

July 30, 2003

L7671

Memorandum

To: Regional Director, Northeast Region

From: Superintendent

Subject: Finding of No Significant Impact (FONSI), National Park Service (NPS)
Special Use Permit Issuance for Fire Island Community Beach Scraping
and Nourishment Projects

Need for Action

The proposed beach scraping and nourishment projects are being undertaken by private communities to help ensure the houses and structures behind the primary dunes are not damaged by storm events. An Environmental Assessment (EA) was prepared for the proposed activities in consideration of Special Use Permits required from the National Park Service (NPS), Fire Island National Seashore (FIIS), because the proposed projects will occur within Fire Island National Seashore boundary.

During the summer of 2002 discussions with the communities, the New York State Department of Environmental Conservation (DEC), the Army Corps of Engineers (ACOE), and other interested parties identified the desire to perform beach nourishment and scraping along the shorelines in front of communities on Fire Island. In an effort to comply with the National Environmental Policy Act (NEPA) and to develop acceptable parameters for these scraping and nourishment projects, the National Park Service, Fire Island National Seashore, held several scoping meetings with the interested public and contracted with several knowledgeable individuals to assist with the development of an Environmental Assessment that outlines parameters that would be permitted during beach scraping and nourishment projects within Fire Island National Seashore (FIIS).

Background

The subject beaches where nourishment and scraping will be permitted are in front of the 17 communities located along Fire Island between Watch Hill and the Fire Island Lighthouse. The community properties include approximately 6 miles of beaches along the 26 miles of FIIS ocean-side shoreline. All of the projects will be executed with private community funds. Fire Island communities consist of over 4,100 homes with a permanent resident population of approximately 400 individuals. The summertime residency climbs to over 20,000.

This EA, FONSI and the subsequent issuing of Special Use Permits for the beach scraping and beach nourishment projects are related to needs expressed by the communities to protect private property and structures in the short term until the ACOE Reformulation Plan is finalized. The *Fire Island to Montauk Point Reformulation Plan for Storm Protection along the South Shore of Long Island* (FIMP) is an interagency approved plan for determining how to deal with the South Shore of Long Island for storm damage protection for the next 50 years. The plan also covers major environmental concerns in an Environmental Impact Statement. This EA was prepared solely to allow the issuance of Special Use Permits by the Fire Island National Seashore to the private communities to protect their properties and homes between now and the issuance of the reformulation plan. The scope of these projects is short term, will be completed by December 2005, and only covers the 6 miles of shoreline in front of the communities.

All references to the existing dune line are based on the parameters defined by this document and are intended to not set a precedent for future projects nor preclude any options under the FIMP. The FIMP will develop a more definitive dune crest line by adding the expertise of New York State, the Army Corps of Engineers, other federal agencies, and other coastal experts to the expertise utilized by the Fire Island National Seashore in this EA.

Beach nourishment consists of pumping sand located just offshore of Fire Island onto the beach berm and then moving some of the sand landward to form an enhanced dune. Bulldozers may be utilized in an effort to augment the dunes that are present between the beach berm and in these cases the houses located in the communities. Nourishment will be allowed by communities that apply for the appropriate permits and follow the parameters that have been set in the EA. These parameters include a beach of no wider than 100' at 9.5' NGVD (National Geodetic Vertical Datum), a slope from the beach to the waterline of 1:15, and an enhanced dune with a 30' dune crest at 16.5' NGVD with a slope of 1:4 down to the beach berm height, with no allowance for southward movement of the dune.

Beach scraping consists of bulldozing sand located on the beach berm, landward in an effort to augment the dunes that are present between the beach berm and in these cases the houses located in the communities. Scraping will be allowed by any community that applies for the appropriate permits and follows the modified parameters that are outlined in this FONSI. These parameters include the blade restriction that only allows the beach to be scraped up to one foot below the current surface as well as a constructing a maximum dune height to 16.5 feet NGVD with a dimension of 30 feet wide on the dune crest, with no allowance for southward movement of the dune. The requirements for the beach profile to be considered for scraping include a beach height at the toe of the dune to be 9.0' NGVD with 100' of beach down to a height of 7.0' NGVD and no elevation within the 100' of beach below 7.0' NGVD.

It is important to recognize that the site of the proposed action is located within a National Park Service area, Fire Island National Seashore (FIIS). Therefore, in addition to complying with general environmental standards that have been promulgated at the federal, state and local levels, the proposed action also must conform to the current management policies of the National Park Service, which are set forth in the 2001 edition of the *NPS Management Policies*, <http://data2.itc.nps.gov/npspolicy/index.cfm> . These projects are limited to that part of FIIS that is directly in front of the private communities and that these projects have a designed function to reduce the potential for the destructive impacts associated with storm events.

Notification of the availability of the Environmental Assessment (EA) was announced through a press release on June 6, 2003. The EA was sent on June 6, 2003 to a total of over 100 people, including agencies and organizations. It was also posted on the World Wide Web and made available at three local libraries. The public review and comment period extended from June 6, 2003 through July 7, 2003.

The NPS received over 100 comment letters during and/or following the EA review period and 96 signatures on petitions. All comments have been reviewed. Most letters and signatures on petitions provided support of the beach nourishment and scraping projects. There was one letter of objection to beach nourishment. There were 10 letters that provided comments and concerns for both types of projects including the one letter objecting. The issues concerning the projects and the EA from those letters are covered in the Synthesis of Public and Interagency Comments and Responses provided as an enclosure to this FONSI. (Enclosure 2)

Together, beach scraping and nourishment made up the preferred alternative under the Environmental Assessment titled, Fire Island National Seashore Short-term Community Storm Surge Protection Plan. Together, the Beach Scraping Alternative (Alternative B) and Beach Nourishment Alternative (Alternative C) make up the NPS Preferred Alternative because it adequately satisfies the need for short term action.

Statement of Selected Alternative, Alternative D. The Preferred Alternative – Combination of B and/or C depending on the need and condition

The selected alternative will allow both beach nourishment and beach scraping. This alternative is selected because it allows the communities to perform protection measures with private funds without precluding any potential alternatives under the more long term solution being formulated in coordination with the Army Corps of Engineers under the Fire Island to Montauk Point Reformulation Plan for Storm Protection along the South Shore of Long Island. This alternative also takes into account the damage to the environment that would be caused by the lack of action in the event of a catastrophic storm event. This alternative was chosen from 4 alternatives that included no action.

The selection of the preferred alternative in this EA was predicated on the adoption of the conservation measures and reasonable and prudent measures as identified by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) through formal Section 7 consultation. These measures must be implemented prior to and during any project.

FIIS made a determination that the project would not adversely impact listed species. Through formal consultation, the United States Fish and Wildlife Service has determined that there is a potential for direct and indirect adverse effects on the piping plover and seabeach amaranth and their habitats. The National Marine Fisheries Service has determined that as long as no hopper dredges are used prior to November 1 and only between November 1 and April 30, then there are no potential impacts to sea turtles, and regardless of the time frame there is no potential for impacts to marine mammals. In order to reduce the potential for adverse effects and the need for further Section 7 consultation, the NOAA, NMFS, and USFWS in their Biological Opinions, identified that the NPS incorporate conservation measures and reasonable and prudent measures into any permitted projects. Those requirements are incorporated in this FONSI by reference. (Enclosure 4) Those requirements will be incorporated as conditions in all Special Use Permits that are issued for beach scraping or beach nourishment and the Biological Opinions will be attachments to the permits.

Environmentally Preferred Alternative

An NPS permit, based on the selected alternative, will allow various communities to perform beach scraping and beach nourishment activities. Alternative D, determined to be the environmentally preferred alternative, is selected for implementation because it will allow the communities to perform beach nourishment and beach scraping within the defined parameters developed and described in the EA, in the attached tables and will include specific conditions in the Special Park Use permit.

As stated above, the NPS made a determination in the Environmental Assessment that the project would not adversely impact listed species. Through continuing informal consultation, the United States Fish and Wildlife Service (USFWS) has determined that there is potential for direct and indirect adverse effects on the piping plover and seabeach amaranth and their habitats.

Beach Nourishment Parameters

Process	NPS Land/ Impact	Seasonal Restrictions	Monitoring	Scope Level	Project Design Criteria
<p>Communities must apply for all appropriate permits and fund each project without federal expenditures. (NPS 1977)</p> <p>Applicant/ permittee is responsible for implementing and enforcing all criteria and conservation measures as part of project design and permit conditions.</p>	<p>Not on NPS upland, except for small lots within community boundaries and for those small tracts between Kismet and Saltaire and potentially the 2 small tracts between Atlantique and Ocean Beach.</p> <p>No tapers outside of community boundaries.</p> <p>Equipment transport will occur by water or interior road transport to avoid and minimize impacts to additional areas of the shoreline whenever possible.</p>	<p>February 1- November 1 = Combined safety window</p> <p>Derived from: 3/ 1-9/1 Fire Island (FIIS) Threatened & Endangered species (T&E) protection policy</p> <p>4/1- 9/1 USFWS Plover window</p> <p>4/1-11/1 USFWS Amaranth window</p> <p>4/30-11/ 1 Sea Turtle and Marine Mammal NMFS window</p> <p>10/1-1/31 EFH NMFS window</p> <p>Surveys and monitoring (conservation measures per USFWS, and NMFS protocol) will determine species presence and along with dredge selection will determine allowable project dates.</p>	<p>Shoreline and ecological resource monitoring including T & E, pre-project, during, and post project throughout project life</p> <p>USFWS, NMFS and NYSDEC protocol will be used and are included as part of the project requirements</p> <p>Grain size and sediment characteristics of the material to be deposited will be consistent with the existing beach substrate.</p>	<p>Max 6 miles</p> <p>3-7 projects in 3 years</p>	<ol style="list-style-type: none"> 1) Beach and dune criteria generally insufficient to meet scraping criteria (width less than 100' and 9'NGVD, maximum dune crest width = 30' @ 16.5' NGVD) 2) Design must establish a 9.0' NGVD beach and no tapers on federal property or in front of undeveloped community property 3) Duneface slope = 1/4 4) Maximum beach construction will allow a maximum of 1:4 slope dune up to a 30' dune crest (15' seaward and landward of the natural, existing central dune crestline) @ 16.5' NGVD, 1:4 dune slope down to 9.0' NGVD, 100' of beach @ 9.0 NGVD, 1:15 slope down to 0 NGVD. Total beach/dune profile would have the following horizontal dimensions from the inland toe of the foredune to the water: foredune= 90ft (base) + beach berm (100ft) + seaward beach slope (135') = 325' from inland toe of foredune. Dune profiles are 16.5' in height, with a 30' crest width and 9.0'NGVD base elevation 5) Constructed dune cannot be displaced seaward of natural, existing dune. Houses on the dune crest, the seaward margin of the dune crest may extend 15' from the central dune crestline. The dune may be widened to extend beneath existing structures. Fill material will not be considered a new primary dune. If fill cannot be tied to the dune crest, beach fill may still be utilized but no elevation beneath existing structures will be permitted. If no dune exists, or it is very irregular, a dune crestline and accompanying dimensions will be developed by the applicant for NPS approval. 6) Must include Interpretation and Education with signs, community involvement and symbolic fencing. 7) Vegetation preserved or planted with local genetic stock at varying densities from 12" on center to 36" on center. 8) All debris removed or reused (fencing). 9) Project will meet all USFWS, NMFS and NYSDEC T & E species conservation design measures. 10) No nourishment will be permitted which would result in a dune width greater than 30 feet at the crest.

Parameters Developed for Beach Scraping

Process and Responsible Party	NPS Land/ Impact	Seasonal Restrictions	Monitoring	Scope/ Level	Project Design Criteria
<p>Communities must apply for all appropriate permits and funding must be private, with no public expenditures . (NPS 1977)</p> <p>Applicant/ permittee is responsible for implementing and enforcing all criteria and conservation measures as part of project design and permit conditions.</p>	<p>Not on NPS upland, except for small lots within community boundaries.</p> <p>Equipment transport will occur by water or interior road transport to avoid and minimize impacts to additional areas of the shoreline whenever possible.</p>	<p>March 1- November 1 = Combined safety window</p> <p>Derived from: 3/ 1-9/1 FIIS beach Threatened and Endangered (T&E) species protection</p> <p>4/1- 9/1 USFWS Plover window</p> <p>4/1-11/1 USFWS Amaranth window</p> <p>Allowed after July 15 through Sept. 30 if surveys and monitoring (conservation measures per USFWS protocol) determine no plover nests w/in 1000m each direction and no SB Amaranth w/in 100m each direction.</p>	<p>Shoreline and ecological resources including T&E species presence, pre-project, during, and post project- project life</p> <p>USFWS and NYSDEC protocol will be used and are included as part of the project requirements</p>	<p>Potential for max of 12-17 projects within 2.5 years</p> <p>Each project minimum length 500' (C/B ratio)</p>	<ol style="list-style-type: none"> 1) Minimum Beach width 100' @ 9.0 NGVD at the toe of the dune with no lower elevation than 7.0' NGVD within the 100' to be considered. 2) Only 1' of beach is permitted to be scraped - dozer blade restriction. 3) Duneface slope = 1/4 4) Maximum beach construction will allow a maximum of 1:4 slope dune up to a 30' dune crest @ 16.5' NGVD, 1:4 dune slope down to 9.0' NGVD at the toe of the dune, 100' of beach sloping from 9.0 NGVD to 6.0 NGVD. 5) Constructed dune template must be built over existing, natural dune. 6) Vegetation preserved or planted with local genetic stock at varying densities (per USFWS protocol). 7) All debris removed or reused (fencing). 8) No southward dune placement accept where widening dune crest per NPS developed template. 9) Project will meet all USFWS, NMFS and NYSDEC T & E species conservation design measures.

Impairment

The National Park Service has considered the potential impacts of each alternative and the implications for impairment to the resources of Fire Island National Seashore, according to its Organic Act of 1916 (16 USC 1), which states:

[The National Park Service] shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

NPS managers must always seek ways to avoid or minimize to the greatest degree possible adverse impacts on park resources and values. Through this law and the General Authorities Act of 1970 (as amended in 1978), NPS managers have the discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may constitute impairment. However, an impact would more likely constitute impairment to the extent it affects a resource or value whose conservation is:

Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;

Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or

Identified as a goal in the park's general management plan or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the resources, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. (See impairment determination on next page.)

Impairment Determination

Implementing the selected alternative will not cause impairment to park resources and values. These projects will have only minor, localized, short-term effects. NPS staff and all but one of the individuals who commented believe that this is the preferred alternative as described in the Environmental Assessment with the criteria outlined above. (Note the following rationale.)

Management Policies and Decision Rationale

NPS Management Policies, 2001, Chapter 4, governs the natural resources, processes, systems, and values of units of the national park system. It states, “The National Park Service will strive to understand, maintain, restore, and protect the inherent integrity of the natural resources, processes, systems, and values of the parks. The Service recognizes that natural processes and species are evolving, and will allow this evolution to continue, minimally influenced by human actions.” It further states that erosion is considered a natural process and, “The Service will allow natural geologic processes to proceed unimpeded.” However, it also states that, “The Service will not intervene in natural biological or physical processes, except:

- When directed by Congress;
- In some emergencies in which human life and property are at stake;
- To restore natural ecosystem functioning that has been disrupted by past or ongoing human activities; or
- When a park plan has identified the intervention as necessary to protect other park resources or facilities.”

Beach scraping and nourishment are consistent with these policies because they are used to protect the existing houses and structures and the people who live there in the event of a catastrophic storm event.

NPS Management Policies, 2001, Chapter 4.8.1.1 governs “Shorelines and Barrier Islands.” It states that “Natural shoreline processes (such as erosion, deposition, dune formation, over wash, inlet formation, and shoreline migration) will be allowed to continue without interference.” However, it states that “... where present developments must be protected in the short run to achieve park management objectives, including high-density visitor use, the Service will use the most effective and natural-appearing method feasible, while minimizing impacts outside the target area.” Beach nourishment as set forth with parameters is consistent with this policy because it allows the construction of a beach consistent with the natural size present along Fire Island. It also allows construction of a naturally sized embryonic dune which is used to protect the existing houses and structures located in the communities within the FIIS boundary, consistent with the General Management Plan, and with impacts minimized as much as possible.

In addition, National Park Service Directors Order 77 (DO77) (<http://data2.itc.nps.gov/npspolicy/DOrders.cfm>), Natural Resource Protection, also discusses the Service's obligation to protect both natural and geologic resources. It states, "Coastal and shoreline management entails more than just the geologic resource itself. The migration of barrier islands, sand bars, and dunes, the erosion of beaches and shorelines, and the creation and destruction of lagoons and inlets have impacts beyond the management of the geologic resource solely for NPS purposes. Homes, businesses, the shipping industry, tourism, boating, fishing, and other coastal activities are all greatly affected by how shorelines are managed. Often this is out of NPS control. Management must consider federal, state, and local laws, ordinances, and policies pertaining to shoreline management." It goes on to state that studying and attempting to understand the processes must be performed and that, "complexity and dynamism requires far more complete data for effective management. The mechanisms of shoreline processes, such as sediment transport and sea level change, are not well understood. Furthermore, these parks are intensively threatened by both in-park recreational pressures and external activities that have long historical roots and are accelerating with continued coastal zone development. Superintendents should ensure that the forces that form and reshape shoreline features are routinely observed and monitored. This is a major element of the program management..."

In this case, scraping and nourishment are a feasible means to protect the community residences located within the FIIS boundary as well as restoring more natural embryonic dunes. In the case of this preferred alternative it is also important to keep in mind that the lack of a project could lead not only to damage to potential property or even human life, but that the damage to properties would also lead to Marine Debris which is described in DO77 as being an identified problem that leads to both direct and indirect impacts that damage both aesthetic and recreational quality or marine and coastal areas.

The beach design parameters set forth in the Environmental Assessment have been carefully designed to comply with the National Park Service regulations and policies and will ensure that the beaches and dunes that are nourished and scraped will be done so mirroring the natural dimensions that occur on Fire Island. In addition, any nourishment projects that are undertaken will be permitted by the NY State Department of Environmental Conservation, The NY State Department of State, and the US Army Corps of Engineers. There will be a team of 2 federal agencies in concert with 2 separate state agencies that will be working together to ensure compliance with all environmental regulations as well as attempting to mirror and protect the natural conditions.

FINDING OF NO SIGNIFICANT IMPACT

The Selected Alternative, as presented in the Environmental Assessment and stipulated by permit, to perform beach nourishment and beach scraping on up to 6 miles of beach does not constitute a major Federal action which will have a significant effect on the air quality, wildlife, vegetation, or the human environment as defined in Section 102(2) of the National Environmental Policy Act of 1969 (PL 91-190, 83 stat. 853). Therefore, the National Park Service will not prepare an environmental impact statement for this project.

RECOMMENDED:

David Spirtes
Superintendent, Fire Island National Seashore

Date

APPROVED:

Marie Rust
Director, Northeast Region

Date

Enclosures:

- 1) [*Fire Island National Seashore Short-term Community Storm Surge Protection Plan Environmental Assessment, June, 2003*](#), as distributed for public comment (replacement costs for re-distribution of this document will be born by the requestor, 146 pages)
- 2) Synthesis of Public and Interagency Comments and Responses
- 3) Errata Sheet to the Environmental Assessment
- 4) USFWS – Biological Opinion
- 5) National Marine Fisheries Service – Biological Opinion
- 6) National Marine Fisheries Service – Essential Fish Habitat Determination

Enclosure 1

National Park Service
U.S. Department of the Interior
Fire Island National Seashore
Patchogue, New York



Fire Island National Seashore

**Short-term Community Storm Surge
Protection Plan**

Environmental Assessment

June, 2003

Synthesis of Public and Interagency Comments on the Environmental Assessment for the Proposed Fire Island Beach Nourishment under the *Fire Island National Seashore Short-term Community Storm Surge Protection Plan*

Some comments received are specific about certain points that Fire Island National Seashore is answering in detail below. On those specific concerns, the Fire Island National Seashore response is indented to differentiate between the response and the comment. For those comments that are less specific they have been responded to in the general prose.

The Davis Park Association

The Davis Park Association submitted a letter dated July 1, 2003. In this letter the Davis Park Association starts out in reference to how much work they have put forth to protect their community without harming their neighbors.

Fire Island National Seashore applauds those efforts.

The letter goes on to question the parameters that have been set up to control beach scraping that would be permitted.

The parameters we have set up in the EA are based on the natural conditions present at Fire Island as determined from scientific analysis of the Light Detection and Ranging (LIDAR) data. This data analysis covered 122 profiles from Watch Hill to the Lighthouse from September 2000. Of the 122 profiles that had the beach elevation at 8.85 feet with a standard deviation of 0.62 feet. The maximum beach elevation noted on these profiles was 10.37 feet. The minimum beach elevation noted on these profiles was 7.48 feet. The Beach Elevation is measured at the dune toe where the landform changes from the dune feature to the beach feature. The beach elevation was rounded to 9 feet, and it indicates that only beaches which fall within the upper half of the natural elevations are eligible for scraping down to 8 feet. However, after further discussions with everyone involved, it has been determined that the criteria to allow scraping should be modified. These new criteria are outlined in the table in the FONSI and include a restriction for the beach at the toe of the dune to be 9.0'NGVD but will allow the scraped beach out from the toe of the dune to go down to the NYSDEC permitted 6.0'NGVD, as long as the beach does not dip below 7.0' NGVD over 100' out from the toe of the dune prior to scraping.

The Nature Conservancy

The Nature Conservancy, Long Island/South Fork Chapter, Coastal Conservation Director, Scott M. Cullen, sent a letter dated July 2, 2003. In the letter the Nature Conservancy stated that they do not have any major issues with the EA or the private nourishment projects within the 6 miles of designated community property as long as there is rigorous oversight to ensure that Fire Island National Seashore (FINS) criteria established in the EA are adhered to. They included the following comments:

1. New Beachfront Construction: The EA acknowledges the problems with the “construction of beachfront homes in locations that have contributed to the destabilization of the barrier island dune system, its most potent natural protective feature.” (pg. 8) The EA acknowledges the limitations of CEHA to preclude such new development or redevelopment and in the past there is no question that inappropriate development has been allowed to occur since the enactment of CEHGA. (pg. 54). To address this concern, the following two conditions will be required in beach scraping and nourishment permits:

No structure will be built or expanded in or behind the project area, seaward of its present location in the CEHA (that includes a 25 feet setback from the toe of the primary dune) for five years following the completion of beach scraping and nourishment projects. This includes but is not limited to outbuildings, building additions, porches, swimming pools, and septic tanks. The only exception to this provision is the installation of sand fence or wooden pedestrian boardwalks crossing the dune to access the beach that are constructed in accordance with an approved permit issued by the NPS.

Permits will be issued to incorporated villages, recognized governmental entities, associations, non-profit organizations, private corporations, and other qualified applicants who can demonstrate the capacity to meet required permit conditions a record of a record of success on similar projects. Non-governmental entities may be required to post a performance bond to guarantee compliance with all permit conditions.

Fire Island National Seashore thanks the Nature Conservancy for their willingness to work with FIIS and private parties to help resolve this issue and would welcome any assistance they can offer in helping to develop measures to preclude development in the NPS dune district or CEHA.

2. Protection of Geologic Processes: NPS management policy 4.8.1 states that the service will allow natural geologic processes to proceed unimpeded unless necessary in emergencies that threaten human life and property. (pg. 15) Therefore, it is unclear the criteria that FINS will use to determine how a problem in a particular community rose to the level of an “emergency” that would enable the violation of this directive. Indeed,

it is our belief that such a declaration should occur pursuant to a clearly defined scope and criteria.

Fire Island National Seashore thanks the Nature Conservancy for this observation. In the FONSI we have attempted to provide the regulatory framework from the cited regulations that allows the Fire Island National Seashore to permit these sorts of projects in front of the communities.

3. Coastal Barriers Resources Act: It is unclear how this EA will meet the Coastal Barriers Resources Act goal of discouraging development in high risk areas when limitations on precluding new or redevelopment is simultaneously acknowledged.

Fire Island National Seashore has attempted to outline projects that will not only preclude the continued development in the zones directly behind the dunes but also sets the stage for the Reformulation Plan to take more aggressive measures that will hopefully help remove development from these areas. We do not believe that the Coastal Barrier Resources Act is applicable within the Fire Island National Seashore.

4. 16 U.S.C. § 459 e: Congress specifically gave FINS authority to work the Army Corp on erosion control in accordance with a plan that is mutually acceptable to the Corp and the Secretary of the Interior. This provision raises several issues:

a. Does FINS need to ensure that this plan is mutually acceptable to the Corp?

The Corps in this case is involved as a permitting agency for activities that are considered fill in a wetland through the Joint Permitting process with the NYSDEC. If no Corps permit is issued then the project will not be permitted by Fire Island National Seashore. The Army Corps of Engineers was given the opportunity to comment on the EA and did not provide any comments. The NPS specifically designed the parameters of the projects to ensure none of the potential options under reformulation would be precluded.

b. Is FINS authorized by its enabling legislation to permit private nourishment projects that do not rise to the level of emergency as stated in NPS management policy 4.8.1?

Yes, Fire Island National Seashore has tried to provide the regulatory framework utilized in the FONSI that allows these private projects to be permitted within the park.

Richard Spotts, Private Citizen, Former National Park Service Employee

Mr. Spotts submitted a letter dated July 2, 2003 as a private citizen and former NPS employee at FINS, in which he expressed general agreement that the preferred alternative is appropriate and the best course of action. However, he raised several questions regarding the EA. All of Mr. Spotts' expressed concerns cover what he feels to be a lack of thoroughness of the EA rather than environmental impacts that would be caused by the proposed action. We feel these questions are not applicable since the assessment has covered them in detail and they are better aimed at an Environmental Impact Statement which this is not. He has also misinterpreted the purpose of the EA and the preferred alternative. This EA determined the preferred alternative is for the National Park Service, Fire Island National Seashore, to issue Special Use Permits to applicants, in this case the towns in which the private communities on Fire Island are located. These applicants will also be applying for additional permits and approvals from the relevant state and federal agencies, in this case, the NY State Department of Environmental Conservation, US Army Corps of Engineers, and NY State Department of State for beach nourishment or scraping. It will be the responsibility of the applicants to ensure they comply with the additional federal and state regulations and policies which they are responsible for, and Fire Island National Seashore is not applying for any approvals from these agencies nor does the NPS Special Use Permit supercede any responsibilities under those programs. On the contrary, all permits and permit applications required for state and federal agency permits must be submitted with the National Park Service, Fire Island National Seashore Special Use Permit application for our permit to be issued. Fire Island National Seashore will be working with these other agencies to ensure all of the projects comply with the suite of regulations.

Fire Island Association Inc., Gerard Stoddard, President

The Fire Island Association Inc., President, Mr. Gerard Stoddard, submitted a letter dated July 3, 2003. In the letter they congratulated and thanked those who worked on the EA. They submitted the following comments:

1. General

We note that many of the conclusions and proposed new standards and criteria do not appear to reflect the levels of scientific rigor that the Department of the Interior has been striving for, according to recent public comments on science-based policy decisions by the Secretary. Fortunately, it appears that you have authority to remedy the situation by supplementing the NEPA analysis in the EA. The following are comments from the text of the EA that seem to reflect an anti-project predisposition that is not appropriate in an objective assessment.

“Over time, the dunes and beachface have been and are affected by houses and other structures which are interfering with dune development.” This statement may reflect an opinion based on esthetics; it is not supported by science. The fact that there is no mention of even the possibility that interruption of the sand supply caused the obvious erosion of Fire Island beaches can only lead to the suspicion that the drafter prefers his explanation to others that are possible.

Fire Island National Seashore responds to these concerns reiterating the science based theory that the dunes are affected by development on them. Effects include the preclusion and prevention of dune grass growth due to shading and the crushing of dune grass rhizomes through continued manipulations and trampling, as well as the disruption of the natural processes by which dunes are created. These theories are supported by scientific papers including those by Norbert Psuty. It is well documented that sand bypassing of Moriches Inlet has been restored as the navigational channel has filled in, so the preponderance of studies conclude that there is no longer an interruption of the sand supply except in the vicinity around the groin constructed in front of Ocean Beach. We point out that under the Fire Island to Montauk Point Reformulation Study it is our intention to have this groin removed. While we understand that Fire Island has been stabilized to prevent east and west migration at the inlets, the dynamic nature of the island and any south to north migration has not been stabilized.

“A natural barrier island system is a dynamic resource that ... remains in a constant state of flux...” Undue reliance on the barrier island roll-over theory leads to inappropriate policies, as discussed below.

The dynamic nature of a barrier island is irrefutable. The projects that will be permitted by this EA are short term with no reliance on the barrier island roll-over theory.

NPS “seeks to restore the primary dune system ... to a more natural condition and location to function as a natural, self-maintaining protective feature for the shore communities.” Once the Fire Island and Moriches inlets were stabilized, it was no longer possible for the beach and dune system to be either “natural” or “self-maintaining.” The price of stabilizing inlets is regular sand bypassing and periodic beach nourishment.

It is well understood and documented that sand bypassing of Moriches Inlet has been restored as the navigational channel filled in over time.

DOI requires that there be “no southward realignment of the dunes which would prejudice the ultimate NPS alternative of removing dune-front construction...” No scientific support is cited for imposing this condition in all cases. Further, removal of structures is a state function under the DEC’s Coastal Erosion Hazard Area

Management Program (CEHAMP), or incident to a beach re-nourishment project. While nominally an “alternative” to beach re-nourishment, in fact acquiring beach front homes and taking no further action is a prohibitively expensive alternative compared to protecting the shoreline.

Fire Island National Seashore seeks to work cooperatively with the State of New York in implementing CEHAMP but maintains the options to acquire those properties that lie within the dune district and the CEHA boundary.

Fortunately, it appears that you have authority to provide supplemental NEPA analysis that could improve the EA without having to restart the process.

This synthesis of public input, along with the attached errata sheets, and the Finding of No Significant Impacts, concludes the NEPA process for the beach nourishment and scraping.

2. Preferred option

The Fire Island Association agrees with the park’s conclusion that Option D, a combination of Options B and C, is the correct choice. It should be noted, however, that new rules and standards proposed in the EA, unless modified, would make it highly unlikely that communities will be able to engage in beach scraping this year.

Fire Island National Seashore thanks the Fire Island Association for agreement and will work with applicants to ensure the parameters are met. The new parameters are outlined in the attached FONSI.

3. Berm elevations needed for scraping

In the discussion of Alternate B (p. 32 - 37) it is noted that 7’ (NGVD) has been the required elevation to permit beach scraping since it was first permitted in 1993. The new criterion of 9’ (NGVD) is apparently based on “discussion with community representatives and regulatory agencies” not otherwise identified. At the same time, the EA notes that data on scraping projects supplied to the Department of Environmental Conservation at community expense over several years “have not been analyzed” (p. 33). Further, our understanding is that the new NYS DEC permits, to be issued after July 3, will *not* raise the requirement from 7’ to 9’ NGVD. If available data has not been analyzed, and the state agency involved proposes no change, what is the scientific basis for the new criterion? “Discussion” would not seem enough. I would hope your authority is sufficient to resolve this issue by requiring analysis of collected data, at community expense, if necessary, be accomplished by, say, July 1, 2004, if the new criterion is to be imposed thereafter. But it is not appropriate to impose it for the 2003 season.

Fire Island National Seashore has modified the criteria to be more similar to those created by the NYSDEC. The new, modified criteria, allow beach scraping to be performed as long as there is 9.0' NGVD at the toe of the dune, and 100' of beach down to 7.0' NGVD. This sloped beach from 9.0' to 7.0' to qualify is a compromise that we felt was reasonable.

4. Tapering fill projects into federal land

Similarly, the rule against “tapering” projects into federal land (Table 2, p. 44) lacks any scientific basis, save for the theory put forth in papers by Susan P. Elias-Gerken et al after the Piping Plover was determined to be threatened by USFWS in 1985. Ms. Elias-Gerken found Piping Plovers favor “ephemeral pools,” “bay tidal flats” and areas of “vegetation-free paths from oceanside to bayside” to other available habitat (“Piping Plover Foraging Ecology on Pike’s Beach, Southampton, NY,” November 1994). Not to impugn Ms. Elias-Gerken’s early research in any way, it has since become evident that Piping Plovers can experience very significant gains in population simply by improving predator control and creating wide beaches by use of off-shore fill, exactly as is contemplated in the EA. (See, e.g., “Village Blazes Paths of Resistance,” *Newsday*, March 17, 2002.)

In brief, no one has shown that placing compatible sand on a sandy beach impairs natural processes or in other ways negatively impacts the resource, or adversely affects endangered species. Thus, making it impossible to taper a project into federal lands means the area to be protected will be less so, with no apparent benefit to the federal lands.

The basis for no tapers on federal lands is by the National Park Service regulations outlined above, not science.

5. Dune “Displacement”

This dynamic is also evident in the expressed concern about “southerly displacement of the dune,” which is apparently based on a fear that the beach and dune might recover to a point where properties now under water or on the beach face will again be large enough to build on or allow reconstruction of a lost building. This is decidedly not, however, the objective of the project sponsors, nor is it permissible under state law. Inasmuch as the state’s Coastal Erosion Hazard Area limit, which creates a de facto coastal construction control line, will not be moved as a result of the projects described in the EA, there is no basis for including a prohibition against constructing a more effective project.

It should be noted that the Fire Island Interim Project (as in all NY state/federal shore protection efforts) contemplated acquisition by the state of any structure seaward of the landward limit of the project. This is more cost effective than “jogging” the project

around a structure that “juts out” on the beach. The few houses that would be affected by this are well known to project engineers, and the state has procedures in place that allow for their expedited acquisition, which would prevent delay of the project by landowner litigation. This long-established, straightforward arrangement is to be preferred to indirect efforts that would result from rules prohibiting seaward relocation of a dune. DEC’s CEHAMP contemplates movement of the CEHA boundary as a result of natural or manmade changes in the location of the primary protective feature (i.e., the dune). But, seaward movement as a result of a state or federal project would not create a developable site because all land seaward of the project limit would be owned by the state.

The Fire Island Interim Project was not implemented due to disagreement between the State of New York and the Army Corps of Engineers. Seaward movement of the dune will not be allowed under the Fire Island National Seashore NPS Special Use Permits.

6. **Barrier island roll-over**

A major problem with the EA is its persistent reference to the project area as one influenced by barrier island dynamics. For example, “These storms ... cause a rolling over the barrier island inland” (p. 8); “transporting sand to the back of the island as a platform for marsh to grow” (p. 9). This may be true of the part of Fire Island east of Watch Hill, but it is *not* true of Fire Island west of Watch Hill, as noted in Leatherman and Allen (1985), cited by Tansky and Bokuniewicz (1989): “The central and western sections of Fire Island have been axially stable for hundreds of years.” (Tansky, Jay; Bokuniewicz, Henry and Schubert, C.E., convenors, “An Overview and Assessment of the Coastal Processes Data Base for the South Shore of Long Island,” New York Sea Grant Program, Special Report No. 104, 1990). This well-known document is not mentioned in the EA, but many of the sanctions against beach fill and beach scraping are based on the application of the roll-over theory to an island that doesn’t and isn’t rolling over. References to overwash and building back bay marshes may well have application to situations involving regressive barrier islands such as Assateague. Fire Island deserves programs that are based on scientific facts, not on misapplied theory.

Fire Island National Seashore thanks the Fire Island Association for these observations and agrees that policies must be generated that follow proven and applied scientific principles. These issues deserve and will be given more analysis in the FIMP EIS. The projects that will be permitted under this EA are short term and negate any reliance or effect on barrier island roll-over theory.

7. **Need for additional expert opinion**

We applaud the park’s initiative and attempts to aid the communities’ self-help efforts. Hiring an outside facilitator and scheduling two scoping sessions involving affected

members of the public was very useful and may have accounted for much of the new data in the EA. The subsequent meetings between the park and representatives of the project sponsors were also very helpful. That said, much available expert knowledge was not accessed in the EA process. The EA fails to mention, for example, the Congressional directive in Sec. 342 of the Water Resources Development Act of 1999 that the park and the Corps of Engineers work together to implement a mutually acceptable shore protection plan. As was evident in the recent meeting in Senator Schumer's office, the Corps has many insights into such projects that are based on vast amounts of relevant experience. Drawing upon this, and opening more sessions to those affected, would have made the EA even more effective.

Again Fire Island National Seashore thanks the Fire Island Association for these observations. It is clearly stated in the EA and subsequent FONSI that these projects are not intended to take the place of, or preclude, any options available in the Fire Island to Montauk Point Reformulation Plan. The purpose of the EA was to evaluate the community sponsored projects in an effort to achieve compliance with NEPA so they could be permitted by the park.

8. Conclusion

FIA in no way wants its comments and observations to supercede those of the project sponsors, especially if doing so might cause a delay in effecting this much needed protection, by beach scraping or by dredge and fill projects. We are supporters of the projects because we believe that additional protection to the Fire Island communities is essential.

Fire Island National Seashore thanks the Fire Island Association for the provided comments and support.

New York State Department of Environmental Conservation, Division of Environmental Permits, Region One, Mark C. Carrara.

New York State Department of Environmental Conservation submitted a letter dated July 3, 2003, as the Deputy Regional Permit Administrator for the New York State Department of Environmental Conservation, Division of Environmental Permits, Region One. In this letter the NYSDEC expressed support for the proposed alternative but raised several issues.

General Comments

1. Document should do a better job of explaining the Federal Dune District, FINS authority to issue Special Use Permits and the Special Use Permit application and review process.

The Federal Dune District is an overlay district of the Community Development and Seashore Districts. The Dune District's northern boundary is described as 40' landward of the crest of the dune as mapped in 1976 and adopted by Congress in 1978, via Public Law 95-625. The southern boundary of the Dune District is contiguous with the southern boundary of the Community and Seashore districts, that being MHW. All three district boundaries are fully described in the Federal Zoning Standards for Fire Island National Seashore, in 36 CFR Section 28.3.

Special Use Permits for National Parks are covered under Director's Order 53, <http://www.nps.gov/policy/DOrders/DOrder53.html>, and general information about SUP's is available at: <http://www.nps.gov/fiis/permits/permits.html>. In general, these permits are required for activities that occur within a National Park. A special park use is a short-term activity that takes place in a park area and:

- Provides a benefit to an individual, group or organization, rather than the public at large;
- Requires written authorization and some degree of management control from the NPS in order to protect park resources and the public interest;
- Is not prohibited by law or regulation; and
- Is neither initiated, sponsored, nor conducted by the NPS.

The approval or denial of requests to engage in special park uses is an important and continuing responsibility of NPS superintendents. Superintendents should be aware that local decisions related to permitting

special park uses may have Service-wide implications, and set precedents that create difficulties for other superintendents. In such instances, the superintendent should consult with the regional or Service-wide specialist. A special park use may involve either rights or privileges, and may or may not support the purposes for which a park was established. In either case, whether the request is approved or denied, the superintendent's decision must be able to withstand review, challenge and litigation.

2. Suggest that FINS post the General Management Plan, NPS policies and Director's Orders on the web in pdf so that all may view them since they are referenced heavily in the document.

Directors Orders are available on the web at:

<http://data2.itc.nps.gov/npspolicy/DOrders.cfm>. The General Management Plan is not available on the web but copies can be obtained from the Fire Island National Seashore. The new GMP to be produced in the next several years will be available on the web.

3. The document appears to be written as an obvious editorial rather than a scientific assessment or study. For instance, on page 31 the author(s) state "There is the perception ..." as if a particular opinion is wrong, yet the document does not provide any argument or discussion to the contrary. Page 35 states "...as some coastal experts have indicated that the effects are, at best, neutral". This inclusion of personal opinions based on no data or supporting discussion is not useful or necessary. Throughout the document there appear to be opinions injected by the author(s) without any supporting arguments to justify such opinions or scientific data to support such opinions.

Those opinions discussed in the EA are formed by coastal experts and scientists. Opinions formed by scientists follow the scientific method and are commonly called hypotheses. These hypotheses referenced in the EA explain observed phenomenon at Fire Island and were included as part of the scientific support that was used to generate the Rhizome Rule which bars vehicles from driving within 20 feet of the dunes. The EA has quoted hypotheses based on the knowledge and experience of the scientists who developed them.

An environmental assessment is not a compilation of scientific papers, but rather a document produced to describe a proposed activity or project for which scientific support is then used to determine the potential for environmental impacts under the National Environmental Policy Act.

State and Local Government Plans, Policies, and Actions (pp. 23 to 26)

This section does not include a synopsis of the New York State Tidal Wetlands Land Use regulations. This section should describe the area of Article 25 (Tidal Wetland Act) jurisdiction. Specifically, Article 25 jurisdiction extends 300 feet from any vegetated tidal wetland or apparent high water line either on the bayside or oceanside of Fire Island. This jurisdiction may be limited by the 10' elevation contour on natural gradual slopes or to the top/crest of bluffs and dunes. In addition, jurisdiction can be limited by pre-existing functional man made structures more than 100 feet in length such as bulkheads and seawalls. However, it should be noted that the Commissioner of DEC has previously declared that landowners cannot fill themselves out of DEC jurisdiction. Hence, in areas where new dunes were created by local erosion control districts or private communities these dunes do not limit Article 25 jurisdiction and DEC still asserts jurisdiction landward of these man-made protective features.

Fire Island National Seashore thanks the DEC for the explanation concerning the NY Tidal Wetlands Land Use regulations. We are hopeful that any projects allowed adding fill to the beaches and dunes do not result in similar construction projects that followed the 1993 and 1994 fill projects on Fire Island.

New York State Coastal Erosion Hazard Areas Act (p. 25)

This section should note that in the Town of Brookhaven and Village of Saltaire, the State has delegated the program to these municipal entities.

Fire Island National Seashore thanks the NYSDEC for pointing out that the Town of Brookhaven and Village of Saltaire enforce the Coastal Erosion Hazard Areas Act for their district. We believe Ocean Beach is the local government instead of Saltaire that enforces the CEHA.

Relations to other Plans, Policies and Actions (p. 28 to 29)

On page 29 it is stated that DOI requires that all work within FIIS be consistent with all NPS laws and policies and that includes prohibitions on work in major federal tracts and no southward realignment of the dunes. Because this statement has such a major significance, the exact section of the federal code or NPS law or policy should be cited to support the contention that NPS laws and policies prohibit southward realignment of the dunes.

We have attempted to make our interpretation of the NPS regulations more clearly in the FONSI. Links to the appropriate rules and regulations are found in the FONSI.

Alternative B. Beach Scraping (pp. 32 to 37)

1. In the first paragraph at the top of page 32, the document states that beach scraping "...is considered as routine beach regrading and cleaning by the NYSDEC as a 'Presumably Incompatible Use' under NYSDEC Tidal Wetland Land Use Regulations 6 NYCRR Part 661 for which a permit is required." This statement is incorrect and needs to be corrected. Under Part 661 beach scraping is considered Use Category #23 (beach regrading) in the adjacent area of a tidal wetland which is listed as "Uses Not Requiring a Permit" and Use Category #30 (filling) in the adjacent area of a tidal wetland which is listed as "**Generally Compatible Use - Permit Required**". In addition, the correct term used in the New York State Tidal Wetlands Land Use regulations is "Presumptively Incompatible Use," not "Presumably." However, beach scraping is not listed as a presumptively incompatible use.

Fire Island National Seashore will make the above changes noted in the Errata Sheets in Enclosure 3 to the FONSI.

2. On page 33 in the second paragraph there is a description regarding the current status of the beach scraping permits. It should be noted that new applications for beach scraping were submitted to DEC during the spring of 2003 and new permits were issued on June 27, 2003 for 12 communities. Applications for two communities that previously did not have beach scraping permits (Fair Harbor & Fire Island Pines) are still pending.

Fire Island National Seashore will make the above changes noted in the Errata Sheets in Enclosure 3 to the FONSI.

3. In Table 1 on page 34, a number of standards are presented which would need to be met by any beach scraping project. However, no documentation or references are provided to support or provide a rationale for these criteria. Accordingly, the basis for each criterion should be explained and should be supported by scientific documentation. On page 33 it states that the criteria frames the conditions under which NPS would consider issuing a special use permit but again no justification or rationale for the criteria are provided.

Fire Island National Seashore hired a coastal geomorphologist with over 20 years of experience studying Fire Island. This coastal geomorphologist, Dr. Norbert Psuty, utilized over 20 years of data and experience gathered at Fire Island as well as 2000 LIDAR data gathered in September 2000. The data analyzed to create the criteria described in the EA are being generated in a paper that is currently in press and therefore the reference cannot be given. The new, modified criteria, allow beach scraping to be performed as long as there is 9.0' NGVD at the toe of the dune, and 100' of beach down to 7.0' NGVD, with no elevation within that 100' below 7.0' NGVD. This sloped beach from 9.0' to 7.0' to qualify is a compromise that we felt was reasonable.

4. In Table 1 it appears that the environmental window is proposed to commence on March 1. What is the rationale for prohibiting work between March 1 and April 1 (e.g., is there a species other than the plover which requires protection during the month of March)? Supporting documentation should be provided for doing so.

Fire Island National Seashore biologists as well as biologists across Long Island have noted Piping Plovers present in early March, see the Piping Plover, Atlantic Coast, Revised Recovery Plan, 1996, https://ecos.fws.gov/species_profile/SpeciesProfile?spcode=B079#status. Fire Island's more stringent policy requiring FWS reasonable and prudent measures of monitoring for Piping Plovers beginning on March 1 is meant to ensure consistency with the National Park Service regulations and guidelines requiring the parks to protect natural resources, especially threatened and endangered species. This concern reiterates the requirement to emphasize that these projects will be undertaken within Fire Island National Seashore, a National Park.

5. In Table 1, the USFWS and NYSDEC monitoring protocols mentioned under the monitoring column should be provided in an appendix and referenced here.

The USFWS and National Marine Fisheries Service biological opinions will be attached to the EA in an appendix. Information about this species including typical measures to protect it is available on the US Fish and Wildlife Service website or at the following link: https://ecos.fws.gov/species_profile/SpeciesProfile?spcode=B079. NYSDEC will be made available to communities, contractors, and other interested parties upon request.

6. In Table 1, what is the basis for the project design criteria listed in the last column, especially the 9-foot NGVD elevation requirement? This should be explained and supported by scientific documentation and a thorough discussion.

Fire Island National Seashore hired a coastal geomorphologist with over 20 years of experience studying Fire Island. This coastal geomorphologist, Dr. Norbert Psuty, utilized the 2000 LIDAR data gathered in September 2000. The data analysis is being generated in a paper that is currently in press and therefore the reference cannot be given. The 9' elevation was determined from a review of beach elevations for the portion of Fire Island from the Light House to Watch Hill. The 2000 LIDAR imagery was used to create profiles and the general elevation of the beach was derived from this source. There was very good agreement on the 9' value from this method of data gathering. It is understood that this was a point in time during September when the beach was quite full. It is derived from 122 measurements distributed somewhat evenly from east to west from the Lighthouse to Watch Hill, including the developed and undeveloped

areas proportionately. Fire Island National Seashore has modified the criteria to be more similar to those created by the NYSDEC. The new, modified criteria, allow beach scraping to be performed as long as there is 9.0' NGVD at the toe of the dune, and 100' of beach down to 7.0' NGVD, with no elevations within that 100' of beach below 7.0' NGVD. This sloped beach from 9.0' to 7.0' to qualify is a compromise that we felt was reasonable.

7. In Table 1, what is the basis for the minimum project length of 500 feet listed in the second column? This criterion would restrict beach scraping in some communities.

The 500 feet figure came from discussions with the communities that anything under 500 feet would not be cost effective. We understand this may require the partnering of smaller communities to ensure the 500' threshold is met.

8. The first sentence in the second paragraph on page 34 states that "If the project would enable the current primary dune to then qualify as a secondary dune, then a permit could not be issued with adequate local zoning controls or DEC regulations to ensure that development is not increased as a result." The meaning of this sentence should be clarified. If the intent of the sentence is to indicate that FINS would not approve any beach scraping project that creates a new primary dune (and therefore immediately converts an existing primary dune into a secondary dune, this should be explicitly stated in the text.

Fire Island National Seashore will make the above recommendation a change noted in the Errata Sheets in Enclosure 3 to the FONSI.

9. In the first paragraph at the top of page 36, the document describes similar beach scraping programs in New Jersey and North Carolina and notes how in these states beach scraping is conducted in the fall, winter and early spring. The document goes on to state that harvesting of sand during these time periods is still a "beach build up stage." Please explain how during these time periods beaches are still building as this is not the case here on Long Island where the beach building period is during the late spring through summer.

Fire Island National Seashore took this statement from North Carolina and New Jersey publicly available information. We are not restricting beach scraping to Fire Island to these windows accept when there is the presence of threatened or endangered species, and when there is a presence of these species then the reasonable and prudent measures can be implemented along with any project. This is consistent with what is done in both NC and NJ. It is understood that spring happens earlier in both NJ and NC. However, it is also understood that both states tend to be more affected by strong surf then the coast of Fire Island due to the location of the continental shelf and the prevailing storms being

Northeasters that occur during fall, winter, and spring, generating strong onshore winds at those locations.

Potential Indirect Impacts of Beach Scraping on T & E Species (pp. 102 to 105)

In the third paragraph on page 103, the document states that “manipulation of the beach and dune building could preclude natural habitat formation, including overwash and back-bay foraging areas.” However, this statement should be qualified as socioeconomic considerations and the recognition in FINS legislation that communities will continue to exist that would prevent any activity anyway which would allow overwash to occur in the developed community areas. Also, in these same areas, there is already a lower likelihood of back-bay foraging occurring.

Fire Island National Seashore thanks the NYSDEC for pointing this out.

Alternative C. Beach Nourishment (pp. 37 to 49)

1. In the last paragraph of the Cost-Benefit subsection on page 39 and top of page 40, the document notes that beach grass rhizomes will not develop through more than 3 feet of sand. It would be useful for the document to discuss the amount of time required for a web of rhizomes to develop in new sand.

This is a difficult question to answer. In discussion with the Nantucket Conservation Foundation Jim Lentowski in 1991, he indicated that beach grass is an aggressive plant that can put out as much as six feet of roots in a year. According to the American beachgrass planting guide, NY Sea Grant, Cornell Cooperative Extension in Suffolk County, the grass rhizomes can grow as much as 6'-10' in a year. For scientists who study rhizome development and dune building, it is clear that the rhizomes themselves not only travel down into the sand, but as the grass climbs to the raising sand surface it leaves roots along its path. The way that a solid formidable dune is created is by grass beginning to grow on the beach. As sand blows around the grass it becomes trapped by the blades, or falls between the blades due to the reduced wind caused in the vicinity of the grass blades, and eventually sand may even cover the blades. Since this happens over time, the blades continue to grow upwards, leaving a web of rhizomes in their tracks. Therefore, a solid dune is built not only by rhizomes developing down into a constructed dune but more when rhizomes have begun growth and development in an embryonic dune that naturally develops into a larger dune. This is the NPS basis for the rationale of embryonic dunes being more beneficial than large constructed dunes.

2. The second paragraph on page 40 states that early season sightings of plovers have occurred. More detail should be provided in regard to this discussion including the

early dates on which sightings have occurred and date and location of each early-season sighting including copies of any field reports recorded.

Fire Island National Seashore biologists as well as biologists across Long Island have noted Piping Plovers present in early March. This is documented in the *Piping Plover (Charadrius melodus) Atlantic Coast Population, Revised Recovery Plan*, published by the US Fish and Wildlife Service in 1996. Fire Island's more stringent policy requiring FWS reasonable and prudent measures of monitoring for Piping Plovers beginning on March 1 is meant to ensure consistency with the National Park Service regulations and guidelines requiring the parks to protect natural resources, especially threatened and endangered species. This concern reiterates the requirement to emphasize that these projects will be undertaken within Fire Island National Seashore, a National Park. We must keep in mind that the purpose of the Fire Island National Seashore is to protect the resources first and to allow visitation that does not harm the resources second.

Alternatives Considered but Rejected (pp. 50 to 55)

1. In the discussion of Acquisition and Removal/relocation on pages 52 to 53, the document states that there are 35 developable vacant lots and 120 additional undeveloped lots. The document should further explain why the additional 120 lots cannot be developed and should discuss their physical location.

Between 1997 and 1998, upon initial review for the Fire Island Interim Project by Corps' staff, their real estate staff, in coordination with FIIS, and NYSDEC, found 35 lots north of the project area, but still within the CEHA that would have benefited by the placement of that proposed renourishment project. Many of those lots are already constructed upon, and it is believed there are 10 or so vacant lots remaining. All but one or two of these lots were located in the Fair Harbor/Dunewood reach.

The 120 additional lots are located on the beach berm or below MLW, so they would have to be either acquired in fee or by easements, to implement the Fire Island Interim Project, or any other fill project that would be undertaken with public money. Most of these lots are located on the west end of the island, where the area is platted below MLW. Most of the eastern community oceanfront lots have MHW as their southern boundary descriptions. Even so, placing sand with public expenditures would, at the very least, require the purchase of easements from those property owners.

There are approximately 380 developed lots within the CEHA.

2. In the discussion of Federal zoning standards on page 53 to 55, the text of the Federal statute which indicates how NPS enforces compliance through condemnation

should be provided. Furthermore, the document should indicate how NPS determines if a project is in compliance with Federal zoning and if it has enforced compliance via condemnation. If NPS has not undertaken enforcement action when a violation has occurred, the reasons for not doing so should be explained as well. Finally, this section should provide a discussion of the various Federal zoning districts on Fire Island, especially the Dune District and should indicate how the Dune District does or does not correspond to the CEHA boundaries.

The federal statute to acquire properties is located in U.S.C. Title 16, Section 459e. Fire Island National Seashore bases its determination of compliance to the statutes by reviewing and commenting on all building permit applications, particularly those that are requests for variances under local law. If a building permit application meets the criteria spelled out in the 36 CFR Part 28 - Federal Zoning Standards for Fire Island National Seashore, which is based on the 459e, then the property is deemed exempt from the Secretarial authority to acquire it by condemnation. If a property is inconsistent with the federal Zoning Standards, then a letter is issued to the town and a copy to the applicant informing him/her that if the property is built as proposed, it will lose its exemption and become subject to condemnation.

Loss of exemption from the acquisition authority of the Secretary of the Interior does not trigger the park service to immediately go in and acquire that property. When, how, and if the property is acquired is up to the discretion of the service, and can be accomplished at any time, if the inconsistency is not remediated. The Department of the Interior acquires properties based on priorities that were established, reviewed and approved by DOI, via the Land Protection Plan. Additionally, acquisition can only be accomplished if money is appropriated for such purchase. Fire Island National Seashore has not condemned a property on Fire Island since the 1970s, primarily due to both money constraints and political pressures. However, inconsistent properties are still subject to condemnation, whether acquired or not. We work closely with the towns to encourage their denial of inconsistent proposals. These efforts are met with varying degrees of success.

The Dune District is measured from the crest of the primary dune, mapped in 1976 and adopted by Congress in 1978. It has never been updated, leaving the district seaward of the dune it is intended to protect in most locations. The CEHA is defined by the landward (northern) toe of the primary dune (on Fire Island), with a 25 feet setback from that dune toe. The CEHA is 1) a more recent map, being mapped and approved in 1998 and the law promulgated in 2001, and therefore a more current guideline from which to base a planning and building setback, and 2) more encompassing than the Dune District, being defined using a more northern margin as its defining point. Where the Dune District may only

incorporate the first row of oceanfront properties, the CEHA extends back to the third or fourth row in some locations.

Potential Adverse Effects of No action on T & E Species

On page 97, in the discussion of adverse impacts on TE species if no action is taken, the following statement is made: "The potential direct adverse impacts of flooding from more intensive overwashes or breach could cause adult and chick mortality or loss of eggs and habitat." For the record, there would be NO anticipated adult mortality due to a breach or overwash. Adults have the ability to fly. They would avoid the water and, assuming the event was prior to July 1, re-nest. Re-nesting would effectively replace most of the losses to eggs/chicks, especially if the resulting habitat was higher quality (as is predicted by the literature). This exact statement has appeared in Army Corps documents before and has been used to praise a project as a means of preventing animal mortality. The argument is not accurate or appropriate. The creation of sink habitat is not likely to happen if the overwash areas are not adjacent to nesting areas. These areas would be frequented by adult birds that can fly away from predators/human disturbance. It is only the eggs and chicks that are susceptible, and they would not be present on overwash fans under the decks of homes. Again, a means of using the endangered species as a reason for doing the work.

Fire Island National Seashore thanks the NYSDEC for these observations. We believe that the catastrophic event that would lead to a breach, could also lead to adult mortalities, especially in and near communities where large debris could result in flying objects as well as floating debris. However, we also agree that the likelihood of such a storm during the breeding season of the piping plovers is very low.

Assessment of the Potential Indirect Impacts of Beach Nourishment on T & E Species (pp. 109 to 114) In the fifth paragraph on page 109, the document states that "beach and dune building could preclude natural overwash processes..." However, as stated above, this statement should be qualified as socioeconomic considerations and the recognition in FINS legislation that communities will continue to exist would prevent any activity anyway which would allow overwash to occur in the developed community areas. Also, in these same areas, there is already a lower likelihood of back-bay foraging occurring.

The natural overwash process produces habitat for the listed species at Fire Island National Seashore. If the communities were set back from an embryonic dune then small overwashes could be permitted allowing habitat to form naturally. This statement in the EA does not take into account back bay foraging and was a general statement concerning nesting for plovers as well as habitat for amaranth.

C.G. Spies, private citizen, Ocean Beach

Mr. Spies provided a letter dated July 4, 2003 that provided mild support to the proposed projects. He points out that it may be beneficial to move sand by wind machine rather than heavy equipment to prevent rhizome damage, and that it may be better to reduce the use of sand fencing and watering of planted dune grasses.

Fire Island National Seashore thanks Mr. Spies for his input.

Sierra Club, Laurie Farber, Long Island Group Chair

The Sierra Club, Long Island Chapter, submitted a letter dated July 6, 2003. In the letter Ms. Farber stated, "I was quite pleased to see the thoroughness of this EA. I believe the Park Service is heading in the right direction with its emphasis on restoring natural processes on the beach.

"I am quite aware of the continuing pressure from the communities to do beach scraping and renourishment, but I hope you'll be able to keep this to a minimum. Our priority would be a buy-out plan based on the Coastal Erosion Hazard Area. We think this would go the longest in preserving or restoring the natural character of the beach. We would certainly strongly oppose any "hard" structures.

"Of particular concern in both beach scraping and renourishment is the impact on the invertebrates in the borrow areas and the resulting impacts on the vertebrates (such as shorebirds, including Piping Plover) that feed upon them. Those beaches that have been repeatedly impacted by these kinds of projects have considerably less life on them than natural beaches. Frequently, the sand used for renourishment is coarser and, therefore, doesn't stay in place very long. The wind and water act upon it differently and there isn't a natural community of plants, roots, and invertebrates to hold it all together.

"We hope you will examine proposals carefully and approve them sparingly. We'd very much like to work with you towards a healthy beach system."

Fire Island National Seashore thanks the Sierra Club and Ms. Laurie Farber for her comments and continued support. A permit condition for sampling invertebrates will be required for beach nourishment projects.

Mike Romanelli, private citizen, Cherry Grove

Mr. Romanelli provided the one letter objecting to the beach nourishment and scraping projects. In his letter to the Superintendent he states, "Dave (Spirtes) ... I know that

FINS is considering new environmental assessment statement and I would like to call your attention to certain problems with dredging sand.

“You were not appointed when Fire Island Pines did its last ocean dredging project but those of us who saw it had several concerns. First of all the dredges were well within 1/2 mile of shore when they were supposed to be further out than that. One member of our community took his boat out and measured the distance using range finders. This raises the concern that nobody is monitoring the projects to see that they are operating within their permits.

“Secondly, the dredge seemed to run out of sand early in the process and began pumping gravel, seashells, live clams and finally clay up on the beach. Clay is the substrate that Fire Island sits on. Digging into the substrate is like digging into the foundation of a building. Whereas the ocean pushes large amount of sand around I don't know of any mechanism for replenishing the clay substrate. Large scale dredging projects might result in damaging the long term stability of the island.

“Digging into the clay layer raises the question as to how much sand is actually out there, or whether or not the dredge just sits in one spot and digs a deeper hole than permitted. Since the dredge dug up clay, we think that permits should not be granted based upon 1996 surveys of the amount of sand that supposedly is in the borrow area.

“I think that those who want to dredge should have a new survey done, to insure that the volume of sand to be removed is really there. They also should provide resources to monitor the process and insure that they operate within their permit. If not they will ignore all the safeguards that might be put in place to mitigate long term environmental damage.”

Fire Island National Seashore thanks Mr. Mike Romanelli for his comments. We understand the concerns and will help ensure the permittees are held to comply with their permits. This will be done in concert with the NYSDEC and the ACOE. We are sure that the construction companies will do all they can to ensure only sand is pumped onto the beaches, since this is what the communities will be paying for and what must be done to comply with the permits. Some coarse sand, shells, and small organisms may be pumped in with the sand and water slurry. The borrow area is out of the NPS jurisdiction but we will help monitor the proper use of the permitted area. Any vigilance by citizens within the communities during the projects is very much appreciated.

Fire Island Ecology, James D. Seymour, Executive Director

Fire Island Ecology, Executive Director, James Seymour submitted a letter dated July 7, 2003. In that letter Mr. Seymour expressed appreciation to Fire Island National Seashore for the “superb” report. The letter goes on in support of the EA and the preferred alternative. It concludes with this important point:

“Finally, we would oppose any scraping or nourishment unless great weight is paid to limiting future building on forward dunes. We note with approval that “no project can be approved unless adequate mechanisms are in place to prevent currently unbuildable lots from qualifying as buildable ones” (p. 128). Our willingness to go along with Alternative D (rather than press for Alternative A) is conditional upon the rigorous implementation of this principle.

Fire Island National Seashore thanks Mr. James Seymour and the Fire Island Ecology for continued support. As previously addressed in its response to the Nature Conservancy, the NPS will impose permit conditions to restrict the building of structures behind beach scraping and nourishment projects and to ensure that permittees have the authority and accountability for complying with permit conditions.

Land Use Ecological Services, Inc. Charles W. Bowman

Land Use Ecological Services, Inc., Mr. Charles Bowman submitted a letter dated July 7, 2003. In this letter he agreed with the alternative but questioned the criteria for scraping developed including the schedule.

Fire Island National Seashore has taken these comments into consideration and redesigned the criteria. The new criteria require 100’ of beach between the dune toe at an elevation of 9.0’ NGVD and the end of the beach berm at 7.0’ NGVD, with no portion of this beach below 7.0’ NGVD. The timing window for beach scraping remains the same, between July 15 and August 15, and requires proper monitoring and implementation of US Fish and Wildlife reasonable and prudent measures. Fire Island National Seashore approves of utilizing American beachgrass (*Ammophila breviligulata*) from the USDA, and agrees that the common variety utilized here is called “Cape.” Please see the following website for availability of local genetic stock and for planting tips:

<http://www.seagrass.sunysb.edu/Pages/FactSheets-PDF/AmericanBeachgrass.pdf>.

ERRATA SHEET TO THE NATIONAL PARK SERVICE ENVIRONMENTAL ASSESSMENT FOR THE SHORT TERM COMMUNITY STORM SURGE PROTECTION PLAN, JUNE 2003

As learned from internal review, public, and interagency comments, the following changes are hereby made to the Environmental Assessment:

1. In the first paragraph at the top of page 32, the document states that beach scraping "...is considered as routine beach regrading and cleaning by the NYSDEC as a 'Presumably Incompatible Use' under NYSDEC Tidal Wetland Land Use Regulations 6 NYCRR Part 661 for which a permit is required." This statement is therefore corrected. Under Part 661 beach scraping is considered Use Category #23 (beach regrading) in the adjacent area of a tidal wetland which is listed as "Uses Not Requiring a Permit" **and** Use Category #30 (filling) in the adjacent area of a tidal wetland which is listed as **"Generally Compatible Use - Permit Required"**.
2. On page 33 in the second paragraph there is a description regarding the current status of the beach scraping permits. New applications for beach scraping were submitted to DEC during the spring of 2003 and new permits were issued on June 27, 2003 for 12 communities. Applications for two communities that previously did not have beach scraping permits (Fair Harbor & Fire Island Pines) are still pending.
3. The first sentence in the second paragraph on page 34 states that "If the project would enable the current primary dune to then qualify as a secondary dune, then a permit could not be issued with adequate local zoning controls or DEC regulations to ensure that development is not increased as a result." National Park Service is therefore clarifying that the intent of the sentence is to indicate that FINS would not approve any beach scraping project that creates a new primary dune.