

United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road Cortland, NY 13045

June 18, 2014

Colonel Paul E. Owen
District Engineer, New York District
U.S. Army Corps of Engineers
Jacob K. Javits Federal Bldg.
26 Federal Plaza, Rm. 2131
New York, NY 10278-0090

Dear Colonel Owen:

The U.S. Fish and Wildlife Service (Service) submits the enclosed final document entitled, "Fish and Wildlife Coordination Act 2 (b) Report, Fire Island Inlet to Moriches Inlet Stabilization Project". This document incorporates the U.S. Army Corps of Engineers New York District Planning Division's (Corps) comments, e-mailed on June 12, 2014, on the Service's June 2014 draft document submitted via e-mail on June 4, 2014. A summary of the Service's draft language on pertinent topics, the Corps' comments, and Service responses are listed as follows:

1) Service's draft document: National Environmental Policy Act (NEPA) – The Corps has failed to address the cumulative effects on several Corps activities proposed/authorized within the project area. Additionally, the development of this project disregards a previous President's Council on Environmental Quality (CEQ) finding regarding segmentation of the authorized Fire Island Inlet to Montauk Point Reformulation Project (FIMP).

Corps' Comment: The discussion on NEPA procedures and segmentation should be deleted from the document. The Fire Island Hurricane Sandy Limited Re-Evaluation Report (HSLRR) evaluated a plan that is a one-time action, beachfill recommendation that would not negate consideration of any of the alternatives under consideration for FIMP. The No Action FIMP alternative would be achieved post-stabilization as there is not any renourishment as part of the recommended alternative. The overall FIMP General Re-evaluation Report/Environmental Impact Statement will assess the entire Project Area and all elements of its implementation. As dictated by the NEPA, the Environmental Assessment (EA) that was prepared for the Fire Island Inlet to Moriches Inlet, Fire Island Stabilization Report (FIMI) has concluded with a Finding of No Significant Impact (FONSI) that the selected alternative will not have a significant impact on the human environment.

Service's Response: The Corps has completed its NEPA assessment for this project. As such, this topic has been removed from the Service's final document.

2) Service's draft document: Overall Impact Assessment – The Service states that the Corps' recommended plan will have direct and indirect adverse impacts on fish and wildlife resources and their supporting ecosystems for cumulative impacts extending to 10 years after the nourishment project.

Corps' Comment: To address concerns with impacts related to beach nourishment, the New York District performed an extensive Biological Monitoring Program (BMP) for Atlantic Coast of New Jersey, Sea Bright to Manasquan Inlet, Beach Erosion Project. The BMP was undertaken before, during, and after construction. The program created a final report detailing its findings can be found at http://www.nan.usace.army.mil/Missions/CivilWorks/ProjectsinNewJersey/SandyHooktoBarnegatInlet/BiologicalMonitoringProgram.aspx.

The summary of BMP results are:

- Intertidal benthos similar to other mid-Atlantic sandy beach infauna
- No long term change in sediment texture due to nourishment
- No long-term impacts to intertidal or nearshore fauna and sediments; recovery from short-term impacts in 2-6.5 months
- Offshore borrow area infaunal recovery takes 2-2.5 years with most impact on abundance and size structure of sand dollar populations
- · Limited effects on surf zone fish assemblage
- No impact to surf zone fish feeding habits
- No impacts to offshore borrow area fish assemblages
- No detectable shifts in finfish food eating habits

Service's Response: The Service maintains its position that this project will have impacts on fish and wildlife resources over the 10 year life of the project while recognizing and agreeing with the Corps that intertidal and offshore benthic communities would likely recover within the 10 year life of the project. The recovery of marine invertebrate prey resources will vary depending on the timing of the fill activity relative to the periods of highest biological activity in these zones of the beach, as well as compatibility of the dredged material with the existing beach substrate. Areas receiving sand in autumn will likely have a longer prey resource recovery period than areas receiving fill in the winter and early spring. In 2003, the time period for benthic recolonization was approximately 12 to 18 months for the Fire Island Community project area (Land Use Ecological Services, Inc., 2005).

The Corps (1999) examined the effects of beach nourishment on oceanside intertidal benthos in Monmouth County, New Jersey. They found that the recovery time of the intertidal infaunal community was as short as 2 months following renourishment carried out between early August and early October. Recovery time following renourishment in mid- to late-October was reported to take between 2.0 to 6.5 months. However, studies conducted in Florida, North Carolina, and South Carolina show that recolonization rates by benthic invertebrates are variable and dependent on the time of year in which the nourishment occurs, beginning within days and taking up to 1 year for full recovery of some species (Reilly and Bellis 1983; Bacca and Lankford 1988; Lynch 1994; Peterson et al. 2000). Further, the macrofaunal community after recolonization may differ considerably from the original community. Once established, it may be difficult for species of the original community to displace the new colonizers (Hurme and Pullen 1988). Time frames for intertidal invertebrate recruitment and re-establishment following beach nourishment are variable and seasonally dependent. Although they can be as short as 2.5 to 6 months, much of the literature suggests that they are generally reported as taking between 12 and 18 months (National Resource Council 1995), and this time frame is consistent with the findings of Land Use Ecological Services, Inc. (2005) for the Fire Island beaches.

It should also be noted that the continuation and possible increase of off-road vehicle (ORV) use within Smith Point County Park and throughout the Fire Island National Seashore following implementation of the proposed project, suggests that the abundances of prey resources in wrack habitat could be reduced via direct mortality, displacement, or degradation of wrack, but additional research is needed to evaluate recolonization rates under varying driving conditions (Kluft and Ginsburg 2009).

- 3) Service's pre-draft document: Service Recommended Conservation Measures
 - A) Revise Project Design to Avoid and/or Minimize Project Impacts Additional measures that the Corps could incorporate into the project design to further avoid and/or minimize projects include:
 - Preserve ocean-to-bay overwash habitat at Smith Point: Where feasible, avoid dune construction in the overwash areas, which are important for Federal and State-listed ground-nesting shorebirds, as well as coastal plant habitat;
 - Revise the dune alignment landward to preserve overwash habitat: The dune alignments at the Lighthouse Tract could be moved landward to preserve more overwash habitat;
 - Time-of-year restrictions: Implement time-of-year restrictions for the entire project area (not proposed for Fire Island Communities) to promote Federal and State-listed ground-nesting shorebird breeding.

Corps' Comment: The New York District and the Department of the Interior held a series of meetings and conference calls over the past several months to discuss project elements as they relate to ongoing formal consultation under Section 7 of the Endangered Species Act and finalizing the Draft EA and HSLRR. The District and Interior had requested this collaboration to finalize the outstanding project description issues that may affect the constructability of the proposed project. The Interior has sent several comment letters related to the FIMI, EA, and HSLRR, the latest letter dated April 17, 2014. During these meetings, a considerable amount of information was exchanged between our respective agencies on the proposed project with the acknowledgements of our agencies respective missions and the unique nature of this action. Consequently, the District has incorporated the recommendations on the project design where applicable, with the understanding that some of the recommendations could not be implemented for the project to maintain its intended purpose of stabilizing the barrier island.

Service's Response: The Service acknowledges the Corps' efforts in incorporating conservation measures where the Corps found them to be applicable/feasible. The Service's above described recommendations remain in the draft document for future consideration under the FIMP or any additional Corps efforts within the project area. Although the Service understands the Corps requirement to adhere to the intended purpose of the proposed action, the Service also notes that the Fish and Wildlife Coordination Act establishes fish and wildlife conservation as a co-equal purpose or objective of Federally-funded water resource development projects, and is not constrained by the specific requirements of this proposed action.

B) Service Planning Aid Letter 2005 - Implement Restoration Opportunities within the Fire Island to Montauk Point Reformulation Study Area to rectify/compensate for project impacts.

Corps' Comment: The New York District is aware of the restoration opportunities previously provided by the Service for the FIMP Reformulation Study. As discussed in the past, the FIMI Stabilization Project cannot advance projects beyond its study boundaries, further coordination with the National Park Service-Fire Island National Seashore (NPS-FIIS) is required to implement activities within their jurisdiction and that the FIMP Reformulation Study is the mechanism that these restoration opportunities can be advanced. During its plan formulation, FIMP identified the restoration objective of advance the restoration of coastal processes as well as their potential to contribute to coastal storm risk management (CSRM). The criteria used in considering the complementary nature of the restoration is: 1) does the restoration increase the CSRM effectiveness of the alternative, 2) are there cost efficiencies in implementing the measures together, or 3) does the restoration provide a desirable mosaic of habitats that could be altered by the CSRM measure?

Service's Response: The Service acknowledges the Corps' efforts in incorporating conservation measures when applicable/feasible. The Service's above described

recommendations remain in the final document for future consideration under the FIMP or any additional Corps efforts within the project area. Although the Service understands the Corps requirement to adhere to the intended purpose of the proposed action, the Service also notes that the Fish and Wildlife Coordination Act establishes fish and wildlife conservation as a co-equal purpose or objective of Federally-funded water resource development projects, and is not constrained by the specific requirements of this proposed action.

C) Coordination with Landowners on Federal and State-listed Ground-Nesting Shorebird and Coastal Plant Management - As an effort to address the indirect effect of increased recreational activities on a wider beach resulting from this beach nourishment project, the Corps should coordinate with and provide resources to the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), FIIS, and Suffolk County for management of Federal and State-listed ground-nesting shorebirds.

Corps' Comment: This recommendation refers to the concept of developing a Long-term Regional Comprehensive Management Plant (LTRCMP) for Threatened and Endangered Species as part of the FIMP Reformulation Study. The LTRCMP was initiated to fully understand the effects that the Reformulation alternatives might have on these species and their habitats. The Service, the Corps, New York State Department of Environmental Conservation (NYSDEC), Suffolk County, and the Towns within the study area initiated the LTRCMP in the early 2000's. The goals of the LTRCMP was to ensure adequate data collection to support a Biological Assessment and the development of educational, management and monitoring strategies to support conservation measures to contribute to the recovery of the species.

The interagency LTRCMP Team had several meetings that identified a series of tasks to be completed to develop the Management Plan. These tasks included coordination with landowners, technical meetings on habitat value, improved mapping of historically used habitats, analysis of a number of coastal processes (particularly breaches and overwashes), evaluation of habitat improvement methods, and public education and outreach. Most of these tasks have been accomplished, or, as in the case of monitoring and data recording, are ongoing; others, such as public education and outreach, would be implemented when the Reformulation Project is authorized for construction.

Service's Response: There have been recent conversations between the agencies to stand the LTRCMP effort up again. Although there has been some progress made since the mid-2000s, there is much yet to do. We are encouraging a renewed effort to engage with the resource agencies, the Corps, and land management agencies to develop and implement a plan to improve the status of listed species in the FIMP area and to provide a roadmap for implementable storm protection projects in a predictable and efficient manner.

D) NPS-Proposed Conservation Measures; Bayside Shoreline Processes - The Corps could assist NPS in undertaking studies to advance bayside shoreline restoration.

Corps' Comment: As part of the Reformulation Study, the New York District will coordinate with National Park Service-Fire Island National Seashore (FINS) to advance the restoration of coastal processes as well as their potential to contribute to CSRM.

Service's Response: The Service applauds the Corps' planned coordination with the FIIS and offers to assist/coordinate in this effort in any way we can.

E) Funding and implementing of studies to assess the impacts of Hurricane Sandy on fish and wildlife resources within Great South Bay and Bellport Bay - Surveys of benthic organisms, SAV beds, bay water quality, and finfish and tidal marshes, for comparison to pre-storm conditions.

Corps' Comment: As part of the Reformulation Study, the New York District has collected a large amount of data

(http://www.nan.usace.army.mil/Missions/CivilWorks/ProjectsinNewYork/FireIslandtoM ontaukPointReformulationStudy/FIMPReports.aspx). The New York District will also be coordinating an adaptive management and monitoring plan that may assess some of the studies highlighted within the bay system as it relates to the restoration of coastal processes and impacts associated with the CSRM alternative.

Service's Response: The Service applauds the Corps' efforts in this regard and offers to assist/coordinate in this endeavor in any way we can.

The Service appreciates the Corps' assistance during the completion of this document. If you have any questions or require additional information, please contact Mr. Steve Sinkevich of the Long Island Field Office at 631-286-0485.

Sincerely,

David A. Stilwell Field Supervisor

cc: NYSDEC, Stony Brook, NY (R. Marsh) USFWS, Long Island Field Office, Islip, NY

Literature Cited

Bacca, B.J. and T.E. Lankford. 1988. Myrtle Beach Renourishment Project. Biological Monitoring Report, Years 1, 2, 3. Coastal Science and Engineering, Inc. Columbia, SC. 46 pp.

Hurme, A.K. and E.J. Pullen. 1988. Biological Effects of Marine Sand Mining and Fill Placement for Beach Replenishment: Lessons for Other Uses. *Marine Mining* 7: 123-136.

Kluft, J.M., and H.S. Ginsburg. 2009. The effect of off-road vehicles on barrier beach invertebrates at Cape Cod and Fire Island National Seashores. Technical Report NPS/NER/NRTR—2009/138. Boston, MA.

Land Use Ecological Services, Inc. 2005. Western Fire Island and Fire Island Pines Beach Nourishment Report – 2005 Environmental Monitoring Report. 14 pp., plus Appendices.

Lynch, A.E. 1994. Macroinfaunal Re-colonization of Folly Beach, South Carolina, after Beach Nourishment. Masters Thesis. University of Charleston, Charleston, SC. 45 pp.

National Research Council [NRC]. 1995. Beach nourishment and protection. National Academy Press, Washington, DC. Available at http://www.nap.edu/catalog.php?record_id=4984.

Peterson, C.H., D.H.M. Hickerson, and G.G. Johnson. 2000. Short-term Consequences of Nourishment and Bulldozing on the Dominant Large Invertebrates of a Sandy Beach. *Journal of Coastal Research* Vol. 16(2): 368-378.

Reilly, F.J. and V.J. Bellis. 1983. The Ecological Impact of Beach Nourishment with Dredged Materials on the Intertidal Zone at Bogue Banks, North Carolina. Miscellaneous Report 83-3. U.S. Army Corps of Engineers Coastal Engineering Research Center, Fort Belvoir, VA.

U.S. Army Corps of Engineers. 1999. New York District, U.S. Army Corps of Engineers, Fire Island Inlet to Montauk Point, Long Island, New York, Reach 1, Fire Island Inlet to Moriches Inlet, Draft Decision Document: An Evaluation of an Interim Plan for Storm Damage Protection, Volume 1, Main Report and Draft Environmental Impact Statement. U.S. Army Corps of Engineers, New York, NY. 151 pp., plus Appendices.