm Maintenance		Fill Maintenance		O&M Cost	Contingency Cost 15%	E&D Cost 7.00%	S&A Cost 9.77%	Total Cost
		Length of Fill ft	Unit Price \$/ft	Length of Fill ft	Unit Price \$/ft					
GSB-1A	RWSP	12,000	\$ 15.00	12,000	\$ 2.00	\$ 408,000	\$ 61,200	\$ 32,844	\$ 45,848	\$ 547,892
GSB-1B	FILT	5,400	\$ 15.00	5,400	\$ 2.00	\$ 189,600	\$ 27,540	\$ 14,780	\$ 20,632	\$ 246,552
GSB-2A	Kismet to Lonelyville	9,000	\$ 15.00	9,000	\$ 2.00	\$ 306,000	\$ 45,900	\$ 24,633	\$ 34,386	\$ 410,919
GSB-2B	Town Beach to Cornelle Estates	4,400	\$ 15.00	4,400	\$ 2.00	\$ 149,600	\$ 22,440	\$ 12,043	\$ 16,811	\$ 200,894
GSB-2C	Ocean Beach to Seaview	3,800	\$ 15.00	3,800	\$ 2.00	\$ 129,200	\$ 19,380	\$ 10,401	\$ 14,519	\$ 173,499
GSB-2D	OBP to POW	7,200	\$ 15.00	7,200	\$ 2.00	\$ 244,800	\$ 36,720	\$ 19,706	\$ 27,509	\$ 328,735
GSB-2E	Sailors Haven	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3A	Cherry Grove	3,000	\$ 15.00	3,000	\$ 2.00	\$ 102,000	\$ 15,300	\$ 8,211	\$ 11,462	\$ 136,973
GSB-3B	Carrington Tract	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3C	Fire Island Pines	6,400	\$ 15.00	6,400	\$ 2.00	\$ 217,600	\$ 32,640	\$ 17,517	\$ 24,452	\$ 292,209
GSB-3D	Talisman to Water Island	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3E	Water Island	2,000	\$ 15.00	2,000	\$ 2.00	\$ 68,000	\$ 10,200	\$ 5,474	\$ 7,641	\$ 91,315
GSB-3F	Water Island to Davis Park	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-3G	Davis Park	4,200	\$ 15.00	4,200	\$ 2.00	\$ 142,800	\$ 21,420	\$ 11,495	\$ 16,047	\$ 191,762
GSB-3H	Watch Hill	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-4A	Bellport Beach	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
GSB-4B	Old Inlet	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
MB-1A	SFCP-TWA	0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
MB-1B	SFCP	6,400	\$ 15.00	6,400	\$ 2.00	\$ 217,600	\$ 32,640	\$ 17,517	\$ 24,452	\$ 292,209
MB-2A	MB-2A	13,000	\$ 15.00	13,000	\$ 2.00	\$ 442,000	\$ 66,300	\$ 35,581	\$ 49,669	\$ 593,550
MB-2B	MB-2B	4,600	\$ 15.00	4,600	\$ 2.00	\$ 156,400	\$ 23,460	\$ 12,590	\$ 17,575	\$ 210,025
		0	\$ 15.00	0	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ -
Total		81,400		81,400		\$ 2,767,600	\$ 415,140	\$ 222,792	\$ 311,004	\$ 3,716,536

Joint Signed TFSP, dated March 11, 2011

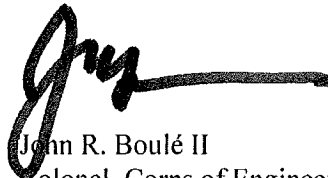
NYS comments, dated December 29, 2011

NYS comments, dated June 28, 2012

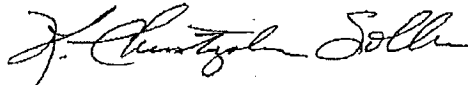
If the State finds any components of the TFSP not acceptable, we request the State provide a locally preferred alternative (LPA). The LPA should include specific components that could be supported, in order to move forward with the required additional analysis. Both Federal agencies would still need to assess their ability to support the LPA.

We look forward to your timely review and are willing to arrange a meeting with your office in the March/April timeframe in order to further discuss the elements of the TFSP as necessary. Please do not hesitate to contact Mr. Anthony Ciorra, Chief of Civil Works at (917) 790-8208, or Mr. Frank Verga, Project Manager at (917) 790-8212, if you have any questions.

Sincerely,



John R. Boulé II
Colonel, Corps of Engineers
District Commander



K. Christopher Soller
Superintendent, Fire Island National Seashore
National Park Service



David Stilwell
Field Supervisor, New York Field Office
U.S. Fish and Wildlife Service

Enclosure

CF:

Al Fuchs, NYS Department of Environmental Conservation
Fred Anders, NYS Department of State, Coastal Resources

S Date: 15 October 20



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

September 11, 2013

Colonel Paul E. Owen
District Engineer
U.S. Army Corps of Engineers
26 Federal Plaza
New York, NY 10278

Dear Colonel Owen:

The U.S. Fish and Wildlife Service is requesting clarification from the U.S. Army Corps of Engineers (Corps) on the planning and integration of several overlapping storm damage protection projects that are currently being planned, permitted or have already been constructed within the U.S. Army Corps of Engineers' (Corps) Fire Island Inlet to Montauk Point Storm Damage Reduction Reformulation Study Area (FIMP) on Fire Island. We are particularly interested in the Smith Point County Park area where the following projects have been recently proposed or constructed: beach nourishment and dune construction at Smith Point County Park, Fire Island, New York (Corps' Public Notice [PN] NAN-2013-00873-EBO; applicant, Suffolk County Department of Public Works dated August 1, 2013); the Corps' proposed Fire Island Interim Project (emergency stabilization project); the Corps' proposed FIMP; and the Corps' constructed Breach Contingency Plan (BCP; Smith Point Breach Fill Project, November 2012).

In terms of planning and integration of projects, the Service has worked with the Corps and the National Park Service to develop a Tentatively Supported Federal Plan (TSFP) for the Fire Island Reach of the FIMP, calling for a feeder beach along portions of Smith Point County Park. However, the PN describes a large-scale beach nourishment and dune construction project which is much greater in scale than the concept of a feeder beach envisioned in the TSFP. In addition, the PN also appears to address areas where the Corps' BCP was implemented to close a small partial breach in Smith Point County Park in November of 2012. If the Smith Point PN were approved it would seem to run counter to the Corps' BCP, which is supposed to be in effect until the FIMP is constructed, providing a period where overwash habitat could be maintained for the benefit of the federally-listed piping plover (*Charadrius melodus*; threatened) as discussed in the Corps' BCP biological assessment, environmental assessment, and Service biological opinion (U.S. Army Corps of Engineers 1996, U.S. Fish and Wildlife Service 1995).

Overall, the Service requests clarification on how these projects will be implemented in the context of a comprehensive and coordinated approach to shoreline and ecosystem resiliency, as

ANDREW M. CUOMO
GOVERNOR



JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

September 5, 2013

Colonel Paul E. Owen
Commander and District Engineer
United States Army Corps of Engineers
New York District
26 Federal Plaza
New York, NY 10278-0090

Dear Colonel Owen:

Thank you for your letters of July 29, 2013 and August 16, 2013. As you are aware, the State has taken some major steps to move the Fire Island to Montauk Point (FIMP) project forward. In addition, the State continues to work with the Breach Contingency Plan (BCP) Coordination Team to track the movement of the breach. The purpose of this letter is to update the Corps on a few items and clarify other issues.

The State has obtained a local sponsor for the FIMP project. Suffolk County has volunteered to take on this role, based largely on the 100 percent fully federally-funded project, which has brought the possibility of the full implementation of FIMP one step closer. Suffolk County has had a representative on the FIMP Executive Steering Committee throughout the project. This is to formally notify you that Gil Anderson, Commissioner of Suffolk County Department of Public Works, will represent the County on the Committee. In addition, the New York State Department of State (DOS) has also had a representative on the Executive Steering Committee, Fred Anders, who has retired. Therefore, Jeff Herter will take over this role and represent DOS on the Committee.

The Corps' August 16, 2013 letter indicates that the Corps has completed its assessment of the re-alignment of the Fire Island dune, which will require the acquisition or relocation of approximately 39 properties, and resulted in a positive cost benefit analysis. This is to confirm the State's support of the Corps moving forward quickly to implement the Fire Island Emergency Interim project along this new dune alignment. As stated in my June 14, 2013 letter, I want to reiterate the State's request to have the Corps take the lead on the acquisition of these properties, both from willing and unwilling sellers, in order to expedite the implementation of this emergency interim project. In addition, the State requests the Corps to also obtain the perpetual beach easements necessary to construct and maintain this project. Since this is a 100 percent federally-funded project and the acquired property will most likely be retained by the Federal Government (these properties are located within the Fire Island National Seashore and managed by the National Park Service), it is logical that the Federal Government (Corps) would take the lead in these acquisitions. Please let me know how the State can assist you in obtaining these properties and easements in the most expeditious manner.



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO

ATTENTION OF

Environmental Analysis Branch

May 6, 2011


Mr. David A. Stilwell
Field Supervisor
Fish and Wildlife Service
3817 Luker Road
Cortland, New York 13045

Dear Mr. Stilwell:

The letter is in response to your letter dated March 16, 2011 regarding mitigation and Endangered Species Act (ESA) consultation as they relate to the Fire Island to Montauk Point (FIMP) Reformulation Study. The Service expresses concerns regarding the Proactive Breach Response component of the Tentatively Supported Federal Plan (TSFP), as well as concerns regarding progress in advancing mitigation the overall TSFP. The letter also referred to reinitiating Section 7 Consultation under the ESA regarding the FIMP Interim Breach Contingency Plan (Interim BCP).

In short, the U.S. Army Corps of Engineers, New York District (District) believes that in the absence of a fully coordinated recommended plan, development of site-specific mitigation plans for the TSFP is premature, and may be unwarranted with respect to the breach response component. With respect to reopening Section 7 Consultation under the Endangered Species Act regarding the FIMP Interim Breach Contingency Plan (Interim BCP), the District's position has not changed since the latest discussion of this topic. Please find the District's response to specific comments in the attached enclosure. The District does acknowledge an importance in discussing impacts and related mitigation measures in general, and suggests that this may best be accomplished in conjunction with the detailed development of a restoration component to the TSFP, as described in our April 4, 2011 letter. The District strongly recommends that our two agencies meet soon to work out a task list and schedule to address these related items in depth at your earliest convenience. To resolve these concerns, I request that you contact my Environmental Analysis Branch chief, Len Houston, by phone (917-790-8702) or Email (leonard.houston@usace.army.mil) to arrange a meeting.

Sincerely,


Mr. Frank Santomauro, P.E.
Chief, Planning Division

Enclosure

cc: USFWS – LIFO
NYSDEC, Region 1, Stony Brook, NY (P. Scully)
NYSDOS, Albany, NY (F. Anders; B. Pendergrass)
USGS, Woods Hole, MA (W. Schwab)
NPS-FIIS, Patchogue, NY (C. Soller)
NPS, Boston, MA (M. Foley)

recommended plan also be the NED/NER plan must be obtained from ASA(CW). Unless and until those conditions are met, there cannot be a recommended plan that will analyze potential environmental impacts as part of the NEPA process. Any analysis of the TSFP as the "recommended plan" prior to achieving the state support or receipt of waiver would appear to be premature. Also, please note that some alternatives discussed in the Draft Formulation Report contain design elements whose purpose is to minimize the impacts.

Some examples of mitigative measures are as follows:

- (a) Avoid: Adjust the time of construction activities to avoid periods of fish migration, shorebird nesting;
- (b) Minimize: Adding to the traditional storm damage reduction design a component to increase back-bay habitat,
- (c) Rectify: Restore water flow to the back-bay; increase or develop new wetlands
- (d) Reduce: replacement of beachfill alternatives with breach response, and smaller beach cross-section templates that are comparable to the breach closure alternatives

5. *Section 7 Consultation - Endangered Species Act*

The Service has noted on several occasions their opinion that the Storm Damage Reduction (SDR) measures developed as part of FIMP will reduce optimal habitat for Threatened and Endangered (T&E) shore species such as the Piping Plover, by reducing the frequency and severity of overwash and breaching. The Service has noted that by inhibiting the formation of early successional habitat, SDR measures may lower productivity of these species. The District has worked with the Service to develop a Draft T&E Management Plan to increase T&E species productivity at locations where SDR measures might be implemented. The Service has indicated in the past that the Management Plan should be implemented at all locations managed by FIMP Partners, where T&E species are present. In addition, the Service has identified a series of locations within the FIMP study area, where there are opportunities to enhance habitat for T&E Species. Many of these are within the FIIS and there may be opportunities to address bayside erosion and T&E concerns at some locations under the TSFP. The District agrees that efforts should resume in establishing the long-term management plan, and would welcome the Service's feedback on the report that was submitted to the USFWS for input.

6. *Section 7 Consultation Breach Contingency Plan*

The Interim BCP was established via coordination among all involved local, state, and Federal agencies and reflects interagency recognition of the benefits of coordinated, rapid response to a barrier island breach. The proposed methods discussed as well as project area conditions have not been changed, thereby making re-initiating consultation unnecessary. It is noted that District staff has been working with Service staff and other resource agencies throughout the duration of the FIMP Study to incorporate management measures for threatened and endangered species into both the BCP and TSFP. If in place, these would address impacts through implementation of specific monitoring and protection measures during and post construction. To date, these discussions have not yielded an agreement, but the District remains hopeful that an agreement can be reached.

7. The Allowable Conditional Breach Closure Characteristics within the Large, Publicly Owned Tracts were then described. Breach closure could be accomplished, if the breach was not naturally closing, within 45 to 60 days of the breach opening. Contracting procedures can be started at the occurrence of the breach, but may need to be cancelled if the breach closes naturally. Under any scenario, the breach would be closed at Day 60. The cross-section of the breach closure would be at +9.5 ft NGVD height at a minimum, the breach cross-section would match the 0.0 ft NGVD shorelines on both the ocean and bay sides making smooth shorelines without indentations, and the cross-section slope would match adjacent bayside and ocean-side slopes. No cross-sectional sand maintenance of the breach closure template would be allowed after the breach closure.

If a breach closed naturally, no additional fill material would be allowed in that location to bring the section to the above cross-section characteristics. Only on the occurrence of a new breach, that did not close naturally in that location, would additional material be allowed to be placed to bring the cross-section to the +9.5 ft NGVD height and shoreline to shoreline width. It was discussed that there would be increasing likelihood of re-breaching and subsequent vulnerability in those locations that did not close naturally with the increased berm height.

8. Discussed, but not resolved, was the issue of placement of additional sand material in the bay during the hydraulic construction closure of the breach, to emulate flood shoal volumes of breaches allowed to remain open. It was acknowledged that the proposed volume and dimensions of any additional bay material placed during breach closure operations would need to be resolved at future technical meetings within the plan identification process, although it was recognized that it could be reasonable to target placement of sand consistent with the volume of material that would be expected to be deposited over a period of 9-12 months.

9. Also discussed but not resolved was the make-up of the Science Advisor Panel and its relationship to the institutional and governmental decision makers. It was hoped that a technical panel could be formed, with academics and consultants, which could make recommendations to the decision makers on the likelihood of breaches within the large, publically-owned tracts closing naturally prior to 45 to 60 days from the time of the breach. These advisors would need to meet right after the breach and frequently thereafter, and considerable monitoring data would need to be collected to aid the Science Panel in its recommendations.

10. Considerable time was spent outlining modeling and monitoring needs for the conditional breach response protocol. Below is the listing on modeling and monitoring needs. This list may be more fully detailed and amended with future FIMP technical team discussions.

Physical Monitoring Outline Requirements:

- A. Develop a Model to predict likelihood of natural closing of breaches in the large, publically owned tracts on Fire Island, using a Bayesian approach, based on empirical physical, climatological and hydraulic data, time of year considerations, etc.
- B. Conduct a Tabletop exercises to run through breaching and closing scenarios after development of the Bayesian model.

12. Respectfully submitted by Lynn M. Bocamazo, P.E., CENAN-EN, (917) 790-8396

Attendees:

Lynn Bocamazo, CENAN-EN
Steve Couch, CENAN-PL-F
Robert Smith, CENAN-PL-E
Mary Foley – NPS Regional Scientist
Chris Soller - NPS, FIIS Superintendent
Charley Roman – NPS
Cheryl Hapke – USGS
Steve Pappa – USFWS
Al Fuchs – NYS DEC
Eric Star – NYS DEC
Santiago Alfageme – Moffat Nichol
By teleconference (partial time):
Fred Anders – NYS DOS
Barry Pendergrass – NYS DOS
Sue McCormick – NYS DEC
Kevin Kispert – NYS DEC



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF
Environmental Analysis Branch

April 4, 2011

Mr. David A. Stilwell
Field Supervisor
United States Department of the Interior
Fish and Wildlife Service
3817 Luker Road
Cortland, New York 13045

RE: Fire Island to Montauk Point (FIMP) Reformulation Study

Dear Mr. Stilwell:

An action item coming out of the January 28, 2011 regional-level meeting with Congressman Bishop on the progress and path forward on FIMP's Tentatively Federal Selected Plan (TFSP) was to continue a dialogue with respect to natural resources. At this time we fully expect that the TFSP will also include strategies for both large-scale restoration of coastal processes and site specific habitat restorations.

To aid in those strategies, the U.S. Army Corps of Engineers, New York District (District) prepared a community Habitat Evaluations Procedures Model (HEP) (in which your agency participated) to identify and assist in the evaluation of benefits of potential restoration alternatives under consideration. The HEP model assessment resulted in a large array of Restoration Designs in the FIMP project area. The restoration framework identified five key physical processes to be targeted for restoration, including 1) longshore transport, 2) cross-island transport, 3) dune growth and evolution, 4) bay shoreline processes, and 5) estuarine circulation and water quality. In the consideration of restoration alternatives, two main categories of process restoration present themselves:

- Restoration of processes with the primary objective of storm damage reduction. These are restoration alternatives that were designed for the purpose of using habitat features for protection purposes. These include measures such as sand bypassing, and some bayside habitat restoration in breach vulnerable areas
- Restoration of processes with the primary objective of habitat restoration. These are measures developed by an HEP interagency team to identify optimal locations for restoration to primarily achieve ecological objectives, with a secondary objective of reducing storm damages.

Over 80 sites across the 83-mile Project area were evaluated by the District and interagency HEP Team for restoration potential. Eighteen (18) sites were selected as having real opportunities for restoration and a total of 57 restoration design alternatives (three to four per restoration site) were developed and evaluated. The information acquired through this restoration evaluation process will facilitate future selection of alternatives based on ecological need at the time of construction, the location of the storm damage reduction activity and availability of funding and support.

As part of the ongoing FIMP collaborative planning process, District staff met on June 25, 2010 with the Fire Island National Seashore (FIIS) to define National Park Service (NPS) restoration goals for (FIIS). Although the U.S. Fish and Wildlife Service (USFWS) was not present at the meeting, it was noted that "goals set forth during this meeting were to meet their (USFWS) request as it pertains to FIIS as well." The particular focus for FIIS was the need to address bayside erosion with the purpose of restoring natural processes and reducing storm damages.

It is our understanding that NPS seeks to accomplish habitat improvements through long-term, adaptive management; with "processes" being monitored instead of a site-by-site specific location determination. NPS' first preference is that the land manager (NPS) allow for natural processes to occur. If this is not a viable approach, then the next preference would be to adopt measures that replicate these natural processes in a sustainable manner. The least-preferred approach would be in restoring a particular landform, or habitat that is not directly linked with a process restoration. NPS also highlighted that they will allow the monitoring of breaches and their closure if there is an imminent threat to human life and harm.

Using materials from the above referenced HEP Model Report, the outcome of the meeting highlighted restoration opportunities (see Attachment 1) at the following sites within FIIS citing those needing highest priority first:

- **T-2 Sunken Forest**
- **T-3 Reagan Property**
- **Other areas** within this "stretch" that NPS would like (bayside) restoration measures to include those in the "Water Island" and "Talisman Beach" area(s).
 - **T-5 Great Gun.** While this is technically not within NPS boundaries, NPS supports Alternatives 1 and 2 at this site. A selection and discussion of these sites demonstrates that NPS would like other areas, not just those within current Park boundaries and/or those previously studied under FIMP (HEP), to be considered. This serves to further reiterate NPS' goal of a multi-dimensional, multi-location, multi-year and multi-phased (restoration) project design(s) throughout the FIMP area. For further consideration, the property owner (the Town of Brookhaven) will have to be contacted.
 - **T-25 Atlantique to Corneille.** This site is supported by NPS, as it simulates a breach/overwash event and creates a feeder beach.

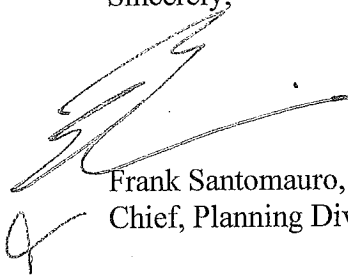
In order to ensure that restoration goals are included within the TSFP, it is important that the partner agencies begin to identify specific sites and an overall process by which they can be

incrementally implemented without delay. Only in this manner can they achieve an equal footing with the storm damage risk reduction options in terms of design and funding. The District's initial goal would be to set forth an agreement with respect to inclusion of the above four sites in the TSFP. This would include developing a monitoring program, including success criteria, by which to evaluate the above alternatives and make reasonable decisions with regard to bringing additional sites per the restoration at other locations over the out years.

The District recognizes that the impact analysis of potential adverse environmental effects of implementing the TSFP still needs to occur before any decisions on the type and quantity of mitigation if any, is addressed. This restoration effort is separate and distinct from that exercise, and would seek to put the selected restoration opportunities in place regardless of any subsequent analysis of mitigation needs. During the upcoming environmental analysis of the TSFP, adaptive management, monitoring and mitigation measures, if applicable, would be added to the TSFP, possibly utilizing some of the restoration sites identified during the effort highlighted in this letter. Your participation in this restoration planning process is critical. It is our desire to reinstate this effort in the near future with a working meeting of the resource agencies to formulate the appropriate design option for each of the four sites at FIIS, and then prioritize the 18 priority HEP sites and formulate an implementation schedule to advance future efforts. Toward that end I am requesting that you identify a POC for this effort. I will then have Mr. Leonard Houston, Chief of our Environmental Analysis Branch contact the designated individual to plan the date and agenda for the meeting, which may conceivably be a multiday effort.

If you have any additional questions/concerns please contact Mr. Houston, at (917)790-8702 or leonard.houston@usace.army.mil for further information.

Sincerely,



Frank Santomauro, P.E.
Chief, Planning Division

cc: USFWS-LIFO (Papa)
NPSIFIIS, Patchogue, NY (C. Soller)
NPS, Boston, MA (M. Foley)

25 June 2010

Subject: Fire Island Inlet to Montauk Point, New York (FIMP) Reformulation Study Meeting of the US Army Corps of Engineers (USACE), New York District with the National Park Service (NPS) on 25 June 2010, at 26 Federal Plaza, New York, New York.

Participants: Peter Wepler, Steve Couch and Pamela Lynch (USACE-Planning); Patti Rafferty (NPS), Mary Foley {via conference call} (NPS) and Chris Soller (Superintendent – FIIS) I.

1. Background.

The goal of subject meeting was to define NPS restoration goals for Fire Island National Seashore (FIIS) as part of the ongoing FIMP collaborative planning process. It was noted, although USFWS was not present at the meeting, that “goals sets forth during this meeting met their requests as it pertains to FIIS as well.” Of particular concern to the NPS, was the need to address bayside erosion, whatever its cause, within the FIIS, with the purpose of restoring natural processes and reducing storm damages. NPS, as part of FIMP also wanted to address, long-term, adaptive management; with “processes” being monitored instead of a site-by-site specific location determination.

In previous meetings and through the FIMP study process, the USACE has developed a number of strategies for strengthening barrier island resiliency as part of breach response procedures and restoration opportunities which involve bayside sediment placement. USACE has presented these as “initial projects” in a phased implementation strategy that would utilize monitoring and adaptive management to expand the number of locations at which these strategies could be constructed over the life of the project. USACE has sought specific input from the NPS to aid in identifying those additional locations for inclusion in the Collaborative Plan.

Pamela Lynch presented a “historical” perspective, from HEP documentation, for each potential restoration site. As each site was addressed, the number of (restoration) alternatives (& accompanying descriptions) were characterized. Prior issues such as “landowner support,” “permitting” and HEP-team consensus agreement were also mentioned, if documented. Sites (and alternatives) determined to be “cost effective” (by the USACE), on the HEP Priority (i.e. “Green”) List and/or those that were shown to significantly effect 1 of the 5 “natural processes” were also denoted.

2. Meeting.

Mary Foley, Patti Rafferty and Chris Soller offered some introductory remarks; these were a summary of those expressed at past HEP/Restoration meetings as well. The NPS goals were to have no project on Major Federal Tracks with only natural processes should operate in these areas, since there have been minimal actions in the past that have degraded these areas. The NPS reiterated their tiered approach to management. In simple terms, NPS’ first preference is that the land manager (NPS) allow for natural processes to occur. If this is not a viable approach, then the next preference would be to adopt measures that replicate these natural processes in a sustainable manner, the least-preferred approach would be in restoring a particular landform, or habitat that is not directly linked with a process restoration. The NPS policies are that all land habitats are equally valued as long as

they are natural result of unimpeded processes. One exception to this philosophy - NPS will allow the monitoring of breaches and their closure if there is an extensive threat to human harm.

Using materials from the prior HEP activities, that described the various restoration opportunities at sites within FIIS (that were also part of the alternative that maximizes NER benefits – as part of the HEP process), Foley, Rafferty and Soller then provided comments on the following specific locations (with those needing highest priority first):

I. Sites within the “*Sunken Forest*” to “*Water Island*” segment of FIIS.

- a. **T-2 Sunken Forest.** NPS presently supports an alternative similar to Alternative 1, without coir log structures. The NPS is going to proceed with this restoration project independent of FIMP. FIIS has funds to study the ongoing erosion, and plans to construct a demonstration scale feeder beach using by-passed sand. NPS may consider more dramatic changes to the Marina in the future (consistent with Alternatives 2, 3, and 4 in the report), but these would need to be directed by the General Management Plan (GMP) process since they could have an impact on existing public access. From a FIMP Study perspective, this either will be part of the Existing Condition or of the No Action Alternative. It can be considered as having an indirect effect and will be analyzed in the cumulative effects analyses.

Note: From a (HEP) historical perspective, this site was not part of the “Green” (priority) HEP list and/or one that significantly benefitted a coastal process. However, alternatives at this site were cost effective and are still viable options under current FIMP restoration measures.

- b. **T-3 Reagan Property.** NPS supports Alternatives 1 and 3 in this location, which includes fill placement in front of the Federal tract of land, and in front of the community bulkhead. NPS does not support the use of the coir log alternative, based upon their functioning in Jamaica Bay in a high wave environment. They might consider another temporary alternative such as sheet piling or Aqua Bags to ‘perch’ the beach during construction. NPS does not support Alternative 2. This opportunity could be replicated at other bulkhead-erosion-induced locations using the Reagan Property as the first increment (locations TBD). It was acknowledged that typically restoration is designed to be sustainable, with no recurring commitment for re-nourishment; therefore there is a real challenge with trying to maintain this type of feature. It was discussed that other on-going projects (such as other dredging projects, etc.) could serve as a maintenance component, with opportunistic re-nourishment when material is available.

Note: From a (HEP) historical perspective this site (Alternative. 2) was part of the “Green” (priority) HEP list. While it was not recognized as one that significantly benefitted a coastal process, the alternatives were cost effective and all are still viable options under current FIMP restoration measures.

- c. **Other areas** within this “stretch” that NPS would like (bayside) restoration measures include those in the “Water Island” and “Talisman Beach” area(s). While these are not specifically identified as “HEP” sites, they are contained within the FIMP (HEP) study footprint and all measures, upon further study, can certainly be considered. It is anticipated, based on HEP studies in similar areas, that these would rank and score similarly to others and would thus be both cost-effective and offer significant NER (restoration) opportunities.

II. Other areas:

- a. **T-5 Great Gun.** While this is technically not within NPS boundaries, NPS supports Alternatives 1 and 2 at this site. A selection and discussion of these sites demonstrates that NPS would like other areas, not just those within current Park boundaries and/or those previously studied under FIMP (HEP), to be considered. This serves to further reiterate NPS’ goal of a multi-dimensional, multi-location, multi-year and multi-phased (restoration) project design(s) throughout the FIMP area.

For further consideration, the property owner (the Town of Brookhaven) will have to be contacted.

Note: From a (HEP) historical perspective this site (Alternatives 1 and 2) were both part of the “Green” (priority) HEP list. Alternative 2 was also recognized as one to significantly benefit a coastal process. All alternatives were cost effective and all are still viable options under current FIMP restoration measures.

- b. **T-25 Atlantique to Corneille.** This site is supported by NPS, as it simulates a breach/overwash event and creates a feeder beach. NPS supported concepts within Alternatives 1 and 3 (and opposed Alternative 2, wetland restoration). It was discussed that these alternatives may need new conceptual plans. One (modified) concept was to initially restore a smaller area, with the idea that over time additional material could be placed to de-vegetate the area, offset erosional losses, and possibly enlarge the habitat. Additional concepts were also discussed and this highlighted that the NPS would like (as stated in T-5 discussion above) to have options remain open (at all sites) to study, modify and manipulate alternatives and designs over the project life.

Note: From a (HEP) historical perspective this site (Alternative 1) was part of the “Green” (priority) HEP list. Alternative 1 was also recognized as one to significantly benefit a coastal process. All alternatives were cost effective and all are still viable options under current FIMP restoration measures.

III. Conclusions:

The meeting concluded with the USACE asking NPS if there were any additional locations for bayside habitat restoration, or bayside sediment placement, which should be considered (consistent with the discussion held). NPS replied that there were no specific additional sites they

were interested in pursuing within the existing FIMP (HEP) parameters; the scope of the existing proposed restoration measures were satisfactory and address their concerns regarding the long-term need for bayside sediment placement.

However, as these sites/restoration opportunities are being considered, and as the project progresses, they would like to have an open-ended option to add additional locations (both within and outside of NPS boundaries) if opportunities arise and are practical. It was further noted that in areas where SDR measures were being implemented additional considerations should be given to bayside restoration measures (as sediment transport may be impacted as a result). This may occur during the initial construction phase or at some time thereafter (perhaps with a scheduled re-nourishment and/or multi-phased project schedule).

3. For any questions or comments, please contact the undersigned or Peter Wepler at Pamela.A.Lynch@usace.army.mil or Peter.M.Wepler@usace.army.mil

Pamela Lynch
Project Biologist
CENAN-PL-E



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

March 16, 2011

Colonel John R. Boulé
Commander, New York District
U.S. Army Corps of Engineers
26 Federal Plaza, Rm. 2109
New York, NY 10278

Dear Colonel ^{John} Boulé:

This letter is a follow up to the U.S. Army Corps of Engineers (Corps) December 15, 2010, Breach Response Plan (BRP) meeting for the Fire Island Inlet to Montauk Point Storm Damage Protection (FIMP) Study area, and to a discussion you and I had during a briefing for Congressman Bishop. The BRP meeting was held at the New York District Office in New York and included representatives from the National Park Service (NPS), New York State Department of State (NYS DOS), New York State Department of Environmental Conservation (NYS DEC), and U.S. Geological Survey (USGS). We very much appreciated the opportunity to participate in the meeting. We request a copy of the minutes for our review due to the significance of the discussions related to development and implementation of the BRP on Fire Island National Seashore. We note that the meeting did not include any substantive discussions on environmental mitigation for breach closure activities, which can result in the disruption of natural processes and habitat formation, or regulatory compliance with Federal laws. In addition, from the U.S. Fish and Wildlife Service's (Service) perspective, there was no definitive agreement between the agencies regarding alternatives for a Proactive Breach Closure Plan (Proactive BCP) for the Westhampton barrier island.

During the course of coordinating with the Corps and other agencies on the FIMP and BRP, the Service has continued to stress and recommend that planning efforts should address mitigation and focus on consultations pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), and Fish and Wildlife Coordination Act (FWCA) of 1958, as amended (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*). These recommendations were provided at the December 15 meeting and reiterated in comments we provided via electronic correspondence dated January 21, 2011, on the Tentatively Supported Federal Plan (TSFP) for the FIMP. Our concerns and recommendations relative to these areas are discussed in more detail below.

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NYS DEC

MAR 18 2011

REGIONAL DIRECTOR
REGION 1

ESA Section 7," we anticipate that the Corps will be contacting us in the near future to ensure compliance with the ESA and FWCA. The Service encourages the Corps to resume coordination with the Service and Federal, State, and local landowners on a comprehensive long-term management plan for listed species in the study area.

The Service recommends that the Corps finalize consultation prior to implementing any breach response plan. We are aware that the Corps was recently issued a Water Quality Certification (Permit Number 1-4799-00023/00007) by the NYSDEC-Region 1 to conduct breach fill activities, and recommend the Corps obtain and complete all other necessary permits and consultations prior to proceeding with undertaking any breach fill activities. We understand that the Corps may undertake breach fill projects in compliance with provisions of the National Environmental Policy Act and the ESA that permit emergency consultations, but we hope that the fact that the Corps has worked to obtain a NYSDEC permit prior to any breach event illustrates the Corps intent to fulfill ESA compliance earlier rather than later as a necessary component of breach response planning.

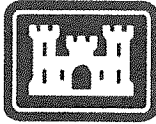
I welcome the opportunity to further discuss these concerns and recommendations with you, or for your staff to contact Steve Papa or Steve Sinkevich, of the Long Island Field Office, to further explore these issues.

Sincerely,

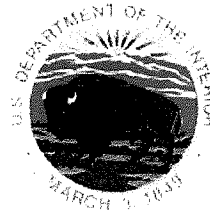


David A. Stilwell
Field Supervisor

cc: NYSDEC, Region 1, Stony Brook, NY (P. Scully)
NYSDOS, Albany, NY (F. Anders; B. Pendergrass)
USGS, Woods Hole, MA (W. Schwab)
NPS/FIIS, Patchogue, NY (C. Soller)
NPS, Boston, MA (M. Foley)



**US Army Corps
of Engineers**®



March 11, 2011

Honorable Joe Martens, Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Dear Mr. Martens:

We write together to ask for your consideration of a newly developed potential plan of improvement for the Fire Island Inlet to Montauk Point, New York, Reformulation Study.

Any plan developed for this area that involves erosion control and beach nourishment must be mutually acceptable to the United States Secretary of the Army and Secretary of the Interior. Through a series of meetings spanning nearly 18 months, the U.S. Army Corps of Engineers and the U.S. Department of Interior now stand ready to move forward with Reformulation Study efforts by utilizing this potential plan of improvement for the entire project study area. This plan of improvement is the Tentative Federal Supported Plan (TFSP) and outlines a plan that appears to meet the Federal agency objectives and requirements necessary for mutual acceptability.

We have enclosed for your review a summary of the TFSP components. While this is a brief overview, supporting information for this plan is included in the May 2008 Draft Formulation Report, similar to Alternative 3G. The State of New York, the non-Federal sponsor, must find the general plan of improvement acceptable before any finalization can occur, including completion of the Reformulation Study Draft General Reevaluation Report and Draft Environmental Impact Statement.

If the State finds the components of the TFSP acceptable, we would immediately move forward with final analysis of the TFSP plan (plan formulation, engineering, economics, environmental assessment, model certifications, internal/external reviews), including higher authority approvals by each Federal agency.

FIRE ISLAND INLET TO MONTAUK POINT, NY
Tentative Federally-Supported Plan
Summary of Components

INLETS: FIRE ISLAND, MORICHES, SHINNECOCK

- Continuation of authorized projects, with increased sediment bypassing at each inlet

MAINLAND

- 10-year floodplain non-structural building retrofits, including road raisings
- Over 4,400 structures, and 4 road raising locations

BARRIER ISLANDS:

FIRE ISLAND @ DEVELOPED LOCATIONS (communities, minor Federal Tracts)

- Beachfill (+15 ft dune, with berm)
- minimum real estate impact alignment
- No tapers into Federal tracts; with overfill in communities

FIRE ISLAND @ UNDEVELOPED LOCATIONS (major Federal Tracts & Smith Point Park)

- Conditional Breach Response (+9.5 ft berm only), guidelines to be developed, anticipated closure to be initiated within 45-60 days
- @ Lighthouse - Reactive Breach Response (+9.5 ft berm only), closure initiated w/in 45 days
- @ Smith Point County Park - short term beachfill in western, developed section to allow relocation of infrastructure, then Conditional Breach Response
- Science Response Team to advise the decision makers for conditional closure
- No maintenance fill for breach closure, action taken only when a breach occurs

WESTHAMPTON BARRIER ISLAND:

- Beachfill (+15ft dune with berm) fronting Moriches Bay
- Breach Response (+13 ft dune, with berm), fronting Shinnecock Bay
- Breach Response to include action to be taken when vulnerable to breaching (specifics still to be defined)

DOWNTOWN MONTAUK AND POTATO ROAD

- Sediment management measures at both sites (feeder beach)
- Potato Road contingent upon a local pond opening management plan for Georgica Pond

GROIN MODIFICATION

- Taper existing Westhampton Groins (13) and existing Ocean Beach Groins (2)

RESTORATION

- Various alternatives at locations throughout study area

INTEGRATION OF ADAPTIVE MANAGEMENT

- Period of renourishment subject to adaptive management considerations and local land use regulations, or 50 year period of renourishment
- Provisions to continually adjust components of the project to improve effectiveness
- Applies to all plan features, developed to address climate change concerns (e.g., Sea Level Rise)

INTEGRATION OF LOCAL LAND USE REGULATIONS AND MANAGEMENT

- Local Land Management planning to include enforcement of federal and state zoning requirements, land acquisition or other measures is a necessary component for long-term risk reduction
- Improved land management can allow for adaptation to reduce costs for renourishment
- Important to ensure that the project does not induce development.

**New York State Department of Environmental Conservation
Division of Water**

Bureau of Flood Protection and Dam Safety, 4th Floor
625 Broadway, Albany, New York 12233-3504
Phone: (518) 402-8185 • FAX: (518) 402-9029
Website: www.dec.ny.gov



Joe Martens
Commissioner

December 29, 2011

Colonel John R. Boulé II
United States Army Corps of Engineers
New York District
26 Federal Plaza
Jacob K. Javits Federal Building
New York, New York 10278

Re: Fire Island Inlet to Montauk Point (FIMP) Reformulation Study

Dear Colonel Boulé:

Thank you for the March 11, 2011, letter regarding the Federal Government's (New York District of the Army Corps of Engineers, National Park Service Fire Island National Seashore Office, and U.S. Fish and Wildlife Service New York Field Office) request for New York State to consider a potential plan of improvement for the Fire Island Inlet to Montauk Point area which is identified in the March 11th letter as the "Tentatively Federally Supported Plan" ("TFSP"). As the March 11th letter notes, the TFSP "appears to meet the Federal agency objectives and requirements," yet will need further approvals in the respective federal agencies before it would be fully approved.

The State has reviewed the TFSP and has had discussions with potential local sponsors. Unfortunately, we find that additional information is needed for the State and the potential local sponsors to respond to your request. As you understand, a positive response, or an adequately formulated request for a locally preferred alternative, will require the State to have support from its potential local partners. It is highly difficult for the State to fully understand, and to present the TFSP to potential local sponsors to seek their response or participation, when the TFSP is general in nature and does not contain the supporting information needed to justify its attributes. Therefore, the State respectfully requests the following information:

1. The March 11th letter provides a one page summary of the components of the TFSP. In May 2009 the Corps issued a Draft FIMP Reformulation Study ("Study"). Within this Study the Corps identified a number of options, including "Alternative 3G." The March 11th letter stated that Alternative 3G is "similar" to the TFSP. In the Study, we understand that alternative 3G was identified as being the National Economic Development/National Ecosystem Restoration ("NED/NER") plan, which was identified as the plan that best accomplishes the storm damage reduction objectives, based upon the integration of the alternatives. The NED/NER plan previously was discussed at a FIMP Executive Steering Committee meeting on November 10, 2009, and was presented by the Corps as the plan recommended for further development. Alternative 3G was also recommended for inclusion in the Draft General Re-evaluation Report and the

Environmental Impact Statement for evaluation as a part of the public review process. Unfortunately, it is impossible to identify the significant differences between the newly developed TFSP and alternative 3G and we would appreciate receiving a detailed comparison of the two plans. We request that this comparison include a detailed description of the increased or decreased risks and impacts to the communities within in the study, as well as the level of storm damage reduction that would be provided by the TFSP.

2. For the State and potential local sponsors to determine the feasibility of agreeing to all or some of the TFSP, it is necessary to understand the costs involved with each phase. The State requests that the Corps provide the detailed cost-estimate/cost-breakdown for various elements of the TFSP and compare TFSP costs to those for Alternative 3G and the NED/NER plan. The Department is currently not clear on which plan is the NED/NER plan.
3. The March 11th letter indicates that the "plan *appears* to meet the Federal Agency objectives" (emphasis supplied). The State respectfully requests confirmation that the TFSP does, in fact, meet Federal Agency objectives and is the Corps "Recommended Plan". It is an extensive process for the State, in conjunction with potential local sponsors, to determine if the TFSP is fully acceptable or if a locally preferred alternative needs to be proposed for all or some of the project area. The State would strongly prefer to undertake this more extensive consultation with the knowledge that the TFSP will be acceptable to the Federal Government (subject to NEPA review and modifications, as well as appropriations) if endorsed by the State.
4. The TFSP calls for significant non-structural measures, such as elevation or relocation of structures. The State would appreciate detailed information on the Corps' proposed options for implementation of this portion of the TFSP. As one might expect, this is of great interest to potential local sponsors. The State would also be interested in the results of any consultations the Corps has undertaken with the Federal Emergency Management Agency on these proposed measures and their implementation. This non-structural effort has a direct relationship to FEMA's flood plain management and flood insurance programs, and they may be of great assistance in this implementation. Also, we request that the Corps provide a comparison of the levels of flood protection provided by the TFSP, Alternate 3G and the NED/NER plan versus the residual flood risks associated with maintaining the existing inlets.
5. Please provide more detailed information on the various barrier island breach and breach closure plans (current and proposed via the TFSP) including their locations, impacts, timeframes for closure, benefits, future estimated costs and how they relate to flood risk. It would be very useful to know how the level of storm damage reduction increases or decreases with the proposed breach plans in the TFSP in comparison to Alternative 3G and the NED/NER plan.
6. The State has discussed with the Federal Agencies its interest in evaluating the option of reducing or phasing out the re-nourishment portion of this project over the project's 50-year life span. This option might allow the beach configuration to eventually return to a more naturalized status or to possibly have beach

FIRE ISLAND INLET TO MONTAUK POINT (FIMP) REFORMULATION STUDY

Below are New York State comments to the "MODIFIED 2B" plan which the Corps has proposed as an alternative to be prepared to other alternatives in order to respond to the State letter dated December 29, 2011. The Corps has recommended that a comparison be made of alternatives 3A, TFSP, and MODIFIED 2B, and no action. These alternatives will be prepared in order to address the questions raised in the State's letter.

June 28, 2012

1. In "MODIFIED 2B" plan the non-structural measures need to stand alone and the benefits cost ratio of the overall plan cannot depend on them.
2. "MODIFIED 2B" proposes 13 ft dune under Proactive Breach Response at Fire Island Developed Locations. Why is the dune 2 ft lower than under Plans 3A and TFSP? How is the berm width affected?
3. What is the cross-section for 25-year plan Proactive Breach Response for "MODIFIED 2B" and what does subject to evaluation mean for all the project locations?
4. What will the real estate impact alignment be under "MODIFIED 2B"?
5. Under Integration of Adaptive Management in "MODIFIED 2B" nourishment is not included. Does that mean that it is not planned?
6. Will there be any maintenance fill for any of the breach closures under "MODIFIED 2B" and other remaining plans?
7. Is there an ability to taper off the State's involvement over time under any of the remaining plans?
8. Will FIMP prevent non-federal entities from constructing non-project activities within the project footprint such as building higher dunes, planting additional vegetation, installing snow fences, or privately funding beach replenishment?
9. Will FIMP allow non-federal entities (state, county, communities) take advantage of dredge mobilization to build a larger locally preferred alternative? Should they choose to provide additional funding to do so? Can they mobilize their own dredge in the event FIMP is providing less protection than they desire?
10. Will FIMP prevent non-federal entities from securing FEMA damage assistance or FEMA mitigation grant monies within the project footprint? (FEMA funded replenishment of non-federal engineered beaches, or FEMA funded home elevations through programs such as "project impact")?

Responses to NYS Comments

The comparisons of the alternative plans are documented in the May 2009 Report (Chapter 10). This information has also been summarized in the following sub-attachments:

- Attachment #1 – Table that provides a comparison of the remaining potential plans
- Attachment #2 – Text description of the TFSP
- Attachment #3 – A series of figures that compares the effectiveness of the TFSP

Please note: in coordinating the proposed responses to comments, the Corps suggested that the analysis consider the effectiveness of an additional alternative, identified as Plan 2B. Plan 2B is included in the table that compares alternatives. This table reflects the comments that were provided by NYS and DOI by email on 28 June 2012. Plan 2B is presently under evaluation.

NYS Comment #2

For the State and potential local sponsors to determine the feasibility of agreeing to all or some of the TFSP, it is necessary to understand the costs involved with each phase. The State requests that the Corps provide the detailed cost estimate/cost-breakdown for various elements of the TFSP and compare TFSP costs to those for Alternative 3G and the NED/NER plan. The Department is currently not clear on which plan is the NED/NER plan.

➤ NAN Response #2

Updated project costs are being developed to show costs associated with each remaining plan. Please note, all costs will change as the plan is updated to account for post-Sandy changes.

In general, costs include the upfront costs associated with construction, and recurring costs associated with renourishment, breach response, and sand bypassing.

- Attachment #4 shows costs associated with the following plans, based upon information contained in the May 2009 Report.
 - 1) Plan 3A, which appears to be the plan that maximizes net benefits
 - 2) TFSP, the plan supported by the Federal Agencies

NYS Comment #3

The March 11th letter indicates that the "plan appears to meet the Federal Agency objectives" (emphasis supplied). The State respectfully requests confirmation that the TFSP does, in fact, meet Federal Agency objectives and is the Corps "Recommended Plan". It is an extensive process for the State, in conjunction with potential local sponsors, to determine if the TFSP is fully acceptable or if a locally preferred alternative needs to be proposed for all or some of the project area. The State would strongly prefer to undertake this more extensive consultation with the knowledge that the TFSP will be acceptable to the Federal Government (subject to NEPA review and modifications, as well as appropriations) if endorsed by the State.

➤ NAN Response #3

The Corps anticipates further confirmation that the TFSP is acceptable to the Federal agencies, but can only document its understanding of agency priorities communicated in the most recent coordination. These plans were briefed at the Secretary-level and general

actuarial rates, based upon the elevation of their house. As such, it is expected that the decision whether or not to participate in the non-structural program could have a bearing on the individual's financial responsibility for their individual flood insurance. In our discussions with FEMA, it also appears that the inclusion of the non-structural program will have a bearing on a homeowner's eligibility for participation in various FEMA programs. Similar to the funding of repair of engineered beaches, FEMA and the Corps need to consider the need to avoid augmentation. We are working to obtain a legal opinion on this, but at this point, it would be best to assume that the Corps program could limit the availability of FEMA funds, through certain programs.

NYS Comment #5.

Please provide more detailed information on the various barrier island breach and breach closure plans (current and proposed via the TFSP) including their locations, impacts, timeframes for closure, benefits, future estimated costs and how they relate to flood risk. It would be very useful to know how the level of storm damage reduction increases or decreases with the proposed breach plans in the TFSP in comparison to Alternative 3G and the NED/NER plan.

➤ NAN Response #5:

Chapters 8 and 9 of the draft formulation report summarize the breach response plans to the extent they were developed at the time. The report identified the expected number of breaches for each plan alternative. Refinements to the breach closure measures which have been made since the compilation of the formulation report draft, as well as additional changes that have been requested will require that the team assess changes which may result if we allow for "natural closure" at a lower elevation than the breach closure design level. Further evaluation of the impacts will be sensitive to the assumptions in the trigger for action to be taken.

The information provided in Attachment #2, in response to NYS Comment #1, provides a comparison as it presently exists of the comparison between the two plans.

NYS Comment #6.

The State has discussed with the Federal Agencies its interest in evaluating the option of reducing or phasing out the re-nourishment portion of this project over the project's 50-year life span. This option might allow the beach configuration to eventually return to a more naturalized status or to possibly have beach configuration addressed by property owners, local municipalities or local zoning entities. The State requests information on the manner in which this option would be addressed within the proposed TFSP. If these concepts are not addressed in the TFSP, the State requests that they be addressed.

➤ NAN Response #6:

Presently the May 2009 draft Formulation Report includes text on three different alternatives for lifecycle management of these alternatives. These three scenarios are the ones jointly developed by the involved agencies, and are described in Chapter 11, Consideration of Lifecycle Management.

➤ NAN Response #8:

The Corps' Sea Level Change (SLC) guidance has been superseded twice since the May 2009 Draft Formulation Report. The current Corps Guidance is EC 1165-2-212 Sea-Level Change Considerations for Civil Works Programs, dated 1 October 2011.

A 9 June 2010 workshop with the FIMP stakeholders considered the implementation and inclusion of prior guidance, EC 1165-2-211, dated July 2009, into the analysis of the alternatives and the selected plan and a scope of work for SLC analysis resulted from the meeting. Subsequent coordination with the Corps' leadership on the Corps guidance, which requires analysis of a three scenarios: "low" (historic), "intermediate" and "high" rates of sea level change further refined this scope of work. An AE is under contract to complete this analysis and to reflect the impact of SLC on the costs and benefits of the various alternatives.

In general, adaptive management of beach renourishment for sea level change considerations can be determined by sea level change and physical project features monitoring. Beach renourishment is highly adaptable due to its "soft" nature, and project features can be revised throughout the life of the projects. Monitoring will be specifically recommended as a feature of the plan, and as a cost-shared project requirement.

Similarly, based upon our discussions with HQUSACE, a similar course of action is recommended for non-structural solutions so that proposed plans can be adapted in the future based upon actual or realized SLC.

FIMP - COMPARISON OF REMAINING PLANS OF IMPROVEMENT ---- AS OF MAY 2, 2013

* Final comparison will also include the **NO ACTION PLAN** *

<p align="center">Plan 3A *NOTE: THIS PLAN IS NOT ACCEPTABLE TO ALL PARTNERS</p>	<p align="center">Updated TFSP Tentative Federally Supported Plan (dated March 11, 2011) *This contains updates to reflect post-Sandy considerations</p>	<p align="center">Plan 2B * Full Analysis of this plan still to be undertaken *This contains updates to reflect post-Sandy considerations</p>
<p><u>INLETS: FIRE ISLAND + MORICHES + SHINNECOCK</u> Continuation of authorized projects, with increased sediment bypassing</p>	<p><u>INLETS: FIRE ISLAND + MORICHES + SHINNECOCK</u> Continuation of authorized projects, with increased sediment bypassing</p>	<p><u>INLETS: FIRE ISLAND + MORICHES + SHINNECOCK</u> Continuation of authorized projects, with increased sediment bypassing</p>
<p><u>MAINLAND</u> <u>6-year floodplain</u> Non-structural building retrofits, including road raisings Over 3,200 structures</p>	<p><u>MAINLAND</u> <u>10-year floodplain</u> Non-structural building retrofits, including road raisings Over 4,400 structures + 4 road raising locations</p>	<p><u>MAINLAND</u> <u>10-year floodplain</u> Non-structural building retrofits, including road raisings Over 4,400 structures + 4 road raising locations</p>
<p><u>BARRIER ISLANDS:</u> <u>FIRE ISLAND @ DEVELOPED LOCATIONS</u> <u>Communities + minor Federal Tracts</u> Beachfill (+15 ft dune, with berm) Minimum real estate impact alignment</p> <p>Groin Modifications; Taper existing Ocean Beach Groins (2)</p>	<p><u>BARRIER ISLANDS:</u> <u>FIRE ISLAND @ DEVELOPED LOCATIONS</u> <u>Communities + minor Federal Tracts</u> Beachfill (+15 ft dune, with berm) Post-Sandy Adjusted Beachfill Alignment Tapers into Federal tracts; alternately overfill in communities @ Lighthouse; Beachfill (+15 ft dune, with berm)</p> <p>Groin Modifications; Taper existing Ocean Beach Groins (2)</p>	<p><u>BARRIER ISLANDS:</u> <u>FIRE ISLAND @ DEVELOPED LOCATIONS</u> <u>Communities + minor Federal Tracts</u> Beachfill (+13 ft dune, with berm) Post-Sandy Adjusted Beachfill Alignment Tapers into Federal tracts; alternately overfill in communities @ Lighthouse; Beachfill (+13 ft dune, with berm)</p> <p>No set renourishments; renourish when cross-section falls below design level (25-year)</p> <p>Groin Modifications; Taper existing Ocean Beach Groins (2)</p>
<p><u>FIRE ISLAND @ UNDEVELOPED LOCATIONS</u> <u>Major Federal Tracts + Smith Point County Park</u> Beachfill (+13 ft dune, with berm) Minimum real estate impact alignment</p>	<p><u>FIRE ISLAND @ UNDEVELOPED LOCATIONS</u> <u>Major Federal Tracts + Smith Point County Park</u> Conditional Breach Response (details TBD) - guidelines TBD; anticipated closure to be initiated within 45-60 days @ Smith Point County Park (East + West) Feeder Beach - beachfill to offset inlet effects, details TBD Long-term relocation of park facilities to minimize renourishment Science Response Team to advise decision makers for conditional closure No maintenance fill for breach closure; action taken only when breach occurs</p>	<p><u>FIRE ISLAND @ UNDEVELOPED LOCATIONS</u> <u>Major Federal Tracts + Smith Point County Park</u> Conditional Breach Response (details TBD) - guidelines TBD; anticipated closure to be initiated within 45-60 days @ Smith Point County Park (East + West) Feeder Beach - beachfill to offset inlet effects, details TBD Long-term relocation of park facilities to minimize renourishment Science Response Team to advise decision makers for conditional closure No set renourishments; renourish when cross-section falls below design level (25-year)</p>
<p><u>WESTHAMPTON (fronting Moriches Bay)</u> Beachfill (+15 ft dune, with berm)</p> <p>Groin Modifications; Taper existing Westhampton Groins (13)</p>	<p><u>WESTHAMPTON (fronting Moriches Bay)</u> Beachfill (+15 ft dune, with berm)</p> <p>Groin Modifications; Taper existing Westhampton Groins (13)</p>	<p><u>WESTHAMPTON (fronting Moriches Bay)</u> Beachfill (+13 ft dune, with berm) No set renourishments; renourish when cross-section falls below design level (25-year)</p> <p>Groin Modifications; Taper existing Westhampton Groins (13)</p>
<p><u>SHINNECOCK (fronting Shinnecock Bay)</u> Proactive Breach Response (+13 ft dune, with berm)</p>	<p><u>SHINNECOCK (fronting Shinnecock Bay)</u> Beachfill / Proactive Breach Response (+13 ft dune, with berm) No set renourishments; renourish when cross-section falls below design level (25-year)</p>	<p><u>SHINNECOCK (fronting Shinnecock Bay)</u> Beachfill (+13 ft dune, with berm) No set renourishments; renourish when cross-section falls below design level (25-year)</p>

ATTACHMENT #2

C. Inlet Modification Plan

Based upon the engineering and economic evaluation of the inlet modification and management measures, including the multiple criteria screening matrix, the recommended plan for inlet management is continuation of the authorized project at each inlet with increased sediment bypassing from the ebb shoal to offset the downdrift deficit. A long-term, monitoring and adaptive management plan is included to allow for future changes or improvements in the inlet management, over time. The inlet management measures are generally described as follows:

Shinnecock Inlet: Continuation of authorized project + Ebb shoal dredging; -16' deposition basin

- 2 year cycle; additional 100,000 CY/yr

Moriches Inlet: Continuation of authorized project + Ebb shoal dredging

- 1 year cycle; additional 100,000 CY/yr;

Fire Island Inlet: Continuation of authorized project + Ebb shoal dredging; deposition basin expansion, with additional updrift disposal

- 2 year interval; additional 100,000 CY/yr; and

D. Groin Modification Plan

Based upon engineering and economic analysis of groin modifications, recommendation is shortening (or tapering) of Westhampton groin field (15 existing), which will increase the amount of sediment transported to the west, and will reduce renourishment requirements for the shoreline downdrift of the groins. This plan includes:

- Shortening of groins, varying between 70 – 100 ft;
- Releases 0.5M to 2M CY of sand to west

E. Breach Response Plan (BRP)

Based upon engineering and economic analysis of the alternatives, recommendation is:

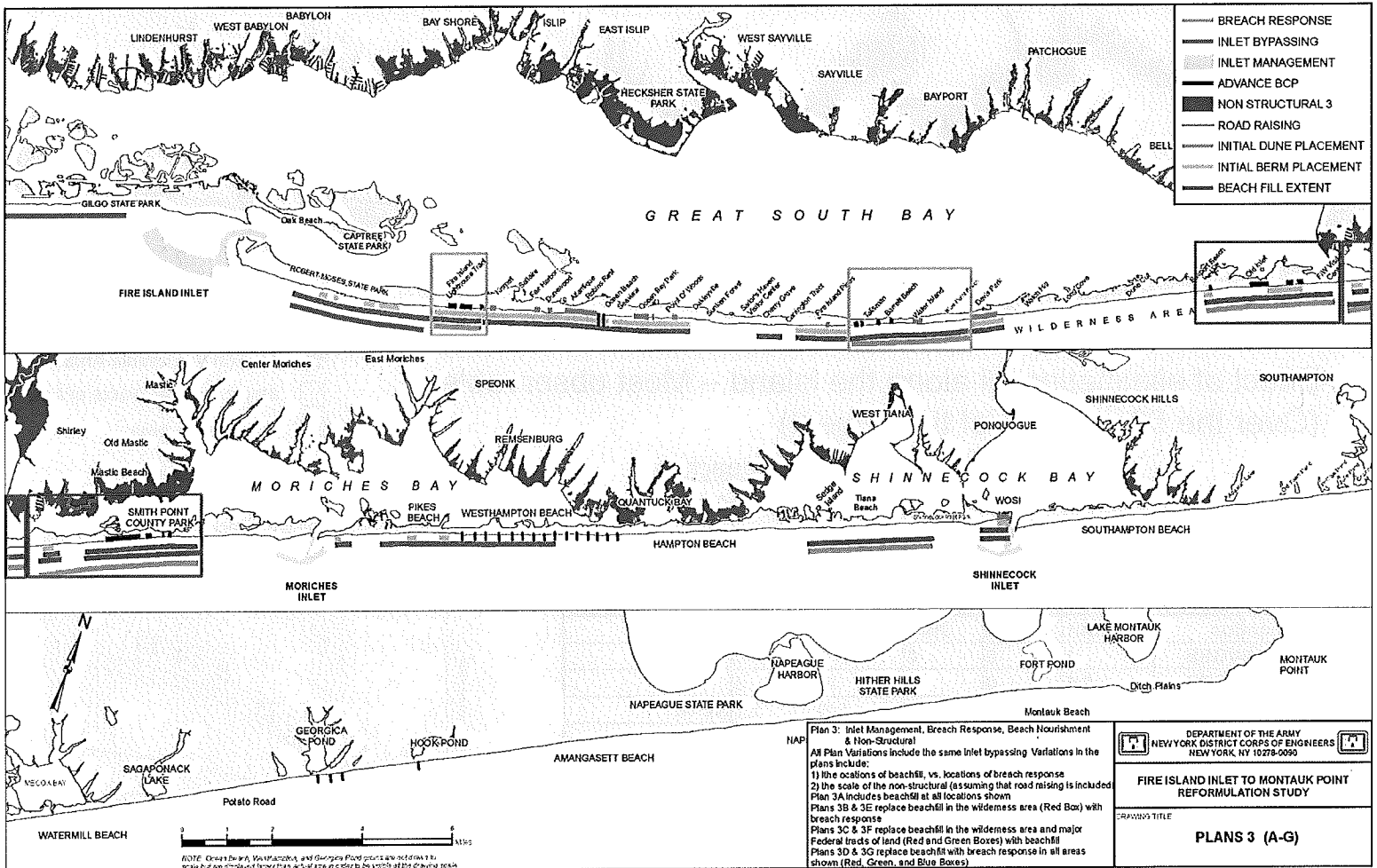
- Conditional Breach Response Plan in Fire Island undeveloped areas, with threshold details currently under development
- Proactive Breach Response Plan for areas along Shinnecock Bay, where a beachfill plan is not recommended:
 - Breach Closure Template: +13' NGVD dune, berm height +9.5 ft NGVD, berm width generally 90 ft wide, but vary depending on conditions prior to the breach and within adjacent areas
 - Proactive Response Plans include restoring the template to the design condition when the shoreline is degraded to an effective width of 50 ft.

F. Sediment Management Plans

The engineering and economic analyses identified two areas of high damages where a conventional beach nourishment project was not economically viable (Downtown Montauk, and Potato Road). In these areas, Sediment Management Alternatives were evaluated to offset the long-term erosion trend, to maintain the current protection, and prevent conditions from getting worse; these features would also serve as feeder beaches. In the area of Potato Road, the implementation of this plan

ATTACHMENT #3

FIMP – Alternative 3 Summary



- BREACH RESPONSE
- ===== INLET BYPASSING
- ===== INLET MANAGEMENT
- ===== ADVANCE BCP
- ===== NON STRUCTURAL 3
- ===== ROAD RAISING
- INITIAL DUNE PLACEMENT
- ===== BEACH FILL EXTENT

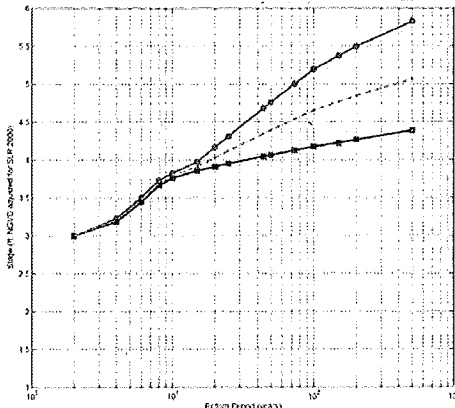
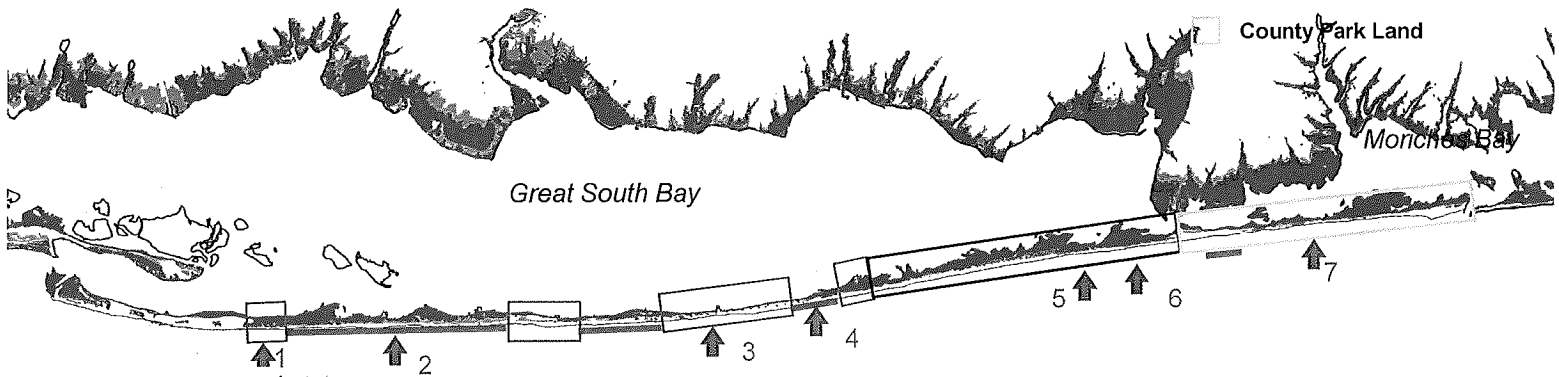
Plan 3: Inlet Management, Breach Response, Beach Nourishment & Non-Structural
 All Plan Variations include the same inlet bypassing. Variations in the plans include:
 1) the locations of beachfill, vs. locations of breach response
 2) the scale of the non-structural (assuming that road raising is included)
 Plan 3A includes beachfill at all locations shown
 Plans 3B & 3C replace beachfill in the wilderness area (Red Box) with breach response
 Plans 3C & 3F replace beachfill in the wilderness area and major Federal tracts of land (Red and Green Boxes) with beachfill
 Plans 3D & 3G replace beachfill with breach response in all areas shown (Red, Green, and Blue Boxes)

DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, NY 10278-0099	
FIRE ISLAND INLET TO MONTAUK POINT REFORMULATION STUDY	
DRAWING TITLE	
PLANS 3 (A-G)	

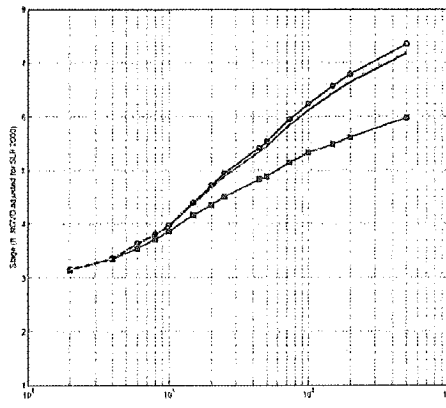
NOTE: Ocean Park, West Patchogue, and Georges Pond points are additions to the plan that are not shown on the original plan and are shown in red boxes.

Effect of eliminating fill along the island: Increase in back-bay stage frequency curves

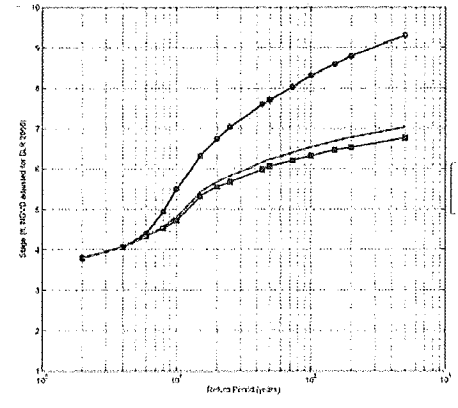
- ↑ Breach Vulnerable Areas
- Major Federal Tracts of Land
- Wilderness Area
- County Park Land



Station 3 Western Great South Bay



Station 8 Eastern Great South Bay



Station 10 Moriches Bay

The figures above show the engineering modeling used as input into the lifecycle damages model. The upper and Lower (red) curves represent the variability in the back-bay stages that are likely in the future without project condition based upon projected changes in the barrier Island condition, considering storm activity, and local actions that may be implemented. Plan 3A is represented by the lower red curve, which is comparable to the baseline condition. The intermediate curves show the effect of eliminating beachfill in various locations. Western GSB is most influenced by eliminating fill in the MFTL. Eastern GSB is most influenced by eliminating fill in the wilderness area. Moriches Bay is relatively insensitive to the effects of fill removal.

Differences Between Plans 3A and 3G/TFSP:

Plan 3A Reduces Breaching in all locations in Great South and Moriches Bay

Plan 3G/TFSP Allows Breaching in Multiple Locations, but includes a larger N-S Plan

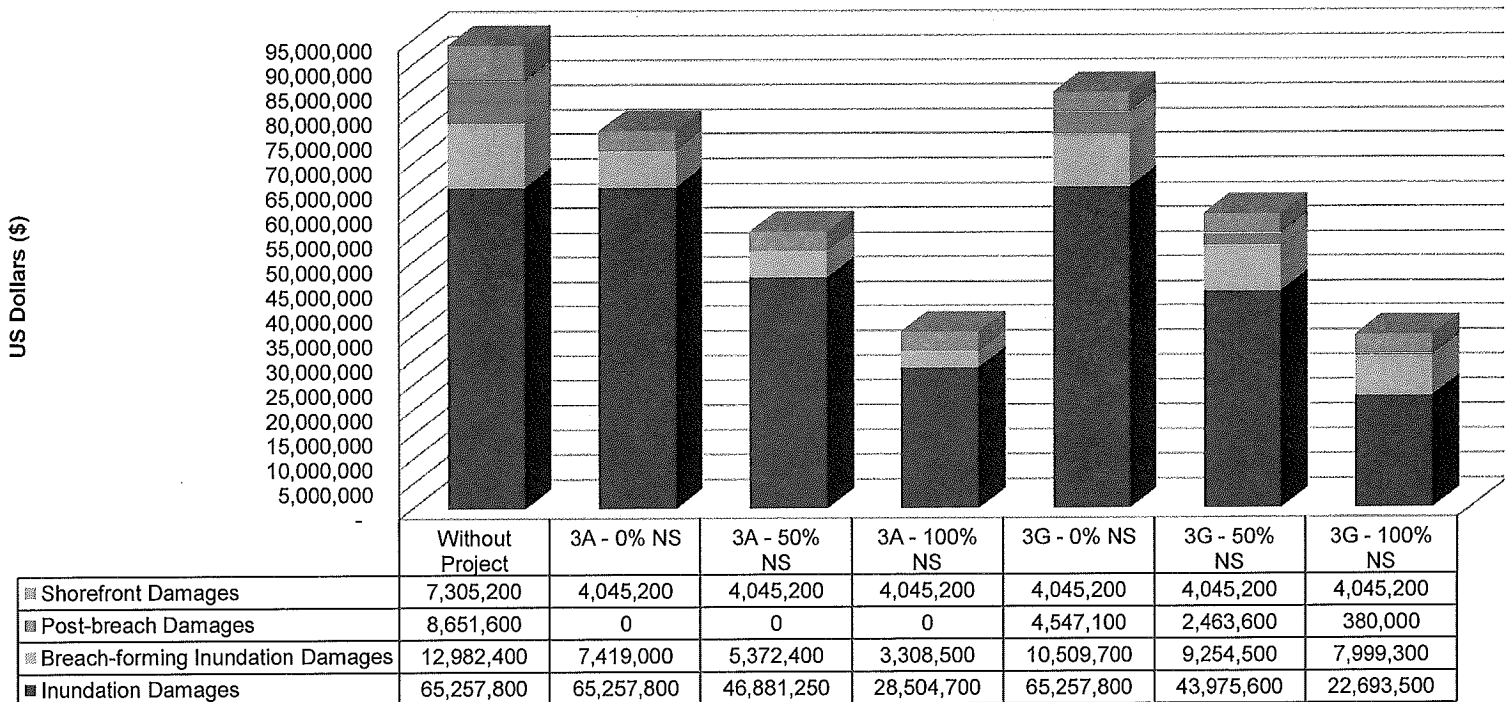
Success of Both Plans (but greater for 3G/TFSP) depends upon participation in N-S Plan

Reduction in “breach reduction benefits” between 3A and 3G/TFSP is: \$140M

Increase in “non-structural benefits” between 3A and 3G/TFSP is: \$110M

3G/TFSP relies more upon N-S, and is also significantly more expensive than 3A, \$105M more

FIMP Damage Contributions by Alternatives



FIMP Cost Overview by Plan Feature

*** Please note costs are presently being updated to account for changed conditions, and current price levels**

*** Costs below reflect those contained in the May 2009 Draft Report**

➤ Plan 3A

Beach fill = \$160,000,000

Building Retrofits = \$407,000,000

Road Raising = \$14,900,000

Groin Modification = \$10,000,000

Inlet Management (additional cost of bypassing)

Shinnecock Inlet = \$756,000 per cycle

Moriches Inlet = \$600,000 per cycle

Fire Island Inlet = \$4,100,000 per cycle

Breach Response (\$6-\$12M per closure)

Restoration Alternatives = up to \$60,000,000

➤ Plan TFSP

Beach fill = \$140,000,000

Building Retrofits = \$550,000,000

Road Raising = \$14,900,000

Groin Modification = \$10,000,000

Inlet Management (additional cost of bypassing)

Shinnecock Inlet = \$756,000 per cycle

Moriches Inlet = \$600,000 per cycle

Fire Island Inlet = \$4,100,000 per cycle

Breach Response (\$6-\$12M per closure)

Restoration Alternatives = up to \$60,000,000

ATTACHMENT #5

REFORMULATION/PLANNING PHASE:

This first phase is now being undertaken by the FIMP Study Team, and will identify building retrofit plans for alternative levels of protection, using input from the municipalities. Next, the benefits, costs, and impacts of the different plans will be evaluated to determine which measures are best suited for the different portions of the study area. Based upon these results, the Reformulation Study will recommend plans for Congressional authorization and funding.



DESIGN PHASE

If Congress authorizes a plan that includes non-structural measures, the Corps then coordinates with participating homeowners to discuss and select retrofit options. After considering homeowner preferences, the Corps prepares design alternatives and evaluates the cost-effectiveness of each option. The Corps would then meet with homeowners to refine the details of the plan. After the final alternative is selected, final cost estimates are developed. Please note that all retrofit work will be done in compliance with FEMA/National Flood Insurance Program (NFIP) regulations, and may provide some reduction in flood insurance premiums.

IMPLEMENTATION PHASE

At the start of this phase, individual municipalities enter into Project Cooperation Agreements with New York State and the Corps, and sponsor funding is obtained. Real Estate Agreements are then executed with participating homeowners. (Participation in the program is strictly voluntary, and at the discretion of the individual homeowner.) Next, each homeowner issues a Corps-provided RFP and guide specifications to contractors, and evaluates submitted bids (designs, cost estimates, and qualifications). Based upon this evaluation, the homeowner decides which firm they would like to hire to retrofit their home.

Nationally, non-structural projects typically have a 65/35 federal/non-federal cost-sharing arrangement. The State of New York as non-federal sponsor would pay between 50% and 70% of the non-federal share, while the remainder would be borne by local municipalities, who can in turn pass the cost onto participating homeowners. A homeowner would be responsible for up to 50% of the 25% non-federal share, or 12.5% of the total project cost. Temporary relocation during construction would be included in the cost-sharing arrangement as a project component.

Each participating homeowner is then required to submit a proposal to the Corps, stating their selection. Upon approval, the Corps meets with the homeowner and their selected contractor to sign a Contractor/Homeowner Agreement (CHA).

Construction activities then begin. The Corps will periodically provide construction inspectors as necessary to review the work. The homeowner is responsible for ensuring that their selected contractor complies with the CHA, and adheres to the approved scope of work and required safety measures.

In the event of unforeseen conditions requiring changes to selected project plans, an appeals process would be established whereby homeowners can submit requests for change orders. The Corps deems the construction phase complete upon a Final Inspection of the building.

MONITORING PHASE

Upon completion of the construction phase, the homeowner is responsible for adhering to the requirements set forth in the Real Estate Agreement regarding acceptable uses. Periodic inspections to ensure continued compliance are conducted by State, County, or local officials.



Above: Residential structure elevation project underway in the Village of Freeport

Some **key points** to keep in mind during project implementation:

- Local height restrictions may be exceeded by elevated buildings, requiring the issuance of variances.
- Legislation in your municipality may require that homes be reassessed after elevation (*in Freeport, this requirement was waived for participating homeowners*).
- Traffic slowdowns during construction due to driver curiosity are common.
- Your local utility company likely has height restrictions for electrical panels, meters, etc. This equipment may need to be placed at acceptable heights after the building is elevated.
- During the winter months, ensure that contractors insulate pipes to prevent freezing.
- For small lots with limited workspace, helical piles are a space-saving alternative for building elevation, if substantial wave action is not anticipated.

D. Consideration of the life cycle management of these plans.

Alternative Plans 3A and 3G, were developed with a 50-year project life, and 50 years of renourishment. These plans do not meet the Vision objectives that “the plan addresses long-term demands for public resources”. These plans do not include provisions that would change the need for continued renourishment within the project life, or alter the conditions so that a different solution could be expected following the 50-year project life.

In order to achieve a reduction in the long-term commitment for renourishment, alternatives would need to be implemented that would reduce the infrastructure that is at risk, or remove infrastructure to allow for a more efficient use of resources. The integration of land and development management regulations identifies improvements in the application of land use regulations, acquisition planning, and post-storm response planning that could help to reduce the infrastructure at risk along the shorefront.

With this as a component of the overall plan, there are several approaches which could be undertaken in the life-cycle management of the project to achieve this. The options that have been identified include:

1 – A scheduled reduction in the scale of protection for the beachfill in a timeframe that coincides with the acquisition planning. Under this scenario a beachfill plan would be maintained for a shorter period of time, over which purchase of property would be offered to shorefront structures at risk. After this period of time, the scale of protection would be reduced, thus reducing the commitment of resources for continued renourishment. The benefit of this approach is that the reduction in protection is not dependent upon the acquisition occurring.

2 – A scheduled relocation of the proposed line of protection that coincides with the acquisition planning. Under this scenario, the beachfill plan would be linked with the proposed acquisition plan. After a period of time, the footprint of the project would be maintained in a more landward location on a scheduled timeframe. The difficulty with this initiative is that the movement of the dune on a prescribed timeframe would require guaranteed acquisition, and could not be guaranteed with a willing-seller program.

3 – Adaptive Management. Under this scenario, the beachfill plan and the acquisition plan could proceed independently. On a periodic basis, coinciding with the scheduled renourishment, the constructed project would be revisited to identify if opportunities exist for adjustment of the maintained profile based upon the relative success in implementing the acquisition plan.

Under any of these scenarios, it is important to 1) identify the time scale that would be necessary for the implementation of alternatives, and 2) identifying the effect that these changes would have on project economics.

It is recognized that the acquisition of shorefront property through a willing-seller program is not an instantaneous action, particularly with consideration for acquisition strategies that could allow for a homeowner to sell their property but be allowed to continuously use the property.



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

Bernadette Castro
Commissioner

April 5, 1999

Frank Santomauro
Chief, Planning Division
Department of the Army
New York District, Corp of Engineers
Jacob K. Javits Federal Building
New York, NY 10278-0090

Dear Mr. Santomauro:

RE: CORPS
Storm Damage Protection
Islip/Brookhaven, Suffolk County
96PR1724

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We are reviewing the recent submission in accordance with Section 106 of the National Historic Preservation Act of 1966.

We concur with the survey plan and look forward to reviewing the resulting report.

If you have any questions, feel free to contact Ellen Cesarski at (518) 237-8643 ext. 281. Please be sure to refer to the SHPO Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont
Director, Historic Preservation
Field Services Bureau

RLP:bsd



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

December 20, 1999

REPLY TO
ATTENTION OF

Environmental Analysis Branch
Environmental Assessment Section

Cynthia Blakemore
Historic Preservation Program Analyst
Historic Preservation Field Services Bureau
New York State Office of Parks, Recreation and
Historic Preservation
Peebles Island
P.O. Box 189
Waterford, New York 12188-0189

RE: CORPS
Storm Damage Protection/Fire Island Inlet
Moriches Inlet
Islip/Brookhaven, Suffolk County
96 PR1724

Dear Ms. Blakemore,

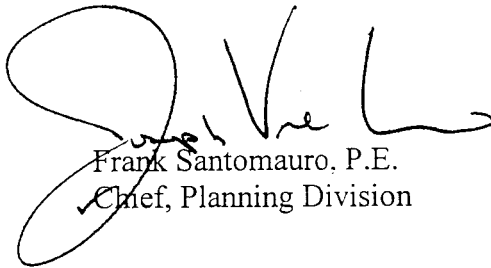
As you are aware the U.S. Army Corps of Engineers, New York District (New York District), is currently undertaking a number of studies to identify potentially significant cultural resources within the above referenced project area to determine if the proposed project would have an effect on any identified resources. As part of these studies, the New York District has conducted a remote sensing survey of the near shore sand placement area. Enclosed is a copy of the draft report entitled "Remote Sensing Survey, Tidal Zone and Near Shore Project Area, Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Fire Island, Suffolk County, New York, Interim Project" (Enclosure 1).

The survey consisted of a near-shore survey utilizing a side scan sonar and magnetometer and a low-water survey using a magnetometer to identify targets and anomalies that may represent potentially significant submerged cultural resources. The total survey effort identified 78 anomalies within the entire project area. The analysis of the data suggests that 52 anomalies are non-significant and require no further work. The remaining 26 anomalies fit the criteria for potentially significant submerged cultural resources. Of these anomalies, four have a side scan signature associated with a magnetic anomaly indicating a portion of the target lies above the sea bed. It is not anticipated that covering the potentially significant resources with sand will constitute an adverse effect. Potentially harmful activities associated with beach fill operations, such as anchoring, anchor dragging or dredging, will not occur in locations where potentially significant resources have been identified and no further work is recommended. If, however, project

plans change to include any activities that may disturb these resources, then additional work, including underwater investigations, may be required.

Please review and provide comments on the enclosed draft report in accordance with Section 106 of the National Historic Preservation Act and 36 CFR 800.4. Please note this report contains sensitive information regarding the location of potentially significant cultural resources that should not be released to the public. Two versions of the final remote sensing report, one with locational data and one without, will be provided to your office once all comments are received and incorporated into the report. If you have any questions or require additional information, please call Nancy Brighton, Project Archaeologist, at (212) 264-2198. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Santomauro". The signature is stylized with large loops and a long horizontal stroke at the end.

Frank Santomauro, P.E.
Chief, Planning Division

Enclosure

cf. Mark Peckham, New York State Office of Parks, Recreation and Historic Preservation
Larry Murphy, Submerged Cultural Resources Unit, National Park Service
Steve Pendry, Northeast, Cultural Resources Center, National Park Service
Constantine Dillon, Fire Island National Seashore, National Park Service



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

December 20, 1999

REPLY TO
ATTENTION OF

Environmental Analysis Branch
Environmental Assessment Section

Constantine J. Dillon
Superintendent
Fire Island National Seashore
National Park Service
120 Laurel Street
Patchogue, New York 11772-3596

RE: Remote Sensing Survey
Tidal Zone and Near Shore Area
Fire Island, Suffolk County
New York

Dear Superintendent Dillon,

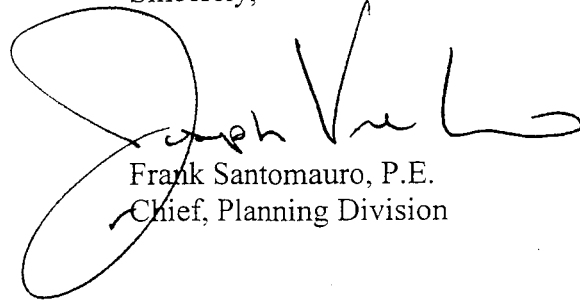
As you are aware the U.S. Army Corps of Engineers, New York District (New York District) has recently completed a remote sensing survey along twelve miles of the Fire Island coastline, including a portion of the Fire Island National Seashore. The remote sensing survey consisted of a survey of the near shore area using a side scan sonar and magnetometer and a low water survey using a magnetometer. Enclosed is a copy of the report entitled "Remote Sensing Survey, Tidal Zone and Near Shore Project Area, Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Fire Island, Suffolk County, New York, Interim Project" (Enclosure 1). The comments assembled by my staff are provided for your review (Enclosure 2).

The total survey effort identified 78 anomalies within the entire project area. The analysis of the data suggested that 52 anomalies are non-significant and require no further work. The remaining 26 anomalies fit the criteria for potentially significant submerged cultural resources. Of these anomalies, four have a side scan signature associated with a magnetic anomaly indicating a portion of the target lies above the sea bed. It is not anticipated that covering the potentially significant resources with sand will constitute an adverse effect. Potentially harmful activities associated with beach fill operations, such as anchoring, anchor dragging or dredging, will not occur in locations where potentially significant resources have been identified and no further work is recommended. If, however, project plans change to include any activities that may disturb these resources, then additional work, such as an underwater investigation, may be required.

Please review and provide comments on the enclosed report by January 31, 2000. Please note this report contains sensitive information regarding the location of potentially significant cultural resources, which should not be released to the public. Two versions of the final remote sensing report, one with locational data, and one without, will be

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Frank Santomauro, P.E.
Chief, Planning Division

Enclosures

- cf. Larry Murphy, Submerged Cultural Resources Unit, National Park Service
Steve Pendry, Northeast Cultural Resources Center, National Park Service
Mark Peckham, New York State Office of Parks, Recreation and Historic
Preservation
Cynthia Blakemore, New York State Office of Parks, Recreation and Historic
Preservation



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

December 20, 1999

REPLY TO
ATTENTION OF

Environmental Analysis Branch
Environmental Assessment Section

Larry Murphy
Submerged Cultural Resources Unit
National Park Service
P.O. Box 728
Santa Fe, New Mexico 87504-0728

RE: Remote Sensing Survey
Tidal Zone and Near Shore Area
Fire Island, Suffolk County
New York

Dear Mr. Murphy,

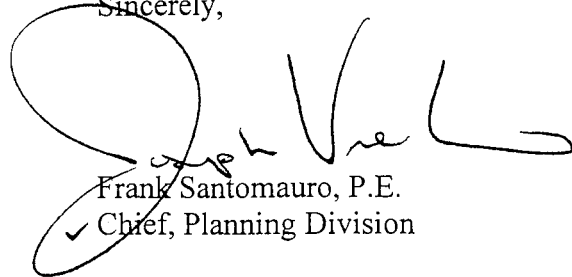
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Please review the enclosed draft report and provide comments to this office by January 31, 2000. Please note this report contains sensitive information regarding the location of potentially significant cultural resources, which should not be released to the public. Two versions of the final remote sensing report, one with locational data and one

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A handwritten signature in black ink, appearing to read "Frank Santomauro". The signature is fluid and cursive, with a large initial "F" and a long, sweeping tail.

Frank Santomauro, P.E.
✓ Chief, Planning Division

Enclosures

- cf. Mark Peckham, New York State Office of Parks, Recreation and Historic Preservation
Cynthia Blakemore, New York State Office of Parks, Recreation and Historic Preservation
Steve Pendry, Northeast Cultural Resources Center, National Park Service
Constantine Dillon, Fire Island National Seashore, National Park Service



**DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090**

December 20, 1999

REPLY TO
ATTENTION OF

Environmental Analysis Branch
Environmental Assessment Section

Steve Pendry
Archaeology Branch
Northeast Cultural Resources Center
National Park Service
400 Foot of John Street
Lowell, Massachusetts 01852

RE: Remote Sensing Survey
Tidal Zone and Near Shore Area
Fire Island, Suffolk County
New York

Dear Mr. Pendry,

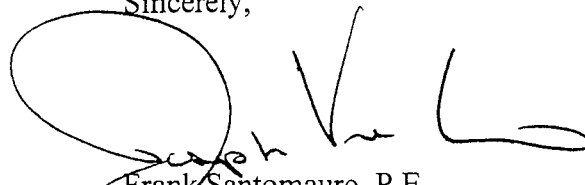
As you are aware the U.S. Army Corps of Engineers, New York District (New York District) has recently completed a remote sensing survey along twelve miles of the Fire Island coastline, including a portion of the Fire Island National Seashore. The remote sensing survey consisted of a survey of the near shore area using a side scan sonar and magnetometer and a low water survey using a magnetometer. Enclosed is a copy of the report entitled "Remote Sensing Survey, Tidal Zone and Near Shore Project Area, Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Fire Island, Suffolk County, New York, Interim Project" (Enclosure 1). The comments on the draft report assembled by my staff are provided for your review (Enclosure 2).

The total survey effort identified 78 anomalies within the entire project area. The analysis of the data suggested that 52 anomalies are non-significant and require no further work. The remaining 26 anomalies fit the criteria for potentially significant submerged cultural resources. Of these anomalies, four have a side scan signature associated with a magnetic anomaly indicating a portion of the target lies above the sea bed. It is not anticipated that covering the potentially significant resources with sand will constitute an adverse effect. Potentially harmful activities associated with beach fill operations, such as anchoring, anchor dragging or dredging, will not occur in locations where potentially significant resources have been identified and no further work is recommended. If, however, project plans change to include any activities that may disturb these resources, then additional work, such as underwater investigations, may be required.

Please review the enclosed draft report and provide comments to this office by January 31, 2000. Please note this report contains sensitive information regarding the location of potentially significant cultural resources, which should not be released to the public. Two versions of the final remote sensing report, one with locational data, and one

without, will be provided to your office once all comments are received and incorporated into the report. If you have any questions or require additional information, please call Nancy Brighton, Project Archaeologist, at (212) 264-2198. Thank you for your assistance.

Sincerely,



Frank Santomauro, P.E.
✓ Chief, Planning Division

Enclosures

- cf. Mark Peckham, New York State Office of Parks, Recreation and Historic Preservation
Cynthia Blakemore, New York State Office of Parks, Recreation and Historic Preservation
Larry Murphy, Submerged Cultural Resources Unit, National Park Service
Constantine Dillon, Fire Island National Seashore, National Park Service



Bernadette Castro
Commissioner

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

March 23, 2000

Frank Santomauro, P.E.
Chief, Planning Division
U.S. Army Corps of Engineers
New York District
Jacob K. Javits Federal Building
New York, New York 10278-0090

Dear Mr. Santomauro:

Re: CORPS
Storm Damage Protection/Fire Island
Inlet-Moriches Inlet
Brookhaven/Islip, Suffolk County
96PR1724

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project. Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

The SHPO has reviewed the Remote Sensing Survey prepared for the project. While we do not have concerns with the filling over the anomalies which are entirely beneath the sea bed, we are concerned with placing fill on the four having a side scan signature. We recommend diver verification of the four anomalies (#2, 13, 63, and 78) so we can determine whether filling is appropriate for these potentially significant resources.

If you have any questions, please contact Cynthia Blakemore at (518) 237-8643, extension 3288.

Sincerely,

Ruth L. Pierpont
Director

RLP:bsd



United States Department of the Interior

NATIONAL PARK SERVICE
Fire Island National Seashore
120 Laurel Street
Patchogue, New York 11772

IN REPLY REFER TO:

February 10, 2000

L7617 (FIIS)

Mr. Frank Santomauro
Chief, Planning Division
Department of the Army
New York District, Corps of Engineers
Jacob K. Javits Federal Building
New York, NY 10278-0090

Dear Mr. Santomauro:

Thank you for the opportunity to review the U.S. Army Corps of Engineers' draft report, Remote-Sensing Survey, Tidal Zone and Near-Shore Project Area, Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Fire Island, Suffolk County, New York Interim Project. We found the study to be adequate but had a number of concerns that are outlined below.

- #1 The remote sensing study is adequate, but the model used, 50 gammas in an area of 80 feet (Pearson 1991), is an untested model. One effect of this is that anomalies that do not appear on more than one lane have been eliminated. Please justify the use of this model. *How can we better justify?*
- #2 Site formation processes have been ignored in the remote sensing survey. Pieces of wrecks, such as hull fragments, are not captured by the survey methods. While in many cases these may not be National Register eligible, but, those located within NPS boundaries may be significant to Fire Island National Seashore (FIIS). This needs to be clarified in the report.
- #3 Of the four anomalies congruent with sidescan sonar targets and tentatively identified as shipwrecks, those located within NPS boundaries should be evaluated by a diver for significance. We disagree that burial under sand constitutes

Controlled burial is done

a no-adverse effect. Rather, the effect of burial is presently unknown and the response of submerged organic structures to compaction under sand requires further study. Burial also impedes access to and identification of these potentially significant anomalies. An effort should be made to identify them before they are either buried or impacted by dredging, anchoring, or other beach fill activities.

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8

- 4 The report should include a section addressing "accidental discoveries" and the appropriate protocol.
- 5 Several years ago, FIIS' dive team used an underwater video to document remnants of a wooden shipwreck in the surf zone in the vicinity of Watch Hill. The NPS regional archeologist also documented this shipwreck, which is buried in the beach and dune but extends south into the ocean. This documentation may be difficult to locate at the present time, but should be part of the survey report. If there is an interest in pursuing this further, please contact FIIS Environmental Compliance Specialist Danette Woo at (631) 289-1711.

6 After a major northeaster (c. 1988?) a wooden copper plated hull was exposed on the beach west of Watch Hill. Eventually the hull was buried again by natural dynamics. The park has photo-documentation of the hull in its archives. Shouldn't this information be part of the report? For more information, please contact FIIS Curator Steve Czarniecki at (631) 395-9693.

- 7 This draft report deals entirely with shipwrecks and refers to the McCormick study on page 12 paragraph 2 with regards to archeological expectations. Nonetheless, page 64 paragraph 2 of the same study also states that the shoreline of Fire Island extended 100 miles SE of present shoreline 18,000 years ago. Therefore, there continues to be a possibility of "resources" other than cultural that could be transported via sand transfer to the beach or disturbed by other support activities taking place offshore. These issues should be documented in the report.

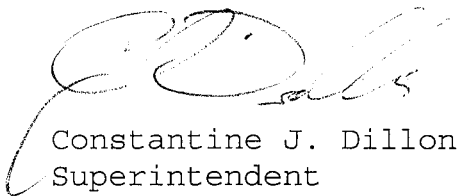
- 8 On page 39, a no-work zone is designated from Sunken Forest to Cherry Grove. The only NPS restriction was the beach area in front of Sailors Haven. This was so designated for reasons of endangered species habitat protection. This should not have precluded use of other survey techniques to survey this small area of beach. And should not have precluded other beach

areas to be surveyed. It is not clear to us why this stretch was omitted from the survey.

- Ocean Beach is not mapped consistently with the other communities, as the maps do not reflect the houses at Ocean Beach even though anomalies 31 and 32 indicate the Ocean Beach groins.

If you have any questions, please feel free to contact Danette Woo, Environmental Compliance Specialist at (631) 289-1711 or danette_woo@nps.gov.

Sincerely,



Constantine J. Dillon
Superintendent



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

March 17, 2003

Chris Ricciardi
U.S. Army Corps of Engineers
Planning Division
26 Federal Plaza
21st Floor
New York, New York 10278

Re: FIMP Reformulation Project

Chris,

I have just a few thoughts on the scope of the survey:

Contexts:

I think it should be emphasized to the bidders that sufficient research should be done prior to field work to develop the contexts needed for the evaluation of properties and, in particular, historic districts. The development of the south shore took several directions in several waves, such as initial settlement, agriculture and fisheries, venue for wealthy New Yorkers to establish their country estates, expansion of the railroads, summering by the middle class – this especially in the Hamptons in the late 19th century when many private residences were converted to boarding houses to cater to the summer folk.

State-Wide Survey

As stated in the NHPA, Sec. 101:

(b)(3) It shall be the responsibility of the State Historic Preservation Officer to administer the State Historic Preservation Program and to —

(A) in cooperation with Federal and State agencies, local governments, and private organizations and individuals, direct and conduct a comprehensive statewide survey of historic properties and maintain inventories of such properties;

I guess, then, that it behooves us to find a way to make the survey product something that we can use to enhance our state-wide survey. Much of the FIMP area was surveyed in the late 1970s and early 1980s, but the inventory forms generated are out of date. The surveys were also not as comprehensive as hoped; those doing the field work tended to ignore newer structures in favor of 18th & 19th century buildings that appeared to their eyes as "historic." The surveyor should contact our office regarding prior surveys and evaluation, but many inventoried buildings were not evaluated at the time of survey and will likely have been altered.

Let's keep thinking about a format that can be used by USCOE & our office. The Town of Islip has borrowed all our inventory forms so that they can scan them for their own use. They will be providing us with copies of the forms as .tif files with a resolution of 150 v. the 300 you specify.

Scope

...Both time & space. Since the project was authorized over 40 years ago, I think we can assume at least 10 years to completion of the "non-structural" solution. In this case the 50 year guideline for NRHP eligibility should be liberalized; perhaps structures constructed prior to 1963 should be evaluated. The description of the project area as just south of the Montauk Highway would seem larger than needed, particularly in the Mastic beach area. Will the 10 year flood plain maps be provided for bidding purposes ?

The Draft Scope/RFP notes that the survey will be of approximately 1600 structures. This seems low. Is this the total number in the survey area or only those that may be NRHP eligible by being 50 (40?) years old?

Misc.

OPRHP should probably SHPO, given that this is a federal undertaking.

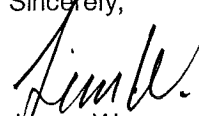
I'm sure your doing this already, but just to make sure...the project should be coordinated with the NYS Department of State as well as DEC.

Steve Resler
New York State Department of State
Division of Coastal Resources
41 State Street, Albany, NY 12231-0001
Phone: (518) 473-2470; Fax: (518) 473-2464
E-mail: sresler@dos.state.ny.us

We have a new database that is in most ways an improvement over the old except in printing reports from our survey database. This needs more programming time which, at the moment, is an expense we would be able to fund. We can generate tables of listed properties and eligible properties, but they would be in HTML format with a rather amateurish appearance. I'm not even that certain all data was "migrated" successfully from the old system to the new.

Keep me posted on your thoughts regarding format, scope & methodology. Call me at (518) 237-8643, x3283 if useful, or james.warren@oprhp.state.ny.us.

Sincerely,



James Warren
W.P. Program Analyst



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

15 June 2003

Environmental Analysis Branch

Re: Cultural Resources Technical Management Group meeting for the US Army Corps of Engineers – Fire Island to Montauk Point Storm Damage Reduction Project

The United States Army Corps of Engineers, New York District, (Corps) is currently undertaking a Reformulation Study of the Fire Island to Montauk Point (FIMP) area. As part of this study, an Environmental Impact Statement (EIS) is being prepared. Not only focusing on the natural environmental, the EIS will take into consideration cultural resource issues such as, but not limited to, archaeological remains both on land and under water, the landscape and how it has changed over time and the current built environment (i.e. standing structures). The Corps invites you, and other members of your organization with expertise in these areas to attend and participate in this data gathering process.

Aside from providing those in attendance with an update on the FIMP Project, the main goal will be to devise a plan of action that will allow for the identification and data collection of the various standing structures and landscapes within the project area. A sampling of standing structures/landscapes within the project area is beginning this summer. As part of this inventory, the Corps will be looking to identify structures that are currently located on the National Register of Historic Places, State and local landmarks, historic districts, as well as to identify structures, districts and/or landscapes that may be eligible for the National Register, State or local landmarks. This is a daunting task that is going to require the corporation and involvement of many groups.

We have scheduled a workshop meeting for Friday, August 8, 2003 between the hours of 10am and 1pm. Thanks to the generosity of the National Parks Service the meeting will be held at the Fire Island National Seashore Headquarters in Patchogue, New York in the River Room. Directions from Sunrise Highway are:

Sunrise Highway to the Waverly Avenue (South) Exit

Follow the bend to the left – to West Avenue (also called Holbrook at this point)

Go through the first traffic light (Main Street) and then through the second traffic light (the Rail Road tracks) and continue down West Avenue.

Look for the signs that say to the ferry terminal. The Fire Island National Seashore Headquarters is on the right just at the corner of West Avenue and Laurel Street)

Fire Island to Montauk Point Reformulation Study Mailing List – June 2003

Federal/State/Local Officials:

Cynthia Blakemore, Robert Kuhn,
Douglas Mackey, Mark Peckham
New York State Office of Parks, Recreation
and Historic Preservation
Historic Preservation Field Service Bureau
Peebles Island - P.O. Box 189
Waterford, New York 12188-0189
(518) 237-8643

Jim Warren
New York State Office of Parks, Recreation
and Historic Preservation
Historic Preservation Field Service Bureau
Peebles, Island - P.O. Box 189
Waterford, New York 12188-0189
Phone: (518) 237-8643 x 3283

Richard Martin, Director
Division of Cultural and Historic Services
Suffolk County Parks Department
P.O. Box 144
West Sayville, New York 11796
(631) 854-4949

Michael S. Bilecki,
Chief Resource Management
Fire Island National Seashore
Department of the Interior –
National Park Service
120 Laurel Street
Patchogue, New York 11773
(631) 289-4810 (ext. 234)

Richard Stավdal
Fire Island National Seashore
Department of the Interior –
National Park Service
120 Laurel Street
Patchogue, New York 11773
(631) 399-2030

Daniel J. Lenihan
Submerged Cultural Resources Unit
Department of the Interior –
National Park Service
P.O. Box 728
Sante Fe, New Mexico 87504-0728

Steve Pendry, Archaeology Branch
Northeast Cultural Resources Center
Department of the Interior –
National Park Service
400 Foot of John Street
Lowell, Massachusetts 01852

Gary Gentile
Regional Cultural Resource Coordinator
NYS Department of Transportation
State Office Building
250 Veterans Memorial Highway
Hauppauge, NY 11788-5518
(631) 952-6219

Tom Oelerich, Acting Regional Director
NYS Department of Transportation
State Office Building
250 Veterans Memorial Highway
Hauppauge, NY 11788-5518

Jeanmarie Brennan
Town of Islip - Dept. of Planning
655 Main Street
Islip, NY 11751
(631) 224-5450
Fax: (631) 224-5444
Jeanmarie-brennan@hotmail.com

Native American Groups:

Peter E. Smith, Sr., Chairman
Trustees of the Shinnecock Indian Nation
P.O. Box 5006
Southampton, New York 11969-5006

Individuals:

Mr. Bellows, Chairperson
Landmarks and Historic Districts Board
52 Lewis Street
Southampton, New York 11968
(631) 283-2282

David J. Bernstein and Daria Merwin
Long Island Institute of Archaeology
Department of Anthropology
S-549 Social and Behavioral Studies
SUNY-Stony Brook
Stony Brook, New York 11794-4364
(631) 632-7615

Robert Hefner
18 Sag Harbor Road
East Hampton, New York 11937

Lynne C. Maher, President
Long Island Divers Association
P.O. Box 56
Brookhaven, New York 119719-9540
(631) 286-3505
lynmermaid@aol.com

Gary Nilsen, President
Institute for Marine Archaeology
P.O. Box 770
Deer Park, New York 11729

Nancy Solomon, Director
Long Island Traditions
382 Main Street
Port Washington, New York 11050
(516) 767-8803 or (516) 767-8805 (fax)
litrad@i2000.com

Dr. Gaynell Stone
2322 North Wading River Road
Wading River, New York 11792
(631) 929-8725

Dr. John Strong
Suffolk County Archaeological Association
54 Harthorne Road
Southampton, New York 11968
(631) 283-4338 or (631) 287-8203
jstrong1@optonline.net

Museums:

East End Seaport Maritime Museum
P.O. Box 624 – Third Street
Greenport, New York 11944
(631) 477-2100

East Hampton Historical Society Marine
Museum
Bluff Road
East Hampton, New York
(631) 267-6544

Doug Shaw, Administrator
Long Island Maritime Museum
P.O. Box 184
West Sayville, New York 11796
(631) 447-8679

Montauk Point Lighthouse Museum
P.O. Box 943
Montauk, New York 11954
(631) 668-2544

Robert MacKay, Director and Sharla Bolton
Society for the Preservation of
Long Island Antiquities (SPLIA)
161 Main Street - P.O. Box 148
Cold Spring Harbor, New York 11724
(631) 692-4664 (631-692-5265 - fax)

Helen Watkin, Director
South Street Seaport Museum
Long Island Marine Education Center
202 Woodcleft Avenue
Freeport, New York 11520
(516) 771-0399

Elaine Barcel, President
Southold Indian Museum
P.O. Box 268
Southold, New York 11971
(631) 765-5577

Historical Society – Town Historians:

Amagansett Historical Association
Montauk Highway at Windmill Lane
P.O. Box 7077
Amagansett, New York 11930
(631) 267-3020

Alice Zaruka, President
Village of Babylon Historical and
Preservation Society
P.O. Box 484
Babylon, New York 11702
(631) 669-7086

Bay Shore Historical Society
22 Maple Avenue
Bay Shore, New York 11706

Bayport Heritage Association
P.O. Box 4
Bayport, New York 11705
(631) 472-4625

Bellport-Brookhaven Historic Society
12 Bell Street
Bellport, New York 11713
(631) 286-0888

Geoffrey Fleming
Bridgehampton Historical Society
P.O. Box 977
Bridgehampton, New York 11932
(631) 537-1088 or (631) 537-4225 (fax)
bhhs@hamptons.com

David Overton, Office of the Historian
Town of Brookhaven
Brookhaven Town Hall
205 S. Ocean Avenue
Patchogue, New York 11772
(631) 654-7897

East Hampton Historical Society
101 Main Street
East Hampton, New York
(631) 324-6850 or x9885 (fax)

Fire Island Lighthouse Preservation Society
4640 Captree Island
Captree Island, New York 11702
(631) 661-4876

Hampton Bays Historical Society
P.O. Box 588
Hampton Bays, New York 11946-0588
(631) 728-9325

Carl Starace, Community Historian
Town of Islip
214 Tahulah Lane
West Islip, New York 11795
(631) 661-0137

Central Islip Historical Society
490 Irving Street
Central Islip, New York 11795

Thomas Curr, President
East Islip Historical Society
P.O. Box 389
Great River, New York 11739-0389
(631) 581-9085

Al Chiesa
East Islip Historical Society
P.O. Box 389
Great River, New York 11739-0389
(631) 581-9085

Islip Hamlet Historical Society
P.O. Box 601
Islip, New York 11751

Friends for Long Island's Heritage
1864 Muttontown Road
Syosset, New York 11791

Mary and Warren Seeley
Manorville Historical Society
P.O. Box 4
Manorville, New York 11949-0004

Montauk Historical Society
RFD#2 – P.O. Box 112
Montauk, New York 11954

Moriches Bay Historical Society
P.O. Box 31
Center Moriches, New York 11934
(631) 878-1776

Ocean Beach Historical Society
P.O. Box 701
Ocean Beach, New York 11770

Ann Swezey, Village Historian
Greater Patchogue Historical Society
P.O. Box 102
Patchogue, New York 11772

Sag Harbor Historical Society
P.O. Box 1709
Sag Harbor, New York 11963-1709
(631) 725-5092

Nancy Donohue
Sagtikos Manor Historical Society
179 Anchorage Drive
West Islip, New York 11795
(631) 661-8348 or (631) 661-1256 (fax)

Charles Webber, President
Sayville Historical Society
P.O. Box 41
Sayville, New York 11782
(631) 563-0186

Emily Oster, Historian
Town of Southampton
116 Hampton Road
Southampton, New York 11968
(631) 283-1612

Adele Cramer, Curator
Southampton Colonial Society and
Historical Museum
P.O. Box 303
Southampton, New York 11968

Southampton Historical Society
17 Meeting House Lane
Southampton, New York 11968
(631) 283-2494

Southold Historical Society
P.O. Box 1
Southold, New York 11971
(631) 765-5500

Stony Brook Historical Society
P.O. Box 802
Stony Brook, New York 11790

Suffolk County Archaeological Association
P.O. Box Drawer AR
Stony Brook, New York 11790

Bob Muller
United States Lighthouse Society –
Long Island Chapter
P. O. Box 744
Patchogue, New York 11772
(631) 207-4331 or (631) 645-5230 (fax)
BobMuller@LILighthouseSociety.org

Wally Broege, Director
Suffolk County Historical Society
300 West Main Street
Riverhead, New York 11901
(631) 727-2881 or (631) 727-3467 (fax)
histsoc@suffolk.lib.ny.us

Marsha Hamilton
Suffolk County Historical Society
300 West Main Street
Riverhead, New York 11901
(631) 727-2881 or (631) 727-3467 (fax)
histsoc@suffolk.lib.ny.us

Westhampton Beach Historical Society
Mill Road - P.O. Box 686
Westhampton Beach, New York 11978
(631) 288-1139

Fire Island National Seashore Headquarters
River Room
120 Laurel Street
Patchogue, NY 11772
Park Headquarters
Phone: (631) 289-4810
Fax: (631) 289-4898

We hope that you, or a representative of your organization, will be able to attend this working session. Any information that your organization can provide with regard to known or eligible National Register structures, districts or landscapes will be greatly appreciated. Without the help of your organization this project will not work as effectively and efficiently as it should.

It is important to know who will be attending the meeting prior to August 8th. Please, Please RSVP to:

Christopher Ricciardi, Archaeologist
U.S. Army Corps of Engineers - Planning Division
Jacob K. Javits Federal Building
26 Federal Plaza – Room 2131
New York, New York 10278-0090
Phone: (212) 264-0204
Fax: (212) 264-0961
E-mail: christopher.g.ricciardi@usace.army.mil

by phone, fax or e-mail no later than August 1, 2003.

Thank you very much for your consideration and your participation in our meeting as well as your continued interest in the Reformulation Study. Whether you or a representative from your organization can attend or not, we will continue to keep informed as to the progress of the Study.

Sincerely,



Leonard Houston



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

11 July 2003

Environmental Analysis Branch

Dave Spirtes, Superintendent
Fire Island National Seashore
120 Laurel Street
Patchogue, New York 11772

Dear Mr. Spirtes:

On behalf of the U.S. Army Corps of Engineers, New York District, I would like to request that we use the facilities at the Fire Island National Seashore for a meeting with regard to the Fire Island to Montauk Point (FIMP) Project.

As part of the ongoing Environmental Impact Statement (EIS), the Corps is conducting a Cultural Resource – Buildings Survey of the project area. The Project's Archaeologist, Chris Ricciardi, has been working with Michael Bilecki and Richard Stavadal to coordinate on this effort.

Mr. Bilecki suggested that we contact to with regard to using the NPS's facility to hold a meeting relating to this project. The meeting date would be Friday, August 8, 2003 at 10am. The meeting should last till approximately 1pm. Aside from our State partner, the Department of Environmental Conservation, other State, Federal and local agencies and institutions are to be invited. We expect anywhere from 10 to 30 people to attend.

I hope that we can secure your approval for this meeting. Please let us know as soon as possible. If you have any questions with regard to this request please contact Chris Ricciardi at (212) 264-0204.

Thank you very much.

Sincerely,

A handwritten signature in black ink, appearing to read "Leonard Houston".

Leonard Houston

Chief, Environmental Analysis Branch



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
250 VETERANS MEMORIAL HIGHWAY
HAUPPAUGE, N.Y. 11788-5518

SUBIMAL CHAKRABORTI, P.E.
REGIONAL DIRECTOR

JOSEPH H. BOARDMAN
COMMISSIONER

July 30, 2003

Mr. Christopher Ricciardi, Archaeologist
U.S. Army Corps of Engineers - Planning Division
Jacob K. Javits Federal Building
26 Federal Plaza - Room 2131
New York, NY 10278-0090

Dear Mr. Ricciardi:

This letter is in reply to your request that the NYSDOT send a representative from its Long Island (Region 10) office to your planned workshop on August 8, 2003. The subject of the workshop is the "Fire Island to Montauk Point Storm Damage Reduction Project."

Mr. Gary Gentile, Sr. Landscape Architect, will attend this workshop and will be our contact person for items relating to Cultural Resources and Landscape Archeology.

Should you have any questions regarding this matter, please contact Gary at (631) 952-6210.

Very truly yours,

A handwritten signature in black ink, appearing to read "Christopher Cotter".

Christopher Cotter, R.L.A.
Regional Landscape Architect

AMAGANSETT HISTORICAL ASSOCIATION
P.O. BOX 7077, AMAGANSETT, NY 11930 (631) 267-3020

September 13, 2003

Christopher Ricciardi, Archaeologist
U.S. Army Corps of Engineers – Planning Division
Jacob K. Javits Federal Building
26 Federal Plaza – Room 2131
New York, NY 10278-0090

Re.: Reformulation Study – Fire Island to Montauk Point Storm Damage Reduction
Project – Cultural Resource Historic Structure Survey

Dear Mr. Ricciardi:

With reference to the above-captioned study, please see the enclosed maps of two
Historic Districts in Amagansett.

The Main Street Historic District contains three properties already listed on the National
and State Registers of Historic Places. This and the Bluff Road Historic Districts contain
many structures that are eligible for inclusion on these registers. A survey of these
structures, and the preliminary National Register nomination forms, has been prepared by
Robert Hefner, an architectural historian under contract as a consultant to the East
Hampton Town Board.

Additional information about these districts, and the details of the eligible structures
within them, may be obtained from:

Planning Department
Town of East Hampton
300 Pantigo Place
East Hampton, NY 11937.

Please feel free to contact us if we may of further assistance.

Sincerely,



Peter Garnham
President, Board of Trustees

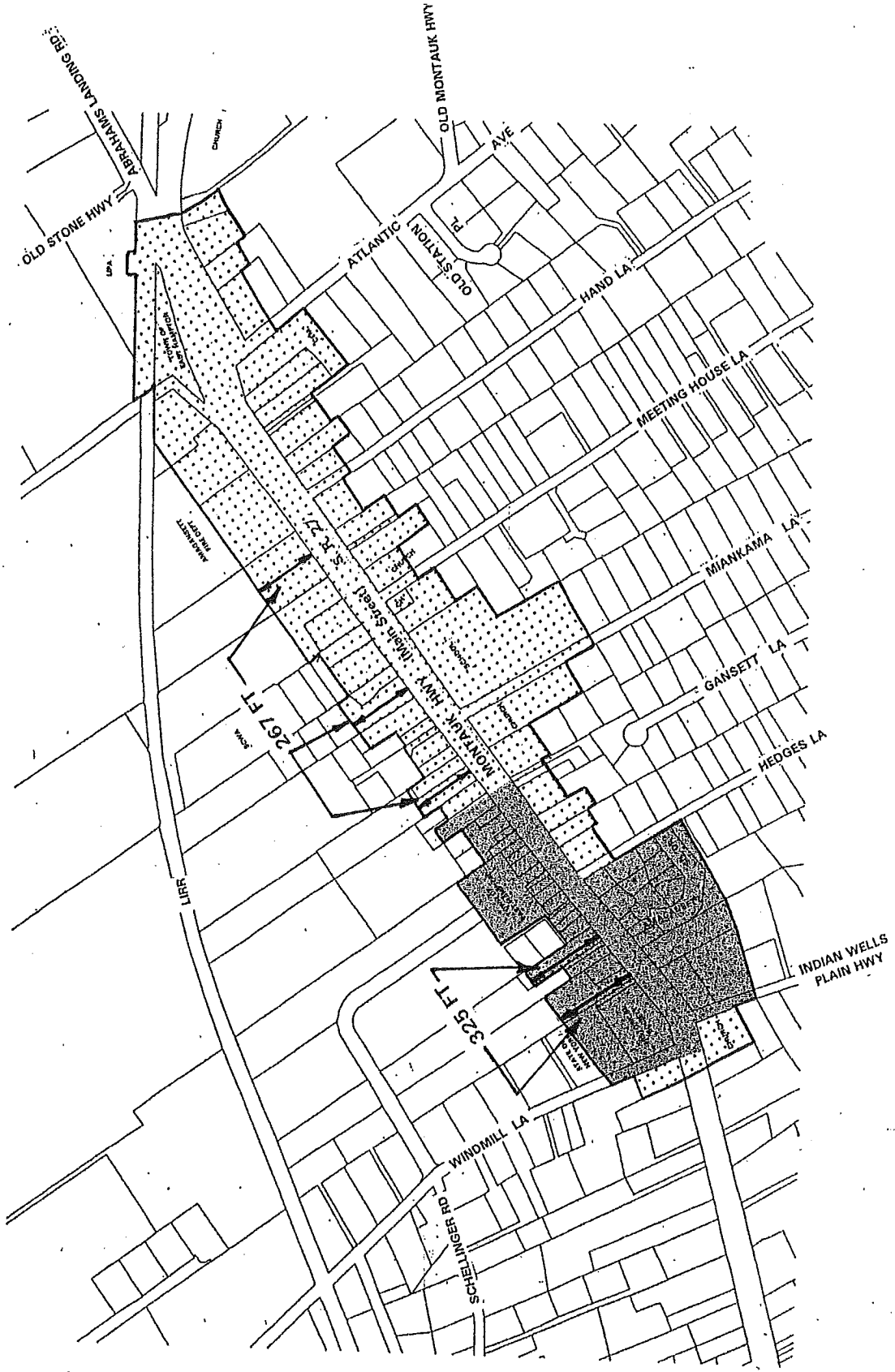
AMAGANSETT HISTORIC DISTRICT

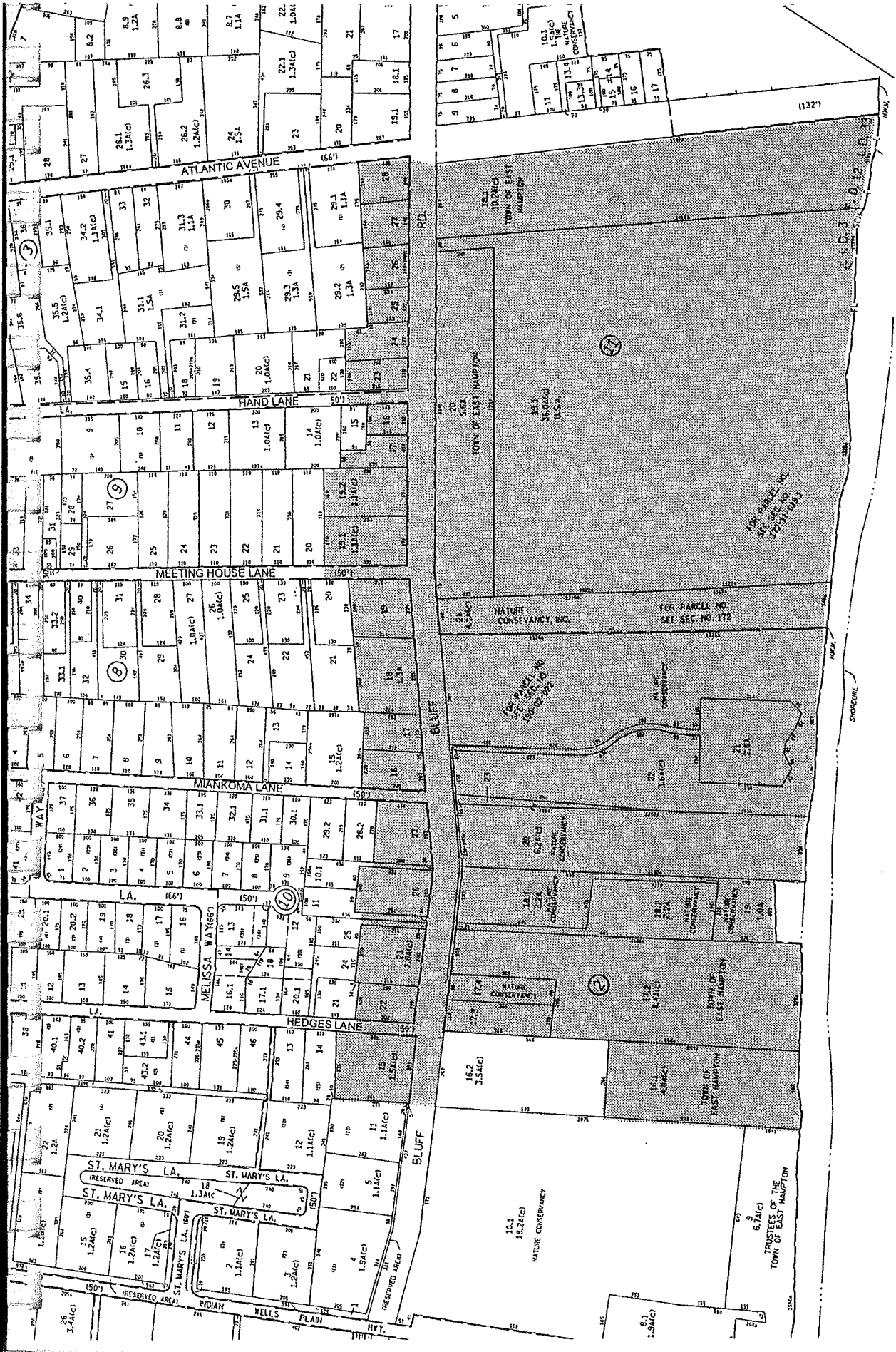
Prepared by
TOWN OF EAST HAMPTON
Planning Department
EAST HAMPTON, NEW YORK

NOT TO SCALE

LEGEND

- Residential District
- Central Business District





BLUFF ROAD HISTORIC DISTRICT

ATLANTIC OCEAN



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

September 24, 2003

Environmental Analysis Branch

Ms. Ruth L. Pierpont, Director –
Bureau of Field Services
NYS Office of Parks, Recreation & Historic Preservation
Peebles Island – P. O. Box 189
Waterford, New York 12188-0189

Re: CORPS
Fire Island to Montauk Point (FIMP) Reformulation Project
Suffolk County, New York

Dear Ms. Pierpont:

The New York District of the United States Army Corps of Engineers (USACE) is undertaking a Reformulation Study of an extended hazard-prone corridor along the south shore of Long Island. The purpose of the ongoing Fire Island to Montauk Point (FIMP) Reformulation Study is to identify, evaluate and recommend long-term solutions for hurricane and storm damage reduction for homes and businesses within the floodplain extending along 83-miles of ocean and bay shorelines from Fire Island Inlet to Montauk Point. The study considers all areas within the maximum estimated limit of flooding, and is located entirely within Suffolk County. The objective of this study is to evaluate and recommend a long-term, comprehensive plan for storm damage reduction, which maintains, preserves or enhances the natural resources. The New York State Department of Environmental Conservation (DEC) is the USACE non-Federal partner.

The USACE has retained URS Corporation to undertake a Cultural Resource Historic Structural Survey of the project area. This historic resource survey, combined with earlier studies, will allow for the identification and evaluation of historic properties, the assessment of effects as related to multiple project alternatives, and the opportunity for ongoing consultation regarding alternatives which avoid, minimize or mitigate adverse effects to historic resources. Due to the large size of the project area and the early nature of project alternative planning, this survey will be part of a phased identification and evaluation, per 36 CFR 800(4)(b)(2).

The information from this historic resource survey will also be useful in the preparation of an Environmental Impact Statement (EIS). As part of this process, the USACE will coordinate review of this project under Section 106 of the National Historic Preservation Act (16USC470) and its implementing regulations 36 CFR Part 800 with the New York State Office of Parks, Recreation & Historic Preservation (NYSOPRHP). Information from the historic resource survey will also be used by Allee, King, Rosen and Fleming (AKRF), a consulting firm, which is assisting the USACE in undertaking the EIS.

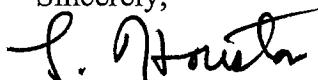
This letter is to inform your agency that URS will be assisting the USACE with this project and in carrying out Section 106 consultation responsibilities.

Please find enclosed a work plan for this project. The work plan provides detailed information regarding the project goals, methodology and approach. We welcome input and comments from the NYSOPRHP regarding this work plan.

Unless otherwise directed, further consultation will be conducted directly with James Warren of your office, the Regional Coordinator for Nassau and Suffolk Counties.

If you have any questions, please contact the Project Archaeologist, Chris Ricciardi, at (212) 264-0204. Thank you for your time and cooperation.

Sincerely,



Leonard Houston

Chief, Environmental Analysis Branch

Enclosure

cc:

James Warren, NYSOPRHP
Steve Tull, URS
Brian Beckenbaugh, URS
Anne Locke, AKRF

Work Plan

Project Scope

URS Group (URS) has been contracted by the United States Army Corp of Engineers (USACE) to conduct a Historic Resource Survey identifying historic properties listed, eligible for, or potentially eligible for listing on the National Register of Historic Places within the area for the Fire Island to Montauk Point (FIMP) Reformulation Project. The project is being conducted in support of a large-scale study of non-structural coastal flood mitigation alternatives (elevation, demolition, acquisition, flood proofing, etc.) across an approximately 240 square-mile project area in Long Island (from Fire Island to Montauk Point.)

URS will undertake a Historic Structures Survey for the areas lying along the south shore of Long Island from Fire Island Inlet to Montauk Point, New York. Given the large project area this project will be part of a phased identification and evaluation, per 36 CFR 800(4)(b)(2). This project will provide a comprehensive view of historic resources within the project area, but will also employ a sampling methodology in which representative resources are documented. This project will also identify areas where further research, evaluation or consultation may be undertaken as particular USACE non-structural projects become better defined. USACE has given a target number of 1600 field forms to be produced.

Project Objectives

The objectives of the project are based on the assumption that there are at least 1600 properties/resources within the area of potential effect which may be fifty years of age or older. With that understanding, the objectives for the Historic Properties Survey of Fire Island to Montauk Point Reformulation Project Area are to:

- Identify above-ground historic resources (inclusive of landscapes, landscape features, structures, sites, districts, and objects) that could be considered eligible for listing on the National Register of Historic Places in accordance with the criteria established in the National Historic Preservation Act of 1966, as amended, sections 60.1-60.4 within the area of potential effects.
- Provide the USACE with a discussion of a sample decision-making process to minimize adverse effects of coastal flooding to historic properties, potential mitigation measures which offset adverse effects to historic properties, and other future project initiatives (including items for future programmatic consultation).

Project Methodology and Approach

I. Initial Coordination

A. Identification of SHPO/THPO

On behalf of USACE, URS will coordinate the Historic Resource Survey in consultation with the State Historic Preservation Office, known as the New York Office of Parks, Recreation and Historic Preservation (OPRHP). URS will consult with OPRHP regarding the work plan and methodology, research design, identification, evaluation and assessment of effects for historic properties within the project area. Although state-recognized tribal groups may have historic ties to the

project area, none has formally designated a Tribal Preservation Officer. Consultation with tribal groups will occur as outlined in 36 CFR 800.2(c)(2).

B. *Consulting Parties.*

USACE and URS have created a preliminary list of groups and individuals who may have historic ties or a specialized knowledge of the project area's historic resources. This list includes members of historical societies, advocacy organizations and local government officials. USACE and URS will refine this list in consultation with OPRHP, have taken initial steps to communicate and consult with these groups, and will continue to communicate with them throughout the Historic Resource Study, as described in 36 CFR 800.3(f).

C. *SHPO Coordination*

URS has made initial informal contact with the OPRHP.

URS, on behalf of USACE, will initiate formal and continue written and informal consultation with OPRHP, as described in 36 CFR 800.3(c)(3).

URS will work closely and consistently with the OPRHP throughout the project. URS will make every effort to make data compatible with that which is housed in the OPRHP's collection. URS, with USACE, will also consult with OPRHP through the review of project deliverables (including the work plan, research design, survey data and conclusions, and report).

D. *Coordination with other reviews*

This Historic Resource Survey will provide information for use in an ongoing separate Environmental Impact Statement (EIS) being conducted in support of the National Environmental Policy Act, as described in 36 CFR 800.3(b).

Although this Historic Resource Survey will demonstrate an appropriate level of involvement by the OPRHP, consulting parties, and the public, it is also assumed that the separate ongoing EIS effort will provide ongoing consultation as well as adequate opportunities for public involvement, as described in 36 CFR 800.2(d)(3).

II. **Area of Potential Effects**

A. The Reformulation Project area is defined by the USACE, is the area falling within the ten year flood plan between Fire Island Inlet and Montauk Point, roughly bordered by the Montauk Highway to the area's north. The specific initial project area, and the focus of the Historic Resource Study, will be within or proximate to the ten-year flood plain.

B. The Area of Potential Effects, as defined in 36 CFR 800.16(d) as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." In consultation with OPRHP, URS will further define the APE to include areas within or proximate to the specific initial project area. The inclusion and level of appropriate documentation for historic districts partially within the APE will be discussed.

III. Research & Historic Context Development

A. *Goals:*

With the goal of aiding research efforts, URS will produce a research design utilizing historic maps, information provided by local historical organizations, and other background research resources which will outline important thematic topics, expected associated property types a preliminary bibliography and significant questions. The research design will be developed in consultation with OPRHP.

The research design will be used as the basis for conducting a detailed research program utilizing primary and secondary information sources. This research will establish the foundation for the development of a historic context.

The historic context include a narrative history of the project area, a detailed analysis of historic and architectural contextual themes associated with the project area, a detailed description of typical property types associated with each contextual theme, and specific evaluation criteria (including character-defining features) for each property type. The historic context will serve as a project tool in the identification and evaluation of historic properties.

B. *Anticipated Topics:*

It is anticipated that, at a minimum, the following themes will be discussed within the research design: farming, maritime industries, duck hunting, Native American populations, extension of railroad services and roadways from New York City and the boroughs, resort development, post WWI and WWII residential and commercial developments, and the advent of storms impacting the project area.

C. *Identifying Previous Research:*

URS will review all information on identified historic properties and information on potentially significant properties that have not yet been officially identified through survey for the purpose of determining the property's eligibility for the Register.

D. *Stakeholder Involvement*

Additionally, through the assistance of the USACE, URS will seek public involvement in identifying properties holding significance for particular communities.

URS will also contact the *Shinnecock* Tribal Council in attempt to gather information allowing for the identification of properties on and off tribal lands that may be of religious and cultural significance to the tribal nation, and potentially are eligible for listing on the Register. URS will work with USACE to identify other social groups with historic ties to the project area.

E. *Level of Research Required to Develop the Historic Contexts of the Area of Potential Effect:*

In accordance with 36 CFR 800.4(b)(1), URS will in good faith carry an appropriate level of investigation to identify historic properties within the area of potential effect including background research, oral history interviews, sample field investigation, and field survey.

The level of research necessary for a survey of this type is limited to the identification and description of historic general trends, groups, and events occurring in the communities within the area of potential effect and how the development of the communities was impacted by these factors. This information will set up a framework for future identification and evaluation efforts for the SHPO and USACE. URS will use the Secretary of Interior's *Standards and Guidelines for Identification of Historic Properties* as a yardstick by which to measure efforts against.

F. *Anticipated Sources to be Utilized:*

- i. Primary sources
 1. Back issues of local Long Island and New York City newspapers and magazines
 2. Family papers and records
 3. Accounts of travelers
 4. Church Histories
 5. Maps-plat, tax, fire, insurance, historic, and land survey
 6. Photographs
- ii. Secondary sources
 1. Historic Preservation Plan formulated and updated by the New York Office of Recreation, Parks, and Historic Preservation
 2. Inventories of previously identified historic properties and archeological sites
 3. Local and regional histories compiled in files, monographs, and pamphlets held in the local historical societies and public libraries
 4. HABS/HAER Reports and the National Register of Historic Places
 5. *The American Guide Series*
 6. Various other available resources produced from other studies and inquiries regarding the history of physical development of Long Island more specifically the southeastern section of the island within the project area

G. *Research Methods*

In researching the historic contexts associated with the area of potential effect, URS will use the following methods:

1. Identify sources and relevant bodies of data in existing information using the bibliographies and citations.
2. Assess the reliability of the information:
 - a. Determine if any potential biases by the author may affect the accuracy and impartiality of their retelling of an event or occurrence
 - b. Identify any major gaps in data
3. Synthesize the information gathered into a narrative with reference to the issues important to the historic contexts identified.
4. Identify those properties emblematic or associated with the appropriate historic context
5. Determine areas within the area of potential effect with a high probability for significant properties associated with the historic contexts utilizing historic maps, atlases, plats, and survey information from other studies

6. Create hypotheses based on preceding research and establish the likely condition and type properties to be investigated
7. Identify the information necessary to be obtained through the survey (allow this to inform the type questions asked on the survey/field form)

H. *Repositories to be Utilized:*

- i. United States Army Corp of Engineers New York District Archives
- ii. New York State Office of Parks, Recreation, and Historic Preservation
- iii. New York State Museum
- iv. Fire Island National Seashore (National Park Service)
- v. Suffolk County Planning Commission
- vi. Suffolk County Historical Society
- vii. Shinnecock Tribal Council
- viii. State University of New York at Stony Brook
- ix. Long Island University
- x. Hofstra University-Long Island Studies
- xi. United State Library of Congress-HABS/HAER Surveys & Map Collections
- xii. Queensboro Public Library
- xiii. New York Public Library
- xiv. Local town historical societies
- xv. Local town public libraries

IV. Field Survey

A. *Strategies for Surveying Project Area*

The project area approximately encompasses 249 square miles. As previously mentioned, clearer and more precise boundaries for the project area will be necessary prior to the initiation of the field survey. URS will divide 1600 field forms across the geographic range prior to beginning the fieldwork, based upon population levels, potential for historic properties, and other information from the historic context. URS will produce a Historic Resource Survey providing baseline locations for concentration of resources within the Area of Potential Effect; this will be the basis of a phased identification and evaluation effort, which will identify areas for future evaluation, and may be used as USACE project alternatives become more specifically defined.

B. *Field Form Production*

URS will produce 1600 field forms for properties which are approximately fifty years of age or older within the area of potential effect. Resources identified through the research design, and/or fieldwork, which may be considered to meet the threshold of "exceptional significance" but which may be less than fifty years of age or older, will be recorded. The fieldwork will identify various classes of properties, important resources, representative resources-those typical within in a large district, and those resources requiring further investigation.

C. *Flexibility of Field Forms*

Field forms will be based on the basic historic resource form (known as the "blue form") used by OPRHP with augmentation to better accommodate the particular needs of this project. URS will produce variations of forms that may be used for broad property categories, such as buildings, landscape features, districts, and

traditional cultural properties. The forms will also contain basic evaluative information for determining a property's integrity.

The field form will relate each surveyed site to a developed context and specific property type; however the field form will not contain individual written building descriptions or statements of significance.

The form will also contain basic construction information for buildings to be used in confirming data needed for USACE non-structural alternatives.

D. *Documentation Standards*

Those properties surveyed will occur typically in areas determined to have a high probability of historic properties. In effort to not miss any historic properties, a cursory windshield investigation will occur in areas thought to have a lesser probability of historic properties. Identifying areas with high probability of historic properties will be accomplished through various means:

- Windshield survey
- Existing survey information
- Historic map research

URS may undertake representative documentation of districts and/or collections of similar resources in which representative character-defining features are documented (including streetscapes) and approximate boundaries are noted. More specific information, such as the documentation of contributing and non-contributing resources, and precise boundary delineation, would not be included as part of this initial Historic Resource Survey, but could be determined at a later date as USACE alternatives become better defined.

As outlined in 36 CFR 800.11(a), URS will ensure that a determination, finding, or agreement under the procedures is supported by sufficient documentation to enable any reviewing parties, including OPHRP, to understand its basis. During a phased identification or evaluation project, the documentation standards regarding description of historic properties may be applied flexibly, as described in this work plan.

E. *Strategy for Surveying Properties Dating Circa 1954*

A resource is typically fifty years of age or older to be considered eligible for listing in the National Register of Historic Places. Some surveyed resources within a larger district may have portions that were constructed after 1954. In addition, field identification of properties built in the early to mid 1950s (as opposed to the mid to late 1950s), is difficult even with a trained eye; for these reasons the survey may include some properties which are slightly less than fifty years old.

However, URS will make reasonable efforts to ensure that those properties surveyed meet this basic age criterion through the use of maps, aerial photography, and other sources that will help determine the stages of post WW II development.

Additionally, URS will set up a general framework for evaluating post-1954 building types in accordance with the National Register Multiple Property Documentation Form and accompanying National Register Bulletin, "Historic Residential Suburbs in the United States 1830-1960."

F. *Survey Methodology*

Sixteen hundred (1600) historic sites will be surveyed from a public right-of-way, at a reconnaissance level. The Survey information is intended to identify properties potentially eligible for listing in the National Register of Historic Places, as part of a phased identification and evaluation.

Although the survey will focus on resources not previously surveyed, some update of previously surveyed sites may be needed if this information is inaccurate or in need of update.

Survey information will be entered directly into a handheld computer that will later be synchronized with a MS Access database. The database will allow querying and GIS mapping, in accordance with section 112 (a)(2) of the *National Historic Preservation Act*.

Geographic information, including UTM numbers, will be identified for each property with a commercial handheld GPS (Global Position System) unit. Property addresses will also be recorded when clearly visible from the right-of-way.

Each of the 1600 sites will be digitally photographed, with a minimum of one photograph per property. The images will have a resolution of no less than 300 dpi and will be in tiff format. Representative photographs will be integrated into the final report, but the entire survey product will also be made available as an appendix.

URS will conduct survey documentation according to the standards defined by the Secretary of Interior in the *Standards and Guidelines for Identification* of historic properties.

V. **Evaluation**

- A. URS will, on behalf of USACE and in consultation with OPRHP, apply the National Register criteria to each surveyed property, as outlined in 36 CFR 800(4)(c). Rather than individualized written determinations of eligibility, URS will rely upon the application of detailed evaluation criteria developed for specific property types (developed in the project historic context) as well as general standards described in National Register Bulletin 15, "How to Apply the National Register Criteria for Evaluation." This approach is consistent with 36 CFR 800.11, in which documentation standards for a phased identification and evaluation project may be applied flexibly, as described in this work plan.
- B. The passage of time, changing perceptions of significance, or incomplete prior evaluations may require URS, on behalf of USACE, to reevaluate properties previously determined eligible or ineligible, in consultation with OPRHP.
- C. URS acknowledges that Native American tribes and certain other traditional social groups may possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them. Traditional Cultural Properties will be identified and evaluated using National Register Bulletin #38 "Guidelines for Evaluating and Documenting Traditional Cultural Properties"

VI. Assessment of Effects

- A. Adverse effects, as described in 36 CFR 800.5(2), are actions which may impair character-defining features which qualify a property for listing in the National Register of Historic Places. In consultation with the OPRHP, URS (on behalf of USACE) will undertake an application of the criteria of adverse effect to those resources that URS (on behalf of USACE and in consultation with OPRHP) has found to be listed in, eligible for or potentially eligible for listing in the National Register of Historic Places.
- B. This is a flexible application of the criteria of adverse effect, in which typical and representative adverse effects are described and evaluated for specific property types; as the exact project alternatives for each historic resource within the project area has not been determined. Different project alternatives, such as retrofitting or relocation, may have different effects upon different property types.

The flexible approach will allow this Historic Resource Survey to be an important decision-making tool later in the USACE planning process. Where alternatives under consideration consist of corridors or large land areas (such as this project), or where access to properties is restricted, URS may use a phased process in applying the criteria of adverse effect consistent with phased identification and evaluation efforts conducted pursuant to Sec. 800.4(b)(2).

VII. Further consultation

- A. URS will discuss, in broad terms, measures allowing USACE to minimize adverse effects to historic properties, eligible, potentially eligible for, or listed in the National Register of Historic Places.

Specifically, this decision-aiding process will allow USACE to consider the application of the least intrusive alternatives for the most historic properties, while achieving cost-effective non-structural project alternatives. This decision-aiding process will be discussed only for broad planning purposes.

- B. URS will also discuss multiple project alternatives mitigating adverse effects to historic properties, eligible, potentially eligible for, or listed in the National Register of Historic Places. Approximate project costs and details will be discussed, although only for broad planning purposes.
- C. URS will also outline broad programmatic interagency procedures scaled for future phases, if any, of the USACE project. These may allow for ongoing, phased identification, evaluation, and decision-making for historic properties. These items will be discussed only for broad planning purposes.

i. These alternatives will be discussed in consultation with OPRHP.

- D. It is anticipated that additional consideration of project alternatives, including avoidance, will be included as part of the separate, ongoing EIS effort. It is anticipated that additional public involvement and consultation with OPRHP and consulting parties will be conducted in support of the EIS.

VIII. Report

An illustrated final survey report will be produced with an introduction stating the purpose and goals of the report and summarizing all pertinent sections of the report.

Section 1, will be concerned with research design and historic context. It will be divided into sub categories: objectives, properties investigated and recorded, and methodology for how data was collected for both the historical context and for the surveys.

Section 2 will be dedicated to the description of the physical setting of the identified significant properties. This section will include photography, maps, site context, and pertinent environmental data.

Section 3, will be a brief summary of the other studies and surveys that have been conducted within the project site or adjacent to it.

Section 4 will be a description of field methods used and the rationale for the methods in gathering data during the survey. The section will explicitly describe how information was gathered and analyzed.

Section 5 will focus on the analysis and synthesis of the information gathered in the background research and surveys. This section will show how the properties surveyed are a part of, and contribute to the Historical Context of the project area. Additionally, this section will identify the types of historic properties found.

Section 6 will contain the conclusions and recommendations ascertained through the survey. The conclusions will focus on what properties were identified as being potentially eligible for the National Register. The section will discuss recommendations for areas and properties requiring additional study.

Section 7 will be citations for references used for the project.

Appendices:

- a. Log of Persons/Institutions contacted as part of the project.
- b. Supporting documentation
- c. Resumes of key personnel
- d. Scope of work

* All reports will be produced in accordance with the format specifications described in the Scope of Work developed by the USACE.

IX. Public Participation

As described in 36 CFR 800(2)(d) the public will be given the opportunity to participate and voice their views in a manner that reflects the nature and complexity of the undertaking.

The public has been asked by USACE for their assistance in identifying historic resources and themes through their local historical societies, town historians, or tribal councils.

Notices and information about the Historic Resource Survey will be established through a media campaign including brief announcements in local newspapers and mailings to local public libraries and historical societies, and summarized information placed on USACE's web site, with an opportunity to contact USACE with input.

It is also assumed that the separate ongoing EIS effort will provide adequate opportunities for public involvement, including formal public comment, as described in 36 CFR 800.2(d)(3).

These efforts for public involvement are in keeping with requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, as well as 36 CFR 800.3 (e) 36 CFR 800.3 (f), and 36 CFR 800.2 (d).

X. Qualifications

As described in 36 CFR 800.2(a)(1), all key URS project staff will meet or exceed relevant Secretary of the Interior's Professional Qualification Standards (36 CFR 61), including Historian, Architectural Historian, Folklorist, Historic Preservationist and/or Cultural Anthropologist, as required by project conditions.

VII. Project Timeline

Attached Excel Spreadsheet



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

September 26, 2003

Environmental Analysis Branch

Re: U.S. Army Corps of Engineers – New York District
Fire Island to Montauk Point (FIMP) Reformulation Project
Phase I Structural Building's Survey – Draft Work Plan

To Whom It May Concern:

The New York District of the United States Army Corps of Engineers (USACE) is undertaking a Reformulation Study of an extended flood hazard-prone corridor along the south shore of Long Island. The purpose of the ongoing Fire Island to Montauk Point (FIMP) Reformulation Study is to identify, evaluate and recommend long-term solutions for storm damage reduction for homes and businesses within the floodplain extending along 83-miles of ocean and bay shorelines from Fire Island Inlet to Montauk Point.

The USACE has retained URS Corporation to undertake a Cultural Resource Historic Structural Survey of the project area. This historic resource survey, combined with earlier studies, will allow for the identification and evaluation of historic properties, the assessment of effects as related to multiple project alternatives, and the opportunity for ongoing consultation regarding alternatives which avoid, minimize or mitigate adverse effects to historic resources.

In August of 2003, you, or representatives from your organization, attended an information meeting held at the National Park Service's headquarters in Patchogue. At that time you expressed interest in reviewing the Scope of Work that was being developed to best undertake this daunting task.

Enclosed, please find enclosed a work plan for this project. The work plan provides detailed information regarding the project goals, methodology and approach. We welcome input and comments from you with regard to this work plan.

If you have any questions, please contact the Project Archaeologist, Chris Ricciardi, at (212) 264-0204. Comments on the Draft Work should also be addressed to Mr. Ricciardi christopher.g.ricciardi@usace.army.mil. Thank you for your time and cooperation.

Sincerely,

A handwritten signature in black ink that reads "L Houston".

Leonard Houston
Chief, Environmental Analysis Branch

Enclosure



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

14 November 2003

Environmental Analysis Branch

Mr. Frank Manhardt, President
Bay Shore Historical Society
40 Hiawatha Drive
Brightwaters, New York 11718

Dear Mr. Manhardt:

On behalf of the U.S. Army Corps of Engineers, New York District (District), I want to thank you, and Ms. Priscilla Hancock, Research Librarian, for the information you provided to the District with regard to historical properties within the area of Bay Shore and Brightwaters.

The data collected from the various historical societies within Fire Island to Montauk Point (FIMP) Storm Damage Reduction Project Reformulation Study area will be used in the Environmental Impact Statement. The information gathered will assist the District in acting as a responsible steward of historic resources within the project area.

If you have any questions, please contact:

Christopher Ricciardi, Archaeologist
U.S. Army Corps of Engineers - Planning Division
Jacob K. Javits Federal Building
26 Federal Plaza - Room 2151
New York, New York 10278-0090
Phone: (212) 264-0204
Fax: (212) 264-0961
E-mail: christopher.g.ricciardi@usace.army.mil

Once again, thank you for assisting the District with the project.

Sincerely,

A handwritten signature in cursive script, appearing to read "Leonard Houston".

Leonard Houston
Chief, Environmental Analysis Branch



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

29 December 2003

Environmental Analysis Branch

Orla M. Smyth
Town of Islip –
Department of Planning and Development
One Manitton Court
Islip, New York 11751

Re: Fire Island to Montauk Point (FIMP) Project – Historical Structures Survey

Dear Ms. Smyth:

On behalf of the U.S. Army Corps of Engineers, New York District (District) I want to thank you for assistance with regard to the District's Fire Island to Montauk Point (FIMP) – Historical Structures Survey Project. The information you provided will greatly help us in our endeavor to identify as many of the historic structures within the project area as possible.

Upon completion and review of the report, the District will be happy to send you a copy of the report for the Town's files.

Once again, thank you for your assistance. If you have any questions, please contact the Project Archaeologist, Chris Ricciardi, at (212) 264-0204 or at christopher.g.ricciardi@usace.army.mil(.

Sincerely,

A handwritten signature in black ink, appearing to read "Josephine Axt".

Josephine Axt, Acting Chief,
Environmental Analysis Branch



REPLY TO
ATTENTION OF

**DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090**

16 June 2004

Environmental Analysis Branch

Re: Cultural Resources Technical Management Group Request for the US Army Corps of Engineers – Fire Island to Montauk Point Storm Damage Reduction Project

The United States Army Corps of Engineers, New York District, (District) is currently undertaking a Reformulation Study of the Fire Island to Montauk Point (FIMP) area. As part of this study, an Environmental Impact Statement (EIS) is being prepared. Not only focusing on the natural environmental, the EIS will take into consideration cultural resource issues such as, but not limited to, archaeological remains both on land and under water, the landscape and how it has changed over time and the current built environment (i.e. standing structures).

Last year you, or representatives from your office, participated in the FIMP Cultural Resources Technical Management Group (CRTMG) to discuss the upcoming Historic Structures Building Survey Project. This fieldwork for this work has been completed and the draft report is in production. We would like to send you a draft of the report for your comments and review.

The document is large, approximately 4500 pages. We will not be sending the entire document but rather the text chapters only. The full report contains a large appendix with the various recording forms, databases and photographs. The entire draft document can be reviewed, if you wish, on CD-ROM. The document comprises at least four CDs. As this is a draft only, no portion of the report can/should be released and/or discussed with the general public. The information in this report will be made public, and available for comment, along with the FIMP DEIS. The New York State Office of Parks, Recreation and Historic Preservation will be concurrently reviewing the complete draft report as well.

If you would rather not participate in the review of this document please let us know. We anticipate that the draft document will be ready for review by the end of July. A meeting of the CRTMG will be scheduled for September to discuss the draft report and to update you on other developments within the Project.

If you have any questions please contact the Project, Archaeologist, Christopher Ricciardi:

Christopher Ricciardi, Ph.D., R.P.A., Project Archaeologist
U.S. Army Corps of Engineers - Planning Division - Environmental Branch
Jacob K. Javits Federal Building
26 Federal Plaza – Room 2151
New York, New York 10278-0090
Phone: (212) 264-0204
Fax: (212) 264-0961
E-mail: christopher.g.ricciardi@usace.army.mil

Thank you very much for your consideration and your participation in the FIMP Reformulation Study.

Sincerely,



for Leonard Houston

cc: FIMP Cultural Resources Technical Management Team

Ron and Marilyn Abrams – Representatives – Shinnecock Native American Nation

Fred Anders – NYS Department of State – Division of Coastal Resources

Amy Balaban – Town of Brookhaven – Division of Environmental Protection

David Bernstein and Daria Merwin – Long Island Institute of Archaeology –
SUNY Stony Brook

Michael Bilecki – National Parks Service

Jeanmarie Brennan – Town Of Islip – Department of Planning

Wally Broege – Suffolk County Historical Society

Mollie Frerichs – Mastic-Shirley Historic Society

Jeffrey Fullmer, NYS Department of State – South Shore Estuary Reserve

Gary Gentile – NYS Department of Transportation – Cultural Resource Coordinator

David Griese – Fire Island Lighthouse Preservation Society

Thomas Isles – Suffolk County Division Office – County Planning

Randy King – Shinnecock Native American Tribal Council

Robert MacKay and Sharla Bolton – Society for the Preservation of
Long Island Antiquities

Richard Martin – Suffolk County Parks Department

Tom Oelerich – NYS Department of Transportation

Bertram Seides – Ketcham Inn Foundation

Orla Smith – Town of Islip Planning Division

Nancy Solomon – Long Island Traditions

George Stafford – NYS Department of State – Division of Coastal Resources

Richard Stavdal – National Parks Service

Dr. Gaynell Stone – Suffolk County Archaeological Association

Paula Valentine – National Parks Service

Margrete Wolfson – Town of Easthampton



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

10 January 2005

Environmental Analysis Branch

Ms. Ruth Pierpont, Director
Historic Preservation Field Service Bureau
NYS Office of Parks, Recreation and Historic Preservation
Peebles Island - P. O. Box 189
Waterford, New York 12188-0189

Re: CORPS
Fire Island to Montauk Point (FIMP) Reformulation Project
Suffolk County, New York

Dear Ms. Pierpont:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with a copy of the draft report, *The Built Environment Along Long Island's South Shore - Historic Structure Study*. This report will be included in the overall Fire Island to Montauk Point (FIMP) Reformulation Study and Environmental Impact Statement that the Corps is currently undertaking.

Ms. Virginia Bartos, and her predecessor, Mr. James Warren, have worked closely with the Corps to insure that the best possible project scope was created for this phase of the project. This report outlines work undertaken to begin the initial process of identifying what, if any structures and historical districts, may be eligible for inclusion on the National Register of Historic Places within the Area of Potential Effect (APE) within the FIMP study area. It is part of a larger phased approach to the overall Section 106 Process.

The Corps concurs with the conclusions and recommendations of the draft report. This baseline study will serve as a guide for helping the Corps, and all involved parties, to devise the best possible protection for historic properties and areas within the APE. The Corps will continue to work closely with your office as well as all interested parties to insure that cultural resource issues are considered as more definitive plans are created for the overall FIMP Project.

In keeping with Section 106 compliance of the Historic Preservation Act of 1966, as amended, the Corps requests a review of the enclosed draft report and your assessment of our determinations by 18 February 2005. We hope that your office will concur with all of the conclusions and determinations made in the report. If you have any questions, please contact the Project Archaeologist, Dr. Christopher Ricciardi, at (212) 264-0204.

Sincerely,

Leonard Houston
Chief, Environmental Analysis Branch

Enclosure



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

January 24, 2005

Dr. Christopher Ricciardi
Project Archaeologist
U.S. Army Corps of Engineers
New York District
Planning Division - Environmental Analysis Branch
26 Federal Plaza - Room 2151
New York, New York 10278-0090

RE: FIMP HSR (03PR04748)

Dear Chris:

First of all, let me thank you for forwarding a copy of the *Fire Island to Montauk Point (FIMP) Reformulation Project* report. The area and resources included within the study area are overwhelming at best and URS should be congratulated for submitting a coherent report. I've shared the report with Field Services Bureau (FSB) archeologist Douglas Mackey and with Mark Peckham, the FSB National Register and Survey Unit Supervisor, who also handles historic maritime properties. This letter includes their responses, along with my observations regarding the historic resource study for Long Island's south shore.

My immediate response to the report is that the State Historic Preservation Office (SHPO) is left out of any decision making process. I suspect (as does my supervisor) that the consultant failed to realize that the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has a larger role than just a caretaker of historic sites. There are two distinct bureaus within OPRHP, one being the FSB that functions as the SHPO and the other being the Bureau of Historic Sites (BHS) that oversees parks and state owned historic resources. Whenever OPRHP is mentioned in the report, it seems that consultation is an option rather than a requirement. In order to comply with Section 106, the SHPO must review any federal undertaking for potential effects to historic resources. In his letter of 17 March 2003, Jim Warren of the FSB anticipated such confusion and recommended that the term SHPO be used rather than OPRHP, advice that was ignored. The role of the SHPO in the decision-making process should be at the beginning of any undertaking and I suggest that a box be added to the chart on page 8.1 between the first and second boxes that states "Consult with SHPO on project scope/potential effects."

In the section on interagency cooperation, the SHPO should again be added to the list of agencies. The consultants mention developing a programmatic agreement to streamline the evaluation process. The FSB has done this in the past with various types of undertakings (wind farms, cell towers, etc.) and it only seems logical to do the same with the FIMP, given the vast area and large number of identified

and potential resources. Mark Peckham indicated that the SHPO is unable to comment on the districts and properties in the report due to the lack of necessary information (photographs, adequate maps, addresses of properties). The property typology in the report fails to indicate which resources if any meet eligibility criteria, making it unusable for our purposes. More definitive data will be required for our review and we can certainly come to some agreement about when and what information is required as FIMP projects are planned by the Army Corps of Engineers. We can certainly streamline the review process and further refine the eligibility criteria. (From some of the sample photos supplied, it is clear that the consultants have a more liberal application of National Register eligibility criteria than the SHPO.) From a cultural resource perspective, the SHPO can certainly help refine or re-define the area of potential effect (APE).

With the general comments out of the way, it is time to turn attention to specifics:

Archeology

Overall, the report has little to say about archeology. URS stated that that this was on purpose, but then included statements about areas where no archeology would be found. FSB archeologist Douglas Mackey offers the following comments:

- The Section describing prehistoric contexts is extremely short and addresses the various stages of prehistoric cultures that have occupied the area and attempts to discuss the different types of sites that may be associated with each. The discussion jumps from a very quick introduction to the Paleo-Indian period and how Long Island may have originally been populated to the major language and cultural groups encountered at the time of European settlement. It almost appears as if the authors believe that the seventeenth century Native American occupants were directly related to the Paleo-Indians that first occupied the area. While this is one theory, there is a 10,000-12,000 year interval of dynamic cultural adaptation and change which is glossed over with no discussion.
- On pages 5.1-5.3 several previous studies are discussed which conclude that large portions of the study area have no potential for archeological resources due to natural and manmade disturbances. Recent studies contradict this information by reporting that a number of sites have been identified in these areas since the initial evaluation was conducted, and it is likely that our knowledge of the geological factors involved has increased since 1980. Therefore it is recommended that this review be updated and that information gathered over the last twenty-five years be included in a re-evaluation of the area's potential.
- On a related topic, although several previous reports have developed models indicating that archaeological sites are unlikely in portions of the project, it is not clear if these models have ever been tested. Given the potential extent of the current project, it will be prudent to test any models proposed to determine if they are valid. Failure to test such far reaching models could potentially result in the failure to identify numerous archaeological sites if the model is wrong.

Maritime Resources

These sections were reviewed by the FSB's Mark Peckham who stated that the report is quite correct in pointing to a large number of marine accidents. Although the report indicated that at least four are

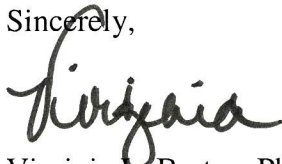
eligible, it is highly likely that the number should be much higher. There is extensive literature on the subject, including a report commissioned by the Corps in 1997 by Greeley, Polhemus & Dolan. In addition to submerged sites, there is the potential of encountering historic shipwrecks and sites buried beneath shifting beaches and dunes.

Property Types (reviewed by Virginia Bartos)

- Many of the URS definitions are too simplistic for Long Island resources. With European occupation from as early as ±1640, there is more variety in the property types than they indicate. For example, in the discussion of late-nineteenth century property types, the report states that the Queen Anne style dominates the landscape. This period had a rich diversity of styles and the photograph identified on page 4.1 is of a Colonial Revival style house, not Queen Anne.
- The report makes generalizations about suburban development based on a Delaware study that begs the question if the same holds true for Long Island.
- The report should give a little more emphasis to commercial property types since the area became part of the late-nineteenth century vacation industry that developed more as part of a trend, and less about tuberculosis that was much more of an issue in Staten Island (Seaview Hospital). With the current return of heritage tourism, it is important to examine the modern vacation industry along with the serious development pressures many of the communities in the study area are facing.
- The list on page 5.3 should be expanded to include a more current list of properties recently added to the National Register of Historic Places. Historic resource studies done by Robert Hefner are missing from the bibliography. These are useful documents that mostly cover the Town of East Hampton and its surroundings.

I presume that this report is part of a proactive approach that the Corps is developing for the Long Island south shore. The real value of the document is that it is a good beginning point for consultants who may be involved with historic resource evaluation as part of future projects since it includes a brief historic overview and a handy encapsulation of the National Register Criteria. The consultants correctly recommend that the Corp work with other agencies, especially when it comes to streamlining the review process. The SHPO looks forward to working with the Corp on this and with any other historic property related issues that are part of the FIMP. If you have any questions about this letter, please contact me at (518) 237-8634 Ext. 3256 or at virginia.bartos@oprhp.state.ny.us.

Sincerely,



Virginia L. Bartos, Ph.D.
Historic Preservation Program Analyst



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

2 June 2005

Environmental Analysis Branch

Ms. Ruth L. Pierpont, Director –
Bureau of Field Services
NYS Office of Parks, Recreation & Historic Preservation
Pebbles Island – P. O. Box 189
Waterford, New York 12188-0189

Re: CORPS
Fire Island to Montauk Point (FIMP) Reformulation Project
Historic Structures Study (03PR04748)
Suffolk County, New York

Dear Ms. Pierpont:

This letter is with regard to comments the U.S. Army Corps of Engineers – New York District (Corps) received from your staff in a letter dated January 25, 2005. The letter, a response to the Draft Report, *The Built Environment Along Long Island's South Shore – Historic Structure Study*, was signed by Ms. Virginia Bartos, and included sections by Mr. Douglas Mackey and Mr. Mark Peckham.

On Friday, May 20, 2005, Dr. Christopher Ricciardi, the Project Archaeologist, met with Mr. Douglas Mackey and Dr. Virginia Bartos to discuss the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP)'s response to the draft report and the letter from earlier this year.

I am pleased to hear that the meeting between our staff members went well, as outlined in the attached Memorandum for the Record (MFR) to this letter. The continued coordination between our two agencies will be key to advancing specifically the Fire Island to Montauk Point (FIMP) Project, as well as all of the Corps ongoing Projects.

As discussed in the MFR, the Corps will work on specific sections of the draft report to include your staff's issues and concerns. Dr. Bartos now has a greater appreciation for all of the coordination between the Corps and Mr. Warren during the two years prior to the draft arriving for review.

If you have any questions please do not hesitate to contact our Project Archaeologist, Dr. Christopher Ricciardi at (917) 790-8630 or christopher.g.ricciardi@usace.army.mil.

Thank you very much for your understanding.

Sincerely,

A handwritten signature in cursive script that reads "L. Houston".

Leonard Houston, Chief
Environmental Analysis Branch

cc: Dr. Virginia Bartos
Mr. Douglas Mackey
Mr. Mark Peckham

MEMORANDUM FOR THE RECORD

SUBJECT: Report on meeting between Virginia Bartos from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and the U.S. Army Corps of Engineers, New York District on Friday, 20 May 2005.

1. On Friday, May 20, 2005, Christopher Ricciardi, Ph.D., Project Archaeologist, met with Virginia Bartos, Ph.D., at the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) to discuss the Fire Island to Montauk Point (FIMP) Reformulation Project and the draft Historic Structures Survey Report, previously submitted to the NYSOPRHP for comments/review.
2. Dr. Ricciardi began by providing Dr. Bartos with information relating to the previous coordination efforts between the two agencies. This information helped Dr. Bartos to gain a better understanding of the level of effort that went into the planning phase of the Historic Structures Survey Project.
3. Dr. Ricciardi provided an overall view of the FIMP Project (see Appendix A for listing of previously submitted/completed reports) as well as the specific Historic Structures Survey. He detailed where the Project is and is going. He provided Dr. Bartos with the five (5) DVDs that constituted the "technical" sections of the Historic Structures Survey Report including the maps, recording forms, images, etc.
4. Dr. Ricciardi then discussed the specifics of the Historic Structure Survey. He outlined how the report was never intended to serve, as a comprehensive Cultural Resource Report and that terrestrial and underwater archaeology were not considered for this phase of the report. Those phases have been and will continue to be undertaken as separate components and reports as the overall FIMP Project progresses.
5. Dr. Ricciardi agreed with Dr. Bartos on some of the specific issues she raised with draft report including that of the references to Hefner's work, the need for a stronger linkage between the Project on Long Island and the references to the author of the Delaware Project and the general historical background to some specific details on structure's title and identification. He would also insure that the previous history, relating to the coordination efforts, be included in the report as well.
6. Dr. Bartos discussed the issue of "50 Years". According to Section 106 Guidelines, any structure that is of 50 years or older must be evaluated. Dr. Bartos, understanding, that a majority of the structures within the project area fall into this category, stated that both organizations should work together to developed guidelines/a specific time period for dealing with structures that are post 1950. Both agencies will work together to develop a Memorandum of Agreement/Understanding (MOA/U) on this specific issue.

7. Both Dr. Ricciardi and Bartos were happy to have clear up the issues raised in Dr. Bartos' letter from the end of January 2005. Both agreed that the report will be updated and completed in the fashion that it was intended as, an introductory study to the overall Project area. Both agreed that the best way to complete this portion of the Section 106 process for the Project will be through a MOA/Us between the two agencies. Perhaps an over-arching MOA/U can be developed to deal with the issue of the date of structures, as referenced in Issue 6, as well as the overall Cultural Resource process for the rest of the project?

8. Dr. Ricciardi thanked Dr. Bartos for her understanding of the FIMP situation as well as her comments. Dr. Bartos was happy to have restored the open lines of communication as well. Both agreed to keep the lines of communication open.

Christopher Ricciardi, Ph.D., Project Archaeologist
Environmental Analysis Branch

Appendix 1: FIMP Cultural Resource Reports

COMPLETED:

Barber, Russell J., Michael E. Roberts and C.C. Lamberg-Karlovsky.

- 1980 A Survey of Archaeological and Historical Resources, Fire Island Beach Erosion and Hurricane Protection Project, Westhampton Beach, New York. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

Greeley-Polhemus Group, Incorporated and Dolan Research, Incorporated.

- 1997a Interim Report #2: Cultural Resource Study - Fire Island to Montauk Point, Suffolk County, New York Reformulation Study: Phase 1 Archaeological Survey. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

- 1997b Remote Sensing Survey: Cultural Resource Study - Fire Island to Montauk Point, Suffolk County, New York Reformulation Study: Reach 2: Interim Project West of Shinnecock Inlet. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

- 1998 Research on Shipwrecks in the Near Shore Area - Fire Island to Montauk Point, Long Island, Suffolk County, New York – Reach 1: Interim Project - Fire Island to Moriches Inlet. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

John Milner and Associates.

- 2000 Cultural Resource Baseline Study - Fire Island Inlet to Montauk Point, Suffolk County, New York - Reformulation Study Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

Panamerican Consultants, Inc.

- 2003 Remote Sensing Survey, Tidal Zone and Near Shore Project Area, Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Fire Island, Suffolk County, New York – Interim Project. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

Reiss, Warren, WCH Industries, Inc. and Boston Affiliates, Inc.

- 1994 Atlantic Coast of Long Island, Fire Island to Montauk Point – Westhampton Beach Interim Protection – Plan Remote Sensing Survey of Two Borrow Areas. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

Tidewater Atlantic Research, Incorporated.

- 2001 Remote Sensing Archaeological Survey of Borrow Areas 2A, 2B, 2C, 3A, 4A, 4B, 5A, 5B, 6A, 7A, and 8A - Atlantic Coast of Long Island, Fire Island Inlet to Moriches Inlet, Suffolk County, New York - Reformulation Study. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

Vetter, John F. and Bert Salwen.

- 1974 Report on an Archaeological Reconnaissance of Fire Island, Suffolk County, New York. Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.

IN PROGRESS:

URS Corporation.

- 2004 The Built Environment along Long Island's South Shore: Historic Resource Study Report on file with the U.S. Army Corps of Engineers - New York District. New York, New York.
DRAFT only.



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

June 28, 2006

Environmental Assessment Branch

Chief Harry Wallace
Poospatuck-Unkechaug Native American Nation
207 Poospatuck Lane
Mastic, New York 11950

Dear Mr. Wallace:

On behalf of the United States Army Corps of Engineers – New York District (Corps) I am writing to you and the Poospatuck-Unkechaug Nation as a prelude to establishing formal contact and an introduction from our Commanding Officer.

The Corps is currently undertaking a major Storm Damage Reduction Project along the southern coast of Long Island, the Fire Island to Montauk Point (FIMP) Reformulation Study. As the project area also includes the lands of your Nation, we would like to formally meet with you and others from the Nation to: a) establish formalized contact b) have a discussion on the FIMP Project and c) to introduce to you what the mission of the Corps is and how we may be able to provide assistance, if you require or wish.

The initial formalized contact would be with our Commanding Officer, followed by future meetings with various technical staff.

I hope that you will consider our request for contact and future meetings. If this is something that interests you, please contact the Project Archaeologist, Dr. Christopher Ricciardi by phone (917-790-8630), email (christopher.g.ricciardi@usace.army.mil) or by mail: U.S. Army Corps of Engineers – New York District – 26 Federal Plaza – Environmental Branch – Room 2151, New York, New York 10278-0090 so that formal arrangements can begin.

Thank you very much for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Houston", is written over the typed name.

Leonard Houston,
Chief, Environmental Branch



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

April 27, 2006

Environmental Assessment Branch

Ruth L. Pierpont, Director
Historic Preservation Field Services Bureau
New York State Office of Parks, Recreation and Historic Preservation
Peebles Island - P.O. Box 189
Waterford, New York 12188-0189

Re: CORPS
Fire Island to Montauk Point (FIMP) Reformulation Project
Historic Structures Study (03PR04748)
Suffolk County, New York

Dear Ms. Pierpont:

The U.S. Army Corps of Engineers, New York District is pleased to furnish you with the final report, *The Built Environment along Long Island's South Shore – Historic Structure Study* and a set of DVDs containing the various data sets referenced in the report.

I would also like to thank Dr. Virginia Bartos for her efforts in working with our Project Archaeologist, Dr. Christopher Ricciardi, throughout this process. Together, they had to wrestle with a complex situation that went beyond the more traditional ways of completing a project such as this.

The Corps is now moving forward with the overall project. As per the recommendations of the coordinated efforts between our offices (see attached MFR from the more recent meeting), we will now begin the process of outlining a Memorandum of Agreement for the next phase of the overall Fire Island to Montauk Point (FIMP) Reformulation Project.

If you have any questions please do not hesitate to contact our Project Archaeologist, Dr. Christopher Ricciardi at (917) 790-8630 or christopher.g.ricciardi@usace.army.mil(.)

Thank you.

Sincerely,

Leonard Houston
Chief, Environmental Analysis Branch

Enclosures