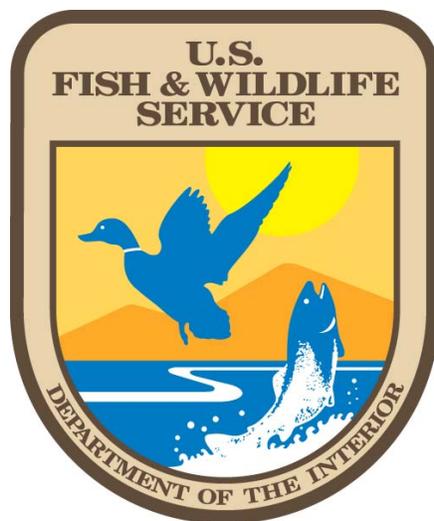


STREAMLINED BIOLOGICAL OPINION
for
THE U.S. ARMY CORPS OF ENGINEERS 2007 LONG BRANCH
PROJECT AREA BEACH RENOURISHMENT OF LONG BRANCH CITY,
INCLUDING SEVEN PRESIDENTS OCEANFRONT COUNTY PARK,
MONMOUTH COUNTY, NEW JERSEY



Prepared for:
U.S. Army Corps of Engineers
New York District
New York, New York 10278-0090

May 2007



United States Department of the Interior



In Reply Refer to:

2006-F-0073

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MAY 22 2007

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U.S. Army Corps of Engineers
26 Federal Plaza, Jacob K. Javits Federal Building
New York, New York 10278-0090

Attn: Leonard Houston, Chief
Environmental Analysis Branch

Dear Colonel Tortora:

This constitutes the U.S. Fish and Wildlife Service's (Service) Streamlined Biological Opinion (SBO), prepared in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA), on the effects of the U.S. Army Corps of Engineers, New York District's (Corps) proposed 2007-2009 beach nourishment cycle of Long Branch City, including Seven Presidents Oceanfront County Park (2007 Long Branch Project Area). This project was included in the Service's 2002 Programmatic Biological Opinion (PBO), Monmouth County, New Jersey to ensure the protection of the federally listed (threatened) piping plover (*Charadrius melodus*) and seabeach amaranth (*Amaranthus pumilus*).

This SBO is based on information documented in the PBO and additional information provided by the Corps. A complete administrative record of this consultation is on file in the Service's New Jersey Field Office.

CURRENT HABITAT STATUS OF THE PROJECT AREA

Within the 2007 Long Branch Project Area, the unraked beaches in Seven Presidents Oceanfront County Park (Park) provide the most suitable habitat for federally and State-listed beach nesting birds, and seabeach amaranth within Section 1 of the Corps' Beach Erosion Control Project (BECP). Within this area, existing dunes are not terraced and large sandy areas of sparse vegetation are present. However, without maintenance of the beach profile (*i.e.*, gentle slope, wide berm) and vegetation control, suitable habitat within the Park will degrade similarly to the habitat conditions recently observed at Monmouth Beach and Sea Bright.

The 2006 seabeach amaranth surveys indicate a decline in total plant numbers and habitat suitability throughout the BECP. This decline in habitat suitability should be addressed with the 2007 Long Branch Project Area renourishment, and future renourishments of Monmouth Beach and Sea Bright.

Project area beaches have become largely unsuitable to support seabeach amaranth, or the State-listed (endangered) least tern (*Sterna antillarum*). The decline in habitat suitability is most likely due to natural succession. Other factors are unlikely; local officials have cooperated to reduce mechanical beach raking within the BECP (2007 Long Branch Project Area, Monmouth Beach, and Sea Bright) and no major changes have occurred in the levels or types of recreational use since 2002.

Outside of raked recreational centers, all beaches in Monmouth Beach and Sea Bright have changed through succession to wide, stabilized, terraced profiles with a narrow flood-prone lower beach, which is flooded too frequently to allow establishment of seabeach amaranth. Area beaches typically include a sharp steep incline leading to an upper terrace vegetated with a dense, mature, dune plant community that is incompatible with seabeach amaranth. These areas also include noticeable expanses of the invasive, non-native Asiatic sand sedge (*Carex kobomugi*).

Natural succession of the project area beaches is also likely to reduce the suitability of nesting habitat for piping plovers. Nesting plovers require a band of sparse vegetation, especially on beaches without overwash areas (Fraser, 2006). Such areas are being lost as dunes stabilize and vegetation continues to encroach on Monmouth Beach and Sea Bright beaches.

SERVICE COMMENTS

Development of Dune and Vegetation Management Guidelines

As discussed at our July 27, 2006 meeting, the Corps agreed to provide partial funding that would assist in the development of the *Dune and Vegetation Management Guidelines for New Jersey Beaches that Support Listed Species* (Dune Guidelines) (SBO Conservation Measure #16). The Dune Guidelines will serve as a technical reference to assist local beach managers in establishing and maintaining dunes that provide habitat for listed species and to assist the Corps in designing and constructing beach profiles that maximize habitat suitability for piping plovers and seabeach amaranth. The Corps also agreed to partially fund Asiatic sand sedge surveys (*Carex kobomugi*) (SBO Conservation Measure #17), to document the extent of this species' invasion in the project area.

Regrading of Monmouth Beach South in Conjunction with 2007 Long Branch Renourishment Project

The enclosed SBO includes a discretionary conservation recommendation to improve degraded habitats within Monmouth Beach South in conjunction with the 2007 Long Branch nourishment project (SBO Conservation Recommendation #1). The Service suggests regrading and restoration at Monmouth Beach South for several reasons in addition to its proximity to the 2007 Long Branch Project Area. First, Monmouth Beach South has not supported nesting plovers

since 2002, and only minimal numbers of seabeach amaranth plants since 2004. Therefore, a restoration attempt in this area would entail little risk to listed species. In addition, Monmouth Beach South offers high restoration potential. At its peak, the area supported over 700 seabeach amaranth plants, a highly productive pair of nesting plovers, and a least tern colony. Monmouth Beach South is also connected to high-quality habitat at the north end of the Park via a designated no-rake zone in Long Branch.

The Service is aware that the Corps' authorized design does not include a dune. We also understand local and State objectives to establish and protect dunes. The Service will consider a regrading plan that includes a dune zone, which is narrower than existing conditions in order to restore habitat for listed species. A gently sloping, sparsely vegetated, upper beach zone that normally is not flooded at high tide would benefit piping plovers, least terns, and seabeach amaranth.

The Service appreciates the Corps' efforts to explore the feasibility of restoration in Monmouth Beach during the 2007 Long Branch renourishment (SBO Conservation Recommendation #1). If restoration is feasible in the future, the Service is available to convene a site visit among various agencies to discuss and help formulate a specific regrading plan. Key participants would include the Corps, the Service, the New Jersey Endangered and Nongame Species Program, the New Jersey Office of Engineering and Construction, the New Jersey Division of Land Use Regulation, and Monmouth Beach Borough.

The regrading design can draw on similar plans proposed for the U.S. Coast Training Center in Cape May and at The Nature Conservancy's Cape May Migratory Bird Refuge. The results of regrading and restoration efforts at Monmouth Beach South and these other two locations, as well as the proposed Dune Guidelines, will help guide restoration techniques. Hopefully restoration can eventually expand to other parts of Sea Bright and Monmouth Beach, and other listed species habitats in the State that have been lost or impaired by similar successional processes.

Incorporation and Responses to Corps Comments

The lettered comments below correspond to the Corps May 3, 2007 comments on the draft SBO and reflect current information based on communication between the Corps and the Service since the February 5, 2007 issuance of the draft SBO.

Corps comments regarding the cover letter: The Service has adjusted the SBO cover letter to reflect that the Corps will provide partial funding to assist in the development of the Dune Guidelines and Asiatic sand sedge surveys.

Corps comments A and B on the SBO: The Service has adjusted the project history and construction schedule to reflect information since issuance of the draft SBO.

Comments C, D, and E: The Service has incorporated the recommended minor changes into Conservation Measures (Nos. 6, 8, and 15) in the SBO and the Attachment.

Comment F and N: The Service recognizes the Dune Guidelines are currently under development and has incorporated the following sentence to Conservation Measure Nos. 16 and 17 in the SBO and the Attachment. The Dune Guidelines are currently being developed and will be agreed upon by the interagency team of federal and State agency representatives before implementation.

The Dune Guidelines final title has yet to be determined, but will reflect guidelines for both federally and State listed species occurring on New Jersey beaches.

Comment G: In Table 1, Sea Bright South data are included under Monmouth Beach North (refer to footnote 1).

Comment H: The Service has not included the addition of footnote No. 4 into Table 2. The Service's Atlantic Coast productivity recovery goal was included in the Species Status Section (Section III, B of the SBO).

Comment I: The Service has added an additional paragraph to reflect that while past shoreline stabilization (*i.e.*, hard structures) of the coastline has interfered with formation and maintenance of natural habitats for piping plover and seabeach amaranth, subsequent renourishment events throughout the BECP (including the 2007 Long Branch Project Area) can be expected to benefit piping plovers and seabeach amaranth by maintaining sandy beach habitats over the life of each project.

Comments J and K: The Service recognizes the Corps' concurrence with the Effect of the Take (Section IV, C of the SBO) and the Reasonable and Prudent Measures with implementing Terms and Conditions (Section IV, D of the SBO).

Comment L: The Service appreciates the Corps efforts to explore the recommendation of restoration efforts in Monmouth Beach.

Comment M: The Service recognizes the Corps' concurrence with Conservation Recommendations Nos. 2 and 3.

Comment O: The Service does not have quantitative data of beach profiles to provide to the Corps at this time as an adaptive management practice to benefit federally listed species. However, the Service requests that the Corps work with the Service and any other relevant parties to determine the quantitative data necessary to adjust the beach profile.

CLOSING

The Service appreciates the Corps' efforts to protect federally listed species from the ongoing implementation of the BECP. If you have any additional questions or concerns regarding this

consultation, please contact John Staples or Stephanie Egger of my staff at (609) 646-9310, extensions 12 and 47, respectively.

Sincerely,



Timothy Kubiak
Acting Supervisor

Enclosure

LITERATURE CITED

Fraser, J. 2006. Piping plover nesting habitat characteristics with recommendations for artificial habitat creation on the Atlantic Coast (in-press). Virginia Tech, Department of Fisheries and Wildlife Sciences. Blacksburg, Virginia. 40 pp.

STREAMLINED BIOLOGICAL OPINION
for
THE U.S. ARMY CORPS OF ENGINEERS 2007 LONG BRANCH
PROJECT AREA BEACH RENOURISHMENT OF LONG BRANCH CITY,
INCLUDING SEVEN PRESIDENTS OCEANFRONT COUNTY PARK,
MONMOUTH COUNTY, NEW JERSEY

Prepared for:
U.S. Army Corps of Engineers
New York District
New York, New York 10278-0090

Prepared by:
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Preparer: Stephanie Egger
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May 2007

TABLE OF CONTENTS

| | Page |
|--|------|
| LIST OF TABLES | ii |
| APPENDIX A | ii |
| I. INTRODUCTION | 1 |
| II. CONSULTATION HISTORY | 1 |
| III. BIOLOGICAL OPINION | 3 |
| A. DESCRIPTION OF THE PROPOSED ACTION | 3 |
| 1. Project Overview and Schedule | 3 |
| 2. Conservation Measures | 4 |
| B. SPECIES STATUS | 9 |
| 1. Seabeach Amaranth Transplants | 9 |
| 2. Regional Decline of Seabeach Amaranth..... | 10 |
| 3. Piping Plover | 10 |
| C. ENVIRONMENTAL BASELINE | 10 |
| 1. Species Status Within the Project Area | 10 |
| a. Seabeach Amaranth..... | 10 |
| b. Piping Plover | 11 |
| 2. Factors Affecting the Species Environment | 14 |
| D. EFFECTS OF THE ACTION | 14 |
| 1. Habitat Succession | 15 |
| 2. Destruction of Seabeach Amaranth | 16 |
| 3. Reduction of Piping Plover Prey Base | 16 |
| E. CONCLUSION | 16 |
| IV. INCIDENTAL TAKE STATEMENT | 17 |
| A. DEFINITION OF INCIDENTAL TAKE | 17 |
| B. EXTENT OF ANTICIPATED TAKE | 17 |
| C. EFFECT OF THE TAKE | 18 |
| D. REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS | 18 |

| | | |
|-------------|---|-----------|
| V. | CONSERVATION RECOMMENDATIONS | 19 |
| VI. | REINITIATION – CLOSING STATEMENT | 20 |
| VII. | REFERENCES..... | 20 |
| A. | LITERATURE CITED..... | 20 |
| B. | PERSONAL COMMUNICATION | 21 |

LIST OF TABLES

Table

| | | |
|----|--|----|
| 1. | Seabeach Amaranth Data for Section I of the BECP Project Area, 2000-2006 | 12 |
| 2. | Piping Plover Nesting Data for Section I of the BECP Project Area, 1997-2006 | 13 |

APPENDIX A

**SUMMARY OF BINDING PROVISIONS OF THE STREAMLINED BIOLOGICAL
OPINION FOR THE 2007 LONG BRANCH PROJECT AREA BEACH RENOURISHMENT
OF LONG BRANCH CITY, INCLUDING SEVEN PRESIDENTS OCEANFRONT COUNTY
PARK**

I. INTRODUCTION

This constitutes the U.S. Fish and Wildlife Service's (Service) Streamlined Biological Opinion (SBO), prepared in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA), on the effects of the U.S. Army Corps of Engineers, New York District's (Corps) proposed 2007 Long Branch Project Area beach renourishment for Long Branch City, including Seven Presidents Oceanfront County Park (Park), Monmouth County, New Jersey.

The Corps proposes the subject beach renourishment as a regularly scheduled component of the Atlantic Coast of New Jersey, Sandy Hook to Barnegat Inlet, Beach Erosion Control Project (BECP). Sections I and II of the BECP provide a 50-year program of beach nourishment for a 21-mile section of New Jersey's Atlantic coast from Sea Bright Borough to Manasquan Borough, Monmouth County (Project Area). Initial nourishment in Section I (Sea Bright to Deal) began in 1994; initial nourishment in Section II (Asbury Park to Manasquan Inlet) began in 1997.

In September 2002, the Corps and the Service completed programmatic formal consultation for all remaining, planned BECP activities for all of Sections I and II through 2053. The Service's September 2002 Programmatic Biological Opinion (PBO) assesses project effects on the federally listed (threatened) piping plover (*Charadrius melodus*) and seabeach amaranth (*Amaranthus pumilus*) over the remaining life of the BECP, and establishes a framework for streamlined consultation prior to each planned renourishment.

This SBO is based on information documented in the PBO, letters received by the Service's New Jersey Field Office (NJFO) from the Corps on June 28, 2006, August 21, 2006 and November 13, 2006, e-mails, telephone discussions and meetings with Corps staff, and field investigations. A complete administrative record of this consultation is on file with the Service's NJFO.

II. CONSULTATION HISTORY

- | | |
|---------------|--|
| June 1, 2006 | The Corps provided the Service with a map of the proposed renourishment of Long Branch during a field investigation. |
| June 28, 2006 | The Service received the Corps' May 17, 2006 letter requesting to reinstate streamlined consultation for the 2007 Long Branch Project Area renourishment pursuant to the PBO. |
| July 21, 2006 | Via letter, the Service recommended the Corps adopt specific Conservation Measures consistent with the PBO as binding provisions of the 2006 streamlined consultation. |
| July 27, 2006 | The Service, Corps, and the New Jersey Endangered and Nongame Species Program (ENSP) met in Monmouth Beach, New Jersey to discuss the Project Area and timing of the 2007 renourishment of Long Branch and the recommended adoption of the Conservation Measures as binding provisions for consistency with the PBO. |

| | |
|-------------------|---|
| July 28, 2006 | Via electronic mail, the Corps indicated general agreement with the Conservation Measures discussed in the July 21, 2006 letter from the Service and the July 27, 2006 meeting in Monmouth Beach. The Corps revised and extended the time frame of the proposed action through March 1, 2008 with the area of activity unchanged. The Corps intends to incorporate the Conservation Measures into the bid package and to meet with the contractor to discuss these Conservation Measures before any work takes place. |
| July 28, 2006 | Via electronic mail, the Service recommended the Corps officially adopt all of the Conservation Measures contained in the Services' July 21, 2006 letter, and noted the extended schedule. The Service also suggested contractors should be made aware of all restrictions before bidding since the SBO may contain Reasonable and Prudent Measures (RPMs) and Terms and Conditions, as well as Conservation Measures, which may affect the actual implementation of the work. |
| August 21, 2006 | The Service received the Corps' August 5, 2006 letter formally adopting all Conservation Measures listed in the Service's July 21, 2006 letter. The Corps will include the contents of the Service's July 21, 2006 letter in its plans and specifications document, which is part of the overall bid package for contract solicitation. |
| August 24, 2006 | Via electronic mail, the Corps confirmed the package to solicit bids had gone out to the public, including the contents of the Service's July 21, 2006 letter. |
| October 12, 2006 | Via personal communication (Leite, pers. comm., 2006), the Corps informed the Service that initial bid package was canceled and will be re-solicited in the 2 nd Quarter FY-2007. The Service requested this new information be sent to the Service in a formal letter. |
| November 13, 2006 | The Service received the Corps' November 8, 2006 letter updating the project schedule for the beach nourishment project for Long Branch. Construction is anticipated to begin in the 3 rd and 4 th quarter of FY-2007 depending on FY-2007 funding. Renourishment will continue until FY-2009 based on future federal funding. |
| February 5, 2007 | The Service issued the draft SBO to the Corps. |
| May 3, 2007 | The Corps provided comments on the draft SBO. |
| May 2007 | The Service issued the final SBO to the Corps. |

III. BIOLOGICAL OPINION

A. DESCRIPTION OF THE PROPOSED ACTION

1. Project Overview and Schedule

The proposed renourishment of Long Branch City, including Seven Presidents Oceanfront County Park is consistent with the overall BECP project as described on pages 13 to 21 of the PBO. The Corps proposes to build the authorized construction template using renourishment material from the offshore Sea Bright borrow area. Renourishment material will be transported from the borrow area via hopper dredge then pumped onto the renourishment area through a temporary pipeline and graded with earth moving material (Burlas, pers. comm., 2006).

The Corps proposes to place approximately 1 million cubic yards of sand with the maximum limits of the beach renourishment from 526,000 N – 2,191,000 E to 543,000 N – 2,193,000 E. This fill covers approximately 3 miles of Long Branch City from the northern municipal border south to Lake Takanassee along the entire beach profile from the landward limit (*e.g.*, boardwalk, dune) to the intertidal zone.

The construction schedule is as follows:

| | |
|--|--|
| 3 rd quarter FY-2007 | The Corps resolicited bids for the renourishment work. |
| September 1, 2007 through March 15, 2009 (applies to the months of September to March only within 2007-2009) | Outside piping plover nesting areas, the Corps conducts beach renourishment in accordance with all binding RPMs, Terms and Conditions, and Conservation Measures of the SBO (consistent with the PBO). |
| September 1, 2007 through March 15, 2009 (applies to the months of September to March only within 2007-2009) and/or After fledging of the last piping plover chick of the 2007 nesting season in the Project Area through March 15, 2009 | Within piping plover nesting areas, the Corps conducts beach renourishment in accordance with all binding RPMs, Terms and Conditions, and Conservation Measures of the SBO (consistent with PBO). |

2. Conservation Measures

For the 2007 Long Branch Project Area beach renourishment, the Corps will implement the following binding 18 Conservation Measures. Conservation Measures Nos. 1, 2, 3, 4, 5, 6 are consistent with the PBO. Conservation Measures 7 through 15 below are modified from RPMs and Terms and Conditions of the PBO. Conservation Measures 16 through 18 are newly developed for the project. A list of the Conservation Measures is reproduced in the Appendix, which may be detached for use in the field.

1. Continuing Consultation with the Service. The Corps will not commit any funds until the SBO is finalized (Burlas pers. comm., 2006). [Addition to PBO Conservation Measure #1 p. 22]
2. Fill Material and Placement. The Corps will finish placement areas to approved and previously constructed grade, except as noted under Conservation Measure #18 of the SBO. [Addition to PBO Conservation Measure #2 p. 22]
3. Endangered Species Management Program (ESMP). The Corps will work with the non-federal project sponsor, the New Jersey Department of Environmental Protection's (NJDEP) Bureau of Coastal Engineering, Office of Engineering and Construction (OEC), to apply OEC's ongoing financial support of the ESMP toward the required non-federal share of the BECP project cost, in order to maintain clear federal involvement with the ESMP. [Addition to PBO Conservation Measure #3 p. 22]
4. Educational Signs. The Corps will provide for the development and production of a seabeach amaranth interpretive sign for the BECP Project Area. The Service is currently developing (with existing Corps funding provided through the ESMP) a seabeach amaranth interpretive sign that will be produced by the Corps. [Addition to PBO Conservation Measure #4 p. 23]
5. Seasonal Restrictions to Protect Piping Plovers
 - a. Definition of Piping Plover Nesting Areas. Nesting areas will be defined according to page 24 of the PBO as "1000 meters on either side of a site...currently occupied by courting, territorial, incubating, or brood-rearing piping plovers, nests with eggs, or unfledged chicks, or any site so occupied within the most recent three nesting seasons (including the current one if territories have already established for the year)."
 - b. Work Within Nesting Areas. The Corps will conduct all work in piping plover nesting areas between September 1, 2007 to March 15, 2009, and/or after fledging of the last piping plover chick of the 2007 nesting season in the Project Area through March 15, 2009 (Burlas, pers. comm., 2006). The timing restriction applies to the months of September to March in the years 2007-2009. No work will be conducted within piping plover nesting areas during the nesting season except that an occasional non-motorized intrusion may occur with written Service

concurrence and field oversight as needed (*e.g.*, to allow entry by pedestrian surveyors or engineers). The Service may issue blanket concurrence for certain categories of non-motorized intrusion into nesting areas, provided the intrusion(s) are no more likely to disturb nesting plovers than routine recreational and beach maintenance activities currently permitted in the area. In no case will any such non-motorized intrusion extend into areas fenced for the protection of listed species. [Addition to PBO Conservation Measure #5 p. 23-27]

- c. Work Outside Nesting Areas. The Corps may elect to continue renourishment work after March 15 outside of nesting areas (should unforeseen delays occur). If work (outside nesting areas) is planned during the nesting season (March 15 to September 1 or fledging of the last chick), the Corps will notify the Service at least 1 week prior to beginning work. Between March 15 and July 1, any proposed work will commence only if a Service-approved field monitor has detected no piping plovers in the sand placement area after 4 days of surveying, throughout the full tidal cycle, in the week immediately preceding the start of work. If any piping plovers are detected, work will not be conducted within 1,000 meters of the bird(s) until the monitor can determine whether the plovers are migrants, or whether they may establish breeding territories. With written Service concurrence, work may proceed or resume if no piping plovers have been observed for 2 weeks following an observation, or if no breeding behavior has been observed by July 1. If any breeding behavior is observed, the area will be classified a nesting area as defined above.

6. Conservation Measures to Protect Seabeach Amaranth

- a. Surveys. The Corps will provide, for any project activities scheduled to occur during the growing season of seabeach amaranth (May 15 to December 1), a Corps or contract biologist, botanist, or designated representative to survey the Project Area for this species twice a month from July 1 to October 1 (2007-2008), and also immediately prior to (within 5 days of) the start of any construction or other work. Plant locations, numbers, and sizes will be recorded and reported to the Service. [Addition to PBO Conservation Measure (6)(i) p. 27]
- b. Outside the Sand Placement Construction Template. The Corps will avoid impacts to all seabeach amaranth plants not directly within the sand placement construction template. [Modified from PBO Conservation Measure (6)(ii) p. 27]
- (1) The Corps will erect symbolic fencing around all seabeach amaranth plants in the work area(s) outside the construction template, including a 3-meter protective buffer. [Modified from PBO Conservation Measure (6)(ii) p. 27]
 - (2) The Corps will designate staging areas and access routes for vehicles and personnel to avoid seabeach amaranth occurrences. Fenced plants will not be disturbed. [Modified from PBO Conservation Measure (6)(ii) p. 27]

- c. Within the Sand Placement Construction Template. The Corps will implement salvage measures and documentation within the construction template.
 - (1) The Corps will work with the Service to develop, implement, and monitor experimental transplantation practices for any plants directly within the construction template. If successful, transplantations might permit salvaged plants to contribute to the annual seed crop. [Modified from PBO Conservation Measure (6)(iii) p. 27]
 - (2) The Corps will document the number of plants destroyed by direct sand placement and the number transplanted to avoid destruction, and will report this information to the Service.
 - d. Sand Scraping. The Corps will work closely with the Service to develop, implement, and monitor experimental “sand scraping” practices to stockpile the top layer of sand (which likely contains a seabeach amaranth seedbank) before renourishment and to re-spread this sediment following construction. [Modified from PBO Conservation Measure (6)(iv) p. 28]
- 7. Pipeline Placement and Equipment Staging. The Corps will not place pipelines or other renourishment-related equipment within piping plover nesting areas during the nesting season. Any material staged or stored within nesting areas will be removed by March 15, 2007 and by March 15, 2008, and 2009 if the project continues after the 2007 nesting season (Burlas, pers. comm., 2006). The Corps will avoid direct impacts to seabeach amaranth plants (outside the sand placement template) by locating pipelines and staging/storage areas away from marked plant locations. [Newly adopted Conservation Measure (Modified from PBO RPM #2, Terms and Conditions #2 p. 105)]
 - 8. Beach Profile Activities. The Corps will not conduct beach profiling activities (unless agreed to by the Service) within piping plover nesting areas during the nesting season and will avoid direct impacts to seabeach amaranth plants if such activities take place during the growing season. [Newly adopted Conservation Measure (Modified from PBO RPM #8, Terms and Conditions #8a p. 107)]
 - 9. Seawall or Bulkhead Repairs. The Corps will not conduct seawall or bulkhead repairs or groin modification activities within piping plover nesting areas during the nesting season and will avoid direct impacts to seabeach amaranth plants if such activities take place during the growing season. [Newly adopted Conservation Measure (Modified from PBO RPM #8, Terms and Conditions #8b p. 107)]
 - 10. Avoidance of Least Tern Colonies. The Corps will work with the ENSP to schedule and implement beach nourishment and associated activities to avoid direct adverse effects to least terns (*Sterna antillarum*), including no sand placement within 200 meters of an active colony (*i.e.*, when breeding terns or unfledged tern chicks are present). There are protective benefits to piping plovers that nest within or in close proximity to a least tern

colony. [Newly adopted Conservation Measure (Modified from PBO RPM #11, Terms and Conditions #11 p. 108)]

11. Pre-Project Coordination. The Corps will provide all project engineers, contractors, construction staff, and Service-approved field monitors(s) with a written summary of the SBO before beginning work. The summary will include all Conservation Measures, RPMs and Terms and Conditions and a statement that these Conservation Measures, RPMs and Terms and Conditions, are non-discretionary. The Corps will also provide maps of seabeach amaranth locations and piping plover nesting areas (including the 1000-meter buffer on either side of the actual nest) before the start of work, and updated maps as needed during construction. [Newly adopted Conservation Measure (Modified from PBO RPM #3, Terms and Conditions #3a p. 105)]
12. Pre-Project Meeting. The Corps will schedule a meeting prior to the start of construction among the Service, Corps planning staff and supervisors, the ENSP, the selected Service-approved field monitors(s) as needed, and appropriate representatives of project engineers, contractors, and construction staff to discuss implementation of Conservation Measures, RPMs and Terms and Conditions. [Newly adopted Conservation Measure (Modified from PBO RPM #3, Terms and Conditions #3b p. 105)]
13. Documentation of Project Coordination. The Corps will provide documentation of field and interagency coordination to the Service at least 1 week prior to starting any work during the piping plover nesting season. Documentation will demonstrate that clear communication channels have been established among the Corps, Service-approved field monitor(s), and other contract personnel to halt or modify construction activities immediately, based upon detection, movement, disturbance, or imminent harm of piping plovers as reported by the field monitor(s). Buffers will be implemented or adjusted accordingly. Documentation will name the Corps staff person(s) responsible for issuing any sudden changes to work orders needed to protect piping plovers and to comply with the provisions of the SBO. The documentation will indicate that the field monitors(s) and other affected Corps and contract personnel will be equipped with adequate communication capabilities to respond immediately to any changed condition that may affect listed species. This documentation must also include provisions for Service notification within 24 hours of any such needed changes to work activities to avoid disturbance or other harm to piping plovers. [Newly adopted Conservation Measure (Modified from PBO RPM #3, Terms and Conditions #3c p. 106)]
14. Weekly Listed Species Reporting. The Corps will provide the Service, the ENSP, and construction contractors a weekly report of seabeach amaranth locations and piping plover activity for the duration of any work during the nesting or growing seasons. The report will indicate the geographic extent of nesting areas (including the 1000-meter buffer on either side of a nest). The Corps will also provide the Service and the ENSP with a weekly report of the location of sand placement activities (both current and planned over the coming week), as well as the results of the pre-construction monitoring described under PBO Conservation Measure #1(iii) and SBO Conservation Measures #6a above, indicating the areas surveyed. The Corps will notify all parties immediately if

species distribution changes, or if there is a change to the planned location of sand placement activities. [Newly adopted Conservation Measure (Modified from PBO RPM #3, Terms and Conditions #3d p. 106)]

15. Beach Management Plan Preparation. The Corps will continue to support a joint Service-ENSP effort to assist Long Branch City and Seven Presidents Oceanfront County Park with the preparation of Beach Management Plans (Plan) for the protection of listed species. When complete, the Plans must be approved by the appropriate bodies within Long Branch City and Monmouth County governments. The Plans will be developed with full input of those local officials or staff directly responsible for beach management including mechanical beach raking, trash removal, life guards, and law enforcement. Plans must be consistent with the Service's 1994 *Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitats on the U.S. Atlantic Coast to Avoid Take Under Section 9 of the Endangered Species Act*, and must address issues including but not limited to: symbolic fencing (on both public and private portions of the beach), mechanical beach raking, trash collection and beach clean-ups, sand fencing, vegetation management, predator control, enforcement of pet laws and New Jersey Coastal Zone Management rules, operation of vehicles on the beach, designation of portions of beach as natural areas, and the local role in endangered species management. State Aid Agreements between the NJDEP's OEC and the local jurisdictions may stipulate that final Plans must be submitted after 18 months with drafts submitted after 6 months for newly written Plans. [Newly adopted Conservation Measure (Modified from PBO RPM #6, Terms and Conditions #6 p. 107)]
16. Dune and Vegetation Management Guidelines. The New York District Corps will collaborate with the Service, ENSP, Corps' Philadelphia District, and any other key State or federal agencies in the development and implementation of the *Dune and Vegetation Management Guidelines for New Jersey Beaches that Support Listed Species* (Dune Guidelines), to serve as a technical reference that will assist local beach managers to establish and maintain dunes that are compatible with habitat for listed species and assist the Corps in designing and constructing beach profiles in nesting areas to maximize habitat suitability for piping plovers and seabeach amaranth. Upon final adoption by all relevant agencies, the Dune Guidelines would take the place of PBO Terms and Conditions #9 (prohibiting sand fencing and vegetation planting in areas that support nesting plovers), and will also assist the Corps in implementing PBO Conservation Recommendation #1 (adjusting beach profiles to maximize habitat suitability for listed species). The Dune Guidelines are currently being developed and will be agreed upon by the interagency team of federal and State agency representatives before implementation.
17. Invasive Species Surveys. The Corps will conduct, under the Dune Guidelines (to be developed), non-native Asiatic sand sedge (*Carex kobomugi*) surveys and any other invasive vegetative species surveys (exotic and native), to document the extent of invasion in the Project Area. The Corps will eradicate invasive vegetative species that are degrading or eliminating habitat for listed species. The Dune Guidelines are currently being developed and will be agreed upon by the interagency team of federal and State agency representatives before implementation.

18. Adaptive Management. The Corps will work with managers of Seven Presidents Oceanfront County Park, the Service, and the ENSP to determine if the existing and planned beach profile can be adjusted within the park's two shoreline restoration areas to increase habitat quality for listed species. Additional habitat improvements (*e.g.*, beach profile with unbroken gentle slope, wide band of sparse vegetation) may be possible if tapers extend into southern Monmouth Beach Borough. The Corps will work with the Service and any other relevant parties to determine the quantitative data necessary to adjust the beach profile. The Corps will implement any adjustments to the beach profile that are agreed upon by all parties to benefit listed species. Further explanation of the current deficiencies and suggested improvements are discussed in Section C (Environmental Baseline) below.

B. SPECIES STATUS

Relevant biological and ecological information considered by the Service in formulating the 2007 SBO was provided in the PBO. New biological information regarding seabeach amaranth transplanting of propagated individuals, regional decline in seabeach amaranth, and New Jersey's statewide piping plover productivity (2003-2006), has subsequently become available since issuance of the Service's September 2002 PBO and is summarized below. All other biological information described within the PBO remains pertinent and is incorporated into this document by reference.

1. Seabeach Amaranth Transplants

Jolls *et al.* (2004) final report documented seabeach amaranth transplant experiments in North Carolina with lab-reared juvenile plants and provides new information on transplanting techniques, selection of transplant locations, and transplant success. Juvenile plants were transplanted in June with a water-saturated soil plug in a pre-excavated hole just below the main rosette of the plant. Survival was highest (94 percent) at higher elevations (above 2.0 m mean high water [MHW]) with nearly 100 percent of plants reaching seed set during the first 10 weeks after transplant. There was a low survival rate (10 percent) for lower elevation transplants (below 0.77 m MHW) and none of these reproduced within the first 10 weeks. Sixty-three percent of plants survived within the predicted elevation range (0.77-2.0 m MHW) after transplantation. Of the plants that survived, the lower-elevation plants grew significantly larger than the plants transplanted within and above the predicted elevation range. In a field study the following year, survival was equal for plants transplanted within and above the predicted elevation range at 1 of 2 study sites, but beach location and dynamics (*i.e.*, increased beach width and overwash events) played key roles in the survival results. The study site experienced increased overwash events due to extreme high tides that increased plant mortality. However, the increased beach width allowed some plants to survive in the predicted elevation range that were not affected by the overwash events.

Jolls *et al.* (2004) documented that instances of herbivory by webworms (caterpillars from a variety of moth species), nutria (*Myocastor coypus*), ghost crabs (*Ocypode quadrata*), and grasshoppers had increased for the transplants above 2.0 m MHW compared to those within the predicted elevation range.

2. Regional Decline of Seabeach Amaranth

As detailed in the Service's 2005 year-end report, seabeach amaranth has undergone a distinct decline in Section I of the BECP (including 2007 Long Branch Project Area) since its peak in 2002. Service surveys documented that a precipitous downward trend continued for 2006, with plant numbers dropping to levels that risk the extirpation of the species from Sea Bright and Monmouth Beach. This same region supported over three-quarters of State-wide total plants for the first 5 years after the species was rediscovered in New Jersey (2000 through 2004). Seabeach amaranth numbers were at less than 5 percent of the long-term average for the area, with only 176 plants from Sea Bright to Seven Presidents Park (see Table 1). Recent information from surveys conducted by the State; indicate that all plants documented in Sea Bright, Monmouth Beach, and Long Branch were destroyed by the effects of Hurricane Ernesto. A few plants remained in Seven Presidents Oceanfront County Park.

3. Piping Plover

Poor statewide piping plover productivity between 2003 through 2006 (0.78 chicks/pair) in New Jersey may factor into lower than anticipated recruitment of breeding pairs within the overall BECP Area. From 2003-2004 there was a 6 percent decrease in the statewide number of nesting pairs, which was the first drop in pairs in 6 years (144 to 135 pairs respectively). From 2004-2005 there was an 18 percent decrease in the number of nesting pairs (135 to 111 pairs respectively). In 2006 the number of pairs remained relatively stable compared to 2005 data, 116 pairs with a productivity rate of 0.836 chicks per pair. These numbers continue to remain well below the State recovery goal of approximately 200-230 pairs (NY/NJ region goal = 550 pairs) and a productivity rate goal of 1.5 chicks per pair (U.S. Fish and Wildlife Service, 1996).

C. ENVIRONMENTAL BASELINE

The environmental baseline for the Corps' overall program of federal beach nourishment, renourishment, stabilization, and restoration activities along the Atlantic Coast of New Jersey within the New York District was established and fully described within the Service's September 2002 PBO. Substantive changes to the Environmental Baseline relevant to formulation of this SBO are provided below.

1. Species Status Within the Project Area

a. Seabeach Amaranth

Seabeach amaranth has declined noticeably within the 2007 Long Branch Project Area, but not as severely as in other areas in Section I of the BECP Area (Sea Bright and Monmouth Beaches) (see Table 1). Seabeach amaranth has occurred at Seven Presidents Oceanfront County Park and a small number of plants have occurred along Long Branch municipal beaches since 2001; however, fewer plants were observed in 2006 than previous years. In 2006, 16.7 percent and 46.8 percent of the average number of plants (average from year of discovery to 2006) were recorded for Long Branch and Seven Presidents Oceanfront County Park (average 2003 to 2006

and average 2001 to 2006) respectively, while less than 2 percent of the average number of plants were recorded on Sea Bright and Monmouth Beaches (average 2000 to 2006).

b. Piping Plover

Piping plovers have nested in two locations in the 2007 Long Branch Project Area since 2003 (see Table 2). One pair nested within Long Branch City in 2003, and the remaining pairs have nested within Seven Presidents Oceanfront County Park, including one pair each in the northern and southern designated natural areas in 2006. The 2003 nesting site in Long Branch City is no longer a nesting area under the terms of the PBO. The site has not been occupied by breeding piping plovers for the past three breeding seasons; however, the Corps must implement Conservation Measure #5(c) if any work is to be conducted outside a nesting area during the nesting season.

Species data are provided in Tables 1 and 2, and a species distribution map is provided in Appendix A.

Table 1. Seabeach Amaranth Data for Section I of the BECP Project Area, 2000-2006

| Site | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|-------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Sea Bright (SBN) | 823 | 4,701 | 9,115 | 4,215 | 3,802 | 1,451 | 58 |
| Monmouth Beach North (MBN) ¹ | 81 | 109 | 22 | 48 | 355 | 500 | 2 |
| Monmouth Beach South (MBS) | 15 | 368 | 717 | 54 | 7 | 1 | 0 |
| Long Branch – North Subsection | NS | 0 | 0 | 1 | 21 | 1 | 1 |
| Long Branch – Central Subsection | NS | 2 | 0 | 2 | 0 | 24 | |
| Long Branch Total (North and Central) | NS | 2 | 0 | 3 | 21 | 25 | 1 |
| Seven Presidents Park – North Subsection | NS | 5 | 20 | 59 | 49 | 52 | 82 |
| Seven Presidents Park – Central Subsection | NS | NS | 5 | 8 | 0 | 0 | 2 |
| Seven Presidents Park – South Subsection | NS | NS | 20 | 8 | 802 | 313 | 31 |
| Seven Presidents Park – Recreational Subsection | NS | NS | 0 | 0 | 3 | 16 | 0 |
| Seven Presidents Park Total (North, Central, South, and Recreational) | NS | 5 | 45 | 75 | 854 | 381 | 115 |
| 2007 Long Branch Project Area Total (Long Branch and Seven Presidents Park) | 0 | 5 | 45 | 76 | 875 | 382 | 116 |
| Section I Total (Long Branch, MBS, MBN, and SBN) | 919 | 5,183 | 9,899 | 4,393 | 5,039 | 2,334 | 176 |

¹ Includes southern Sea Bright

NS = Not surveyed

All data were collected from Service-lead interagency surveys except Long Branch Central.

Data for Long Branch Central are provided by the New Jersey Office of Natural Lands Management.

Table 2. Piping Plover Nesting Data for Section I of the BECP Project Area, 1997-2006

| Site | Year | # Pairs | # Pairs Hatching Young | Pair Success ¹ | # of Fledges | Fledge Rate ² (Productivity) | |
|---|------|------------------|------------------------|---------------------------|---------------|---|-------------|
| Sea Bright North (SBN) | 1998 | 2 | 2 | 100 % | 4 | 2.00 | |
| | 1999 | 4 | 2 | 50 % | 4 | 1.00 | |
| | 2000 | 3 | 1 | 33 % | 2 | 0.67 | |
| | 2001 | 3 | 1 | 33 % | 4 | 1.33 | |
| | 2002 | 5 | 4 | 80 % | 10 | 2.00 | |
| | 2003 | 7 | 4 | 57 % | 3 | 0.43 | |
| | 2004 | 5 | 4 | 80 % | 7 | 1.40 | |
| | 2005 | 7 | 5 | 71 % | 9 | 1.29 | |
| | 2006 | 7 | 5 | 71 % | 12 | 1.71 | |
| Monmouth Beach North/Sea Bright South (MBN) | 1997 | 1 | 1 | 100 % | 0 | 0.00 | |
| | 1998 | 2 | 2 | 100 % | 6 | 3.00 | |
| | 1999 | 3 | 3 | 100 % | 8 | 2.67 | |
| | 2000 | 4 | 3 | 75 % | 8 | 2.00 | |
| | 2001 | 4 | 3 | 75 % | 2 | 0.50 | |
| | 2002 | 3 | 2 | 67 % | 2 | 0.67 | |
| | 2003 | 2 | 2 | 100 % | 5 | 2.50 | |
| | 2004 | 4 | 2 | 50 % | 4 | 1.00 | |
| | 2005 | 3 | 2 | 67 % | 5 | 1.67 | |
| | 2006 | 3 | 2 | 67 % | 6 | 2.00 | |
| Monmouth Beach South (MBS) | 2000 | 1 | 1 | 100 % | 3 | 3.00 | |
| | 2001 | 1 | 1 | 100 % | 4 | 4.00 | |
| | 2002 | 1 | 1 | 100 % | 4 | 4.00 | |
| Seven Presidents Oceanfront County Park (Park) | 2003 | 1 | 1 | 100 % | 2 | 2.00 | |
| | 2004 | 1 | 0 | 0 % | 0 | 0.00 | |
| | 2005 | 1 | 1 | 100 % | 3 | 3.00 | |
| | 2006 | 2 | 2 | 100 % | 4 | 2.00 | |
| Long Branch City (LBC) | 2003 | 1 | 1 | 100 % | 1 | 1.00 | |
| 2007 Long Branch Project Area Total (LBC and Park) | | 2003-2006 | 6 | 5 | 83.3 % | 10 | 1.67 |
| Section I Total³ | | 1997-2006 | 81 | 58 | 71.6 % | 122 | 1.51 |

¹ Pair Success = Percentage of pairs hatching young

² Fledge Rate = Fledges per Pair

³ Section I Total includes: SBN, MBN, MBS, Park, and LBC

2. Factors Affecting the Species Environment

The Service incorporates into this document by reference the detailed discussion in the PBO of factors affecting piping plovers and seabeach amaranth within the 2007 Long Branch Project Area, including habitat conditions, predation, recreational use, and presence of other beach nesting birds.

Important changes in habitat conditions have been observed since the September 2002 PBO. The Service's PBO anticipated that, without direct intervention by the Corps, dune formation and dune stabilization would further limit the available habitat and adversely affect both piping plover and seabeach amaranth during 1 to 2 seasons prior to renourishment. However, it appears that the created habitat is stabilizing more rapidly than originally anticipated in some areas of the BECP. Habitat created by the BECP is *temporarily* suitable and must be restored and maintained to persist. Outside of raked recreational centers, all beaches in Monmouth Beach and Sea Bright have changed through succession to wide, stabilized, terraced profiles with a narrow flood-prone lower beach, which is flooded too frequently to allow establishment of seabeach amaranth. Area beaches typically include a sharp steep incline leading to an upper terrace vegetated with a dense, mature, dune plant community that is incompatible with seabeach amaranth. These area beaches also include noticeable expanses of the invasive, non-native Asiatic sand sedge (*Carex kobomugi*).

Natural succession of the project area beaches is likely to reduce the suitability of nesting habitat for piping plovers. Nesting plovers require a band of sparse vegetation, especially on beaches without overwashes (Fraser, 2006). The project area has also become largely unsuitable to support seabeach amaranth or the least tern. Such areas are being lost as dunes stabilize and vegetation continues to encroach on Monmouth Beach and Sea Bright beaches.

Within the 2007 Long Branch Project Area, the unraked beach in Seven Presidents Oceanfront County Park provides the most suitable habitat available within Section I of the BECP. Dunes within this area are not terraced and large sandy areas with sparse vegetation are present. However, without maintenance of the beach profile (*i.e.*, gentle slope, wide berm) and vegetation control, suitable habitat within the Park will likely degrade as did the habitat observed at Monmouth Beach and Sea Bright.

D. EFFECTS OF THE ACTION

The Service has reviewed information provided by the Corps for the 2007 Long Branch Project Area renourishment and determined that the potential effects of the project are consistent with those addressed in the PBO. Those effects are hereby incorporated by reference; however, the Service anticipates further adverse effects to piping plovers and seabeach amaranth in the 2007 Long Branch Project Area due to rapid habitat succession that was not anticipated or fully addressed in the PBO.

Past shoreline stabilization (*i.e.*, extensive system of hard stabilization structures and upland development) within the 2007 Long Branch Project Area has interfered with formation and maintenance of natural habitats for piping plover and seabeach amaranth. The project would

further perpetuate shoreline stabilization and interfere with natural processes, such as formation of overwash areas that would provide optimal habitat for piping plovers and seabeach amaranth, extending along approximately 3 linear miles of Atlantic coastal shoreline.

Following initial construction of federal nourishment projects within the BECP (including the 2007 Long Branch Project Area), similar creation of potentially suitable habitat for piping plovers and seabeach amaranth has occurred. It should be noted that although the Corps nourishment projects can create sandy beach habitat that may attract piping plovers, the habitat created can be expected to be of lesser quality than habitat that is formed through natural coastal processes such as overwash. Subsequent renourishment events throughout the BECP (including the 2007 Long Branch Project Area) can be expected to benefit piping plovers and seabeach amaranth by maintaining sandy beach habitats over the life of each project.

1. Habitat Succession

Without Corps intervention and maintenance, habitat succession in the 2007 Long Branch Project Area is likely to proceed as it has in Monmouth Beach and Sea Bright and habitat for piping plover and seabeach amaranth would degrade over time.

The beach at Monmouth Beach South has become terraced and heavily vegetated and has not supported nesting piping plovers since 2002. Nourishment of Monmouth Beach South was completed in 1999 and in the following year (2000), plovers began nesting and seabeach amaranth colonized. A pair of plovers nested from 2000-2002, with high reproductive success, fledging 3-4 chicks each year. Seabeach amaranth increased in numbers from 2000-2002 with annual counts of 15, 368, and 717 plants observed respectively. Seabeach amaranth within Monmouth Beach South declined dramatically with only 54 plants recorded in 2003, 7 plants recorded in 2004, 1 plant recorded in 2005, and none recorded in 2006.

The wider beach conditions created by the 2002 renourishment of Monmouth Beach North and Sea Bright may have benefited both the piping plover and least terns. Least terns established a large colony from 2003-2005 at Monmouth Beach North, but have since declined at this site. Piping plovers may have also benefited directly from the 2002 renourishment at Monmouth Beach North and Sea Bright, as productivity was much higher in 2003 than in 2001 or 2002. The number of nesting pairs in Monmouth Beach North and Sea Bright has remained relatively stable with a combined average reproductive success of 1.467 chicks/pair (average 2002-2006), just slightly below the Service's Atlantic Coast Population Recovery Goal of 1.5 chicks/pair (5-year average productivity per pair) (U.S. Fish and Wildlife Service, 1996). Piping plovers were able to utilize a few less-vegetated patches in the upper terrace on these beaches in 2006. However, habitat succession is continuing at a rapid pace at Monmouth Beach North and Sea Bright. Without intervention, piping plovers are likely to follow the declines of seabeach amaranth and least terns in the next few years as the few remaining suitable nest sites are encroached with vegetation.

Over the 6-year life of the 2007 Long Branch Project fill, the Service anticipates that up to 3 pairs of piping plovers per year may nest within the action area, benefiting from created habitat, but may be exposed to indirect adverse effects (*e.g.*, incomplete implementation of Beach

Management Plans, SBO Conservation Measure #15). Adverse effects may be mitigated (avoided or managed) with improved beach management practices, such as implementation of the Dune Guidelines (SBO Conservation Measure #16), and Beach Management Plans (SBO Conservation Measure #15), thereby reducing incidental take.

2. Destruction of Seabeach Amaranth

Seabeach amaranth plants will be destroyed by either direct sand placement or burial of native seedbank in the 2007 Long Branch Project Area. Some plants also die from the stress of transplantation. With the adoption of Conservation Measure #6 as a binding provision of this SBO, such impacts may be minimized. Within the construction template, the Corps will attempt to transplant seabeach amaranth plants that would otherwise be destroyed by sand placement. The Corps will also stockpile the top layer of sand in certain key areas before renourishment and re-spread this sediment following construction. Seven Presidents Oceanfront County Park natural areas, likely contains seabeach amaranth seedbank. Transplantation and sand scraping are experimental, and no information is available regarding the viability of plants or seeds following the use of these methods. Monitoring and documentation of the success of these methods will be used for future SBOs. Since the probability of the experimental techniques succeeding is unknown, the Service must anticipate the worst case loss of up to 100 percent of seabeach amaranth plants and their seed within the footprint of the 2007 Project Area construction template.

3. Reduction of Piping Plover Prey Base

The time of completing the renourishment of Seven Presidents Oceanfront County Park cannot be predicted with certainty; therefore, the Service must anticipate that adverse effects on prey base recovery could reduce chick growth rates and survival, thus affecting the reproductive success of up to 2 pairs of plovers in 2008 (or 2009).¹

E. CONCLUSION

Actions associated with the 2007 Long Branch Project Area renourishment and effects to listed species are consistent with those identified and discussed in the Service's PBO. After reviewing the size and scope of the project, the Conservation Measures, the environmental baseline, the status of federally listed species within the Project Area, and the effects of the action, the Service's programmatic "no jeopardy" Opinion for completion of the BECP applies to the 2007 renourishment.

No Critical Habitat has been designated for these species within the Project Area; therefore, no Critical Habitat will be affected.

¹ The Corps does not anticipate nourishing Seven Presidents Oceanfront County Park in the winter of 2007, but possibly by winter 2008 into 2009.

IV. INCIDENTAL TAKE STATEMENT

A. DEFINITION OF INCIDENTAL TAKE

Section 9 of the ESA and the federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. *Take* is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. *Harm* is further defined by the Service to include significant habitat modification or degradation that results in the death or injury to listed species by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. *Harass* is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering. *Incidental take* is defined as take that is incidental to, and not the purpose of carrying out an otherwise lawful activity.

Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered a prohibited taking under the ESA, provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement. Sections 7(b)(4) and 7(o)(2) of the ESA do not apply to the incidental take of federally listed plant species; therefore, no incidental take statement, and subsequently no RPMs nor Terms and Conditions, were provided for seabeach amaranth within the Service's September 2002 PBO or are provided within this SBO.

B. EXTENT OF ANTICIPATED TAKE

The Service anticipates annually that up to two pairs of piping plovers will nest at Seven Presidents Oceanfront County Park and one pair will nest within other portions of the Long Branch Project Area until the next nourishment event.

No take from direct effects are anticipated by the Service since all work in piping plover nesting areas will be done outside the nesting season (binding SBO Conservation Measure #5).

The indirect effects of the 2007 Long Branch Project Area renourishment are anticipated to result in harm in the form of perpetuation of suboptimal habitat quality along approximately 3 linear miles of oceanfront beach annually over the anticipated 6-year life of the initial fill event. The type and amount of anticipated incidental take is consistent with that described in the Service's September 2002 PBO and does not cause the total annual level of incidental take of the PBO to be exceeded.

Since 2003 an average of 1.5 pairs of piping plovers per year have nested in the Long Branch Project Area. No reported piping plovers nested within the Project Area between 1999 and 2002 (BECF Southern Reach, Section I initial nourishment in 1999).

The Service anticipates the following incidental take of piping plovers from the 2007 Long Branch Project Area from indirect effects:

1. Fifty percent reduction in productivity due to reduced prey availability if nourishment of nesting areas is completed between February and March 15, 2008 (or 2009) for 2 pairs of piping plovers in 2008 (or 2009) at Seven Presidents Oceanfront County Park. With a 4-year average productivity rate of 1.75 chicks fledged per nesting pair from Seven Presidents Oceanfront County Park, lost productivity of 1.75 chicks for the initial year following renourishment is anticipated (50% reduction in productivity x 2 pairs of piping plovers x 1.75 chicks/pair average productivity = lost productivity of 1.75 chicks).

OR

Twenty-five percent reduction in productivity due to reduced prey availability during the 2008 (or 2009) nesting season if nourishment of nesting areas is completed between November 2007 and January 2008 (or November 2008 and January 2009). With a 4-year average productivity rate of 1.75 chicks fledged per nesting pair from Seven Presidents Oceanfront County Park, lost productivity of 0.875 chicks for the initial year following renourishment is anticipated (25% reduction in productivity x 2 pairs of piping plovers x 1.75 chicks/pair average productivity = lost productivity of 0.875 chicks).

2. Impaired productivity of up to three pairs per year in 2008-2012 (or 2009-2013), due to the construction of habitat that will attract and expose piping plovers to sub-optimal habitat conditions (*i.e.*, discontinuous slopes, temporary scarping, stabilized dunes, lack of non-ocean feeding areas), recreational impacts, adverse beach management practices, and predation. Based on current available information, the Service estimates 0.1 - 0.5 chicks per pair will be lost from the above indirect adverse effects (Hecht, pers. comm., 2006). Based on 3 pairs of piping plover, nesting annually for 5 years, lost productivity is estimated between 1.5 to 7.5 chicks cumulatively (3 pairs of piping plovers x 5 years x 0.1 to 0.5 chicks/pair lost = lost productivity of 1.5 to 7.5 chicks).

C. EFFECT OF THE TAKE

The level of take anticipated, as described above, from the proposed action is consistent with the effects considered in the PBO. Therefore, the Service's programmatic "no jeopardy" Opinion for completion of the BECP applies to the 2007 renourishment.

D. REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

To be exempt from the take prohibitions of Section 9 of the ESA, the Corps must implement all pertinent RPMs and Terms and Conditions, as stipulated in the Service's 2002 PBO, to minimize the impact of anticipated incidental take of piping plovers. The Service has determined that additional and modified RPMs and Terms and Conditions beyond those specified in the PBO, are also needed to minimize the impact of incidental take anticipated for the 2007 Long Branch Project Area renourishment:

RPM 1: Schedule sand placement in nesting areas to allow maximum recovery time of benthic prey resources, development of the wrack line, and adjustment of the beach profile.

RPM 1: Term and Condition

- 1.1 Conduct renourishment of piping plover nesting areas as soon as possible following fledging of the last chick in the 2007 Project Area, starting in late August or September 2007 (or 2008) and finishing by November 15, 2007 (or 2008) (if Project funding allows for renourishment of Seven Presidents Oceanfront County Park).

RPM 2: Continue the adaptive management practices of the ESMP.

RPM 2: Term and Condition

- 2.1 Evaluate the ESMP annually, and with Service input, adapt the Program as needed to maintain species protection at levels at least equal to those of the 2003-2006 nesting seasons. As species distributions and/or threats may change, different levels and/or methods of species management may be necessary to maintain current levels of protection (*i.e.*, more or less effort than one full-time, seasonal, local monitor may be needed).

V. CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. The Service recommends the Corps carry out the following actions to further piping plover and seabeach amaranth recovery in addition to the existing Conservation Recommendations in the PBO, specifically Nos. 2, 3, 5, 6, and 9.

1. Restore habitat for listed species in southern Monmouth Beach Borough (Monmouth Beach South) in conjunction with the 2007 renourishment of Long Branch City. The Service recommends sufficient regrading of Monmouth Beach South (outside the nesting season) to return the area to a condition that resembles the Corps' authorized beach profile - a flat, 100-foot-wide berm at an elevation of 10 feet above mean low water. Vegetation thinning is also recommended.
2. Work with the Service to determine if a seasonal restriction to protect seabeach amaranth is feasible and appropriate to future renourishments. Through the Corps-funded ESMP, the Service has collected data regarding peak periods for seed set. The Service recommends further data collection of seabeach amaranth germination rates.
3. Transplant seabeach amaranth or re-spread seed within the suitable elevation range (0.77 to 2.0 m MHW) for increased survival and increased reproductive success. Other factors such as an historic record of seabeach amaranth and suitability of the existing habitat may be used to determine transplanting locations (*i.e.*, areas of open sand with sparse vegetation, moisture availability, sufficient beach width, few erosion events). The Service is currently developing protocols to assist the Corps in seabeach amaranth transplants and re-spreading seed.

VI. REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the effects of initial beach nourishment conducted by the Corps, within the City of Long Branch, including Seven Presidents Oceanfront County Park, Monmouth County, New Jersey. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or Critical Habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or Critical Habitat that was not considered in this opinion; or, (4) a new species is listed or Critical Habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

As a reminder, this consultation covers the 2007 Long Branch nourishment event only and potential impacts to federally listed species that may occur prior to any subsequent re-nourishment events. Subsequent re-nourishment events will be considered separate federal actions and will require individual consultations.

VII. REFERENCES

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B. PERSONAL COMMUNICATION

Burlas, M. 2006. Project Biologist. U.S. Army Corps of Engineers, New York District, New York, New York.

Hecht, A. 2006. Atlantic Coast Piping Plover Recovery Coordinator. U.S. Department of the Interior, Fish and Wildlife Service, Hadley, Massachusetts.

Leite, D.F. 2006. Project Manager. U.S. Army Corps of Engineers, New York District, New York, New York.

APPENDIX A

**SUMMARY OF BINDING PROVISIONS OF THE STREAMLINED BIOLOGICAL
OPINION FOR THE 2007 LONG BRANCH PROJECT AREA BEACH
RENOURISHMENT OF LONG BRANCH CITY, INCLUDING SEVEN PRESIDENTS
OCEANFRONT COUNTY PARK**

**SUMMARY OF BINDING PROVISIONS OF THE STREAMLINED BIOLOGICAL
OPINION FOR THE 2007 LONG BRANCH PROJECT AREA BEACH
RENOURISHMENT OF LONG BRANCH CITY, INCLUDING SEVEN PRESIDENTS
OCEANFRONT COUNTY PARK**

BACKGROUND

The U.S. Fish and Wildlife Service's September 2002 Programmatic Biological Opinion (PBO) was developed in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA) on the effects of the U.S. Army Corps of Engineers, New York District's (Corps) proposed continuing construction of Section I and II of the Atlantic Coast of New Jersey Beach Erosion Control Project, Monmouth County, New Jersey on the federally listed (threatened) piping plover (*Charadrius melodus*) and seabeach amaranth (*Amaranthus pumilus*). This document outlines the provisions of the 2007 Streamlined Biological Opinion (SBO) for the beach nourishment cycle of Long Branch City, including Seven Presidents Oceanfront County Park and is intended for use in the field. This document describes the construction schedule and the non-discretionary binding provisions (Conservation Measures, Reasonable and Prudent Measures [RPMs], and Terms and Conditions) the Corps must implement for the protection of the piping plover and seabeach amaranth with respect to ESA compliance. Contractors should be made aware of all restrictions of the SBO that affect implementation of the project.

DEFINITIONS

Section 9 of the ESA and the federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. *Take* is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. *Harm* is further defined by the Service to include significant habitat modification or degradation that results in the death or injury to listed species by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. *Harass* is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering. *Incidental take* is defined as take that is incidental to, and not the purpose of carrying out an otherwise lawful activity.

INCIDENTAL TAKE

The SBO issued by the Service includes an Incidental Take Statement. Under the terms of Section 7(b)(4) and Section 7(o)(2) of the ESA, taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the provisions of the SBO. All the binding provisions of the SBO, as described below, are non-discretionary and must be undertaken by the Corps for the exemption in Section 7(o)(2) to apply. The Corps has a continuing duty to implement the activity covered by this SBO. If the Corps: (1) fails to implement the provisions or (2) fails to require all contractors to adhere to the provisions, the protective coverage provided by Section 7(o)(2) to the Corps *and its*

contractors may lapse. In order to monitor the impact of incidental take, the Corps must report the progress of the action and its impact on the species to the Service as specified in the Incidental Take Statement.

BINDING PROVISIONS

With respect to ESA compliance, the binding provisions of this SBO include: (1) the Corp’s construction project description (schedule, specific nature, and extent of beach renourishment activities) agreed upon by the Corps and the Service; (2) the Conservation Measures incorporated by the Corps into their project description for the protection of listed species; and (3) RPMs with the Terms and Conditions of the Incidental Take Statement issued by the Service to reduce the level of anticipated incidental take.

CONSTRUCTION SCHEDULE

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| <p>3rd quarter FY-2007</p> | <p>The Corps resolicited bids for the renourishment work.</p> |
| <p>September 1, 2007 through March 15, 2009 (applies to the months of September to March only within 2007-2009)</p> | <p>Outside piping plover nesting areas, the Corps conducts beach renourishment in accordance with all binding Terms and Conditions, and Conservation Measures of the SBO (consistent with the PBO).</p> |
| <p>September 1, 2007 through March 15, 2009 (applies to the months of September to March only within 2007-2009)</p> <p>and/or</p> <p>After fledging of the last piping plover chick of the 2007 nesting season in the Project Area through March 15, 2009</p> | <p>Within piping plover nesting areas, the Corps conducts beach renourishment in accordance with all binding Terms and Conditions, and Conservation Measures of the SBO (consistent with the PBO).</p> |

CONSERVATION MEASURES

For the 2007 Long Branch Project Area beach renourishment, the Corps will implement the following binding Conservation Measures. Conservation Measures Nos. 1, 2, 3, 4, 5, 6 are consistent with the PBO. Conservation Measures 7 through 15 below are modified from RPMs and Terms and Conditions of the PBO. Conservation Measures 16 through 18 are newly developed for the project.

1. Continuing Consultation with the Service. The Corps agrees not to commit any funds until the SBO is finalized.
2. Fill Material and Placement. The Corps will ensure that all renourishment material consists of clean sand fill material (*i.e.*, 90 percent or greater sand); conforms to the existing beach substrate; and consists of material that is capable of maintaining suitable piping plover and seabeach amaranth habitat. Grain size will be compatible with existing beach material. The Corps will finish placement areas to approved and previously constructed grade, except as noted under Conservation Measure #18 of the SBO.
3. Endangered Species Management Program (ESMP). The Corps will work with the non-federal project sponsor, the New Jersey Department of Environmental and Protection's (NJDEP) Bureau of Coastal Engineering, Office of Engineering and Construction (OEC), to apply OEC's ongoing financial support of the ESMP toward the required non-federal share of the BECP project cost, in order to maintain clear federal involvement with the ESMP.
4. Educational Signs. The Corps will provide for the development and production of a seabeach amaranth interpretive sign for the BECP Project Area. The Service is currently developing (with existing Corps funding provided through the ESMP) a seabeach amaranth interpretive sign that will be produced by the Corps.
5. Seasonal Restrictions to Protect Piping Plovers
 - a. Definition of Piping Plover Nesting Areas. Nesting areas will be defined according to page 24 of the PBO as "1000 meters on either side of a site...currently occupied by courting, territorial, incubating, or brood-rearing piping plovers, nests with eggs, or unfledged chicks, or any site so occupied within the most recent three nesting seasons (including the current one if territories have already established for the year)."
 - b. Work Within Nesting Areas. The Corps will conduct all work in piping plover nesting areas between September 1, 2007 and March 15, 2009 and/or after fledging of the last piping plover chick of the 2007 nesting season in the Project Area through March 15, 2009. No work will be conducted within piping plover nesting areas during the nesting season except that an occasional non-motorized intrusion may occur with written Service concurrence and field oversight as needed (*e.g.*, to allow entry by pedestrian surveyors or engineers). The Service may issue blanket concurrence for certain categories of non-motorized intrusion into nesting areas, provided the intrusion(s) are no more likely to disturb nesting plovers than routine recreational and beach maintenance activities currently permitted in the area. In no case will any such non-motorized intrusion extend into areas fenced for the protection of listed species.
 - c. Work Outside Nesting Areas. The Corps may elect to continue renourishment work after March 15 *outside of nesting areas* (should unforeseen delays occur). If work

(outside nesting areas) is planned during the nesting season (March 15 to August 15 or fledging of the last chick), the Corps will notify the Service at least 1 week prior to beginning work. Between March 15 and July 1, any proposed work will commence only if a Service-approved field monitor has detected no piping plovers in the sand placement area after 4 days of surveying, throughout the full tidal cycle, in the week immediately preceding the start of work. If any piping plovers are detected, work will not be conducted within 1,000 meters of the bird(s) until the monitor can determine whether the plovers are migrants, or whether they may establish breeding territories. With written Service concurrence, work may proceed or resume if no piping plovers have been observed for 2 weeks following an observation, or if no breeding behavior has been observed by July 1. If any breeding behavior is observed, the area will be classified a nesting area as defined above.

6. Conservation Measures to Protect Seabeach Amaranth

- a. Surveys. For any project activities scheduled to occur during the growing season of seabeach amaranth (May 15 to December 1), the Corps will provide a Corps or contract biologist, botanist, or designated representative to survey the Project Area (2007-2008) for this species twice a month from July 1 to October 1, and also immediately prior to (within 5 days of) the start of any construction or other work. Plant locations, numbers, and sizes will be recorded and reported to the Service.
- b. Outside the Sand Placement Construction Template. The Corps will avoid impacts to all seabeach amaranth plants not directly within the sand placement construction template.
 - (1) The Corps will erect symbolic fencing around all seabeach amaranth plants in the work area(s) outside the construction template, including a 3-meter protective buffer.
 - (2) The Corps will designate staging areas and access routes for vehicles and personnel to avoid seabeach amaranth occurrences. Fenced plants will not be disturbed.
- c. Within the Sand Placement Construction Template. Within the construction template, the Corps will implement salvage measures and documentation.
 - (1) The Corps will work with the Service to develop, implement, and monitor experimental transplantation practices for any plants directly within the construction template. If successful, transplantations might permit salvaged plants to contribute to the annual seed crop.
 - (2) The Corps will document the number of plants destroyed by direct sand placement and the number transplanted to avoid destruction, and will report this information to the Service.

- d. Sand Scraping. The Corps will work closely with the Service to develop, implement, and monitor experimental “sand scraping” practices to stockpile the top layer of sand (which likely contains a seabeach amaranth seedbank) before renourishment and to re-spread this sediment following construction.
7. Pipeline Placement and Equipment Staging. The Corps will not place pipelines or other renourishment-related equipment within piping plover nesting areas during the nesting season. Any material staged or stored within nesting areas will be removed by March 15, 2007 and by March 15, 2008 and 2009 if the project continues after the 2007 nesting season. The Corps will avoid direct impacts to seabeach amaranth plants (outside the sand placement template) by locating pipelines and staging/storage areas away from marked plant locations.
8. Beach Profile Activities. The Corps will not conduct beach profiling activities (unless agreed to by the Service) within piping plover nesting areas during the nesting season and will avoid direct impacts to seabeach amaranth plants if such activities take place during the growing season.
9. Seawall or Bulkhead Repairs. The Corps will not conduct seawall or bulkhead repairs or groin modification activities within piping plover nesting areas during the nesting season and will avoid direct impacts to seabeach amaranth plants if such activities take place during the growing season.
10. Avoidance of Least Tern Colonies. The Corps will work with the ENSP to schedule and implement beach nourishment and associated activities to avoid direct adverse effects to least terns (*Sterna antillarum*), including no sand placement within 200 meters of an active colony (*i.e.*, when breeding terns or unfledged tern chicks are present). There are protective benefits to piping plovers that nest within or in close proximity to a least tern colony.
11. Pre-Project Coordination. The Corps will provide all project engineers, contractors, construction staff, and Service-approved field monitors(s) with a written summary of the SBO before the start of work. The summary will include all Conservation Measures, RPMs and Terms and Conditions and a statement that these Conservation Measures, RPMs and Terms and Conditions are non-discretionary. The Corps will also provide maps of seabeach amaranth locations and piping plover nesting areas (including the 1000-meter buffer on either side of the actual nest) before the start of work, and updated maps as needed during construction.
12. Pre-Project Meeting. The Corps will schedule a meeting prior to the start of construction among the Service, Corps planning staff and supervisors, the ENSP, the selected Service-approved field monitors(s) as needed, and appropriate representatives of project engineers, contractors, and construction staff to discuss implementation of Conservation Measures, RPMs and Terms and Conditions.

13. Documentation of Project Coordination. The Corps will provide documentation of field and interagency coordination to the Service at least 1 week prior to starting any work during the piping plover nesting season. Documentation will demonstrate that clear communication channels have been established among the Corps, Service-approved field monitor(s), and other contract personnel to halt or modify construction activities immediately, upon detection, movement, disturbance, or imminent harm of piping plovers as reported by the field monitor(s). Buffers will be implemented or adjusted accordingly. Documentation will name the Corps staff person(s) responsible for issuing any sudden changes to work orders needed to protect piping plovers and to comply with the provisions of the SBO. The document will indicate that the field monitors(s) and other affected Corps and contract personnel will be equipped with adequate communication capabilities to respond immediately to any changed condition that may affect listed species. This documentation must also include provisions for Service notification within 24 hours of any such needed changes to work activities to avoid disturbance or other harm to piping plovers.

14. Weekly Listed Species Reporting. The Corps will provide the Service, the ENSP, and construction contractors a weekly report of seabeach amaranth locations and piping plover activity for the duration of any work during the nesting or growing seasons. The report will indicate the geographic extent of nesting areas (including the 1000-meter buffer on either side of a nest). The Corps will also provide the Service and the ENSP with a weekly report of the location of sand placement activities (both current and planned over the coming week), as well as the results of the pre-construction monitoring described under PBO Conservation Measure #1(iii) and SBO Conservation Measures #6a above, indicating the areas surveyed. The Corps will notify all parties immediately if species distribution changes, or if there is a change to the planned location of sand placement activities.

15. Beach Management Plan Preparation. The Corps will continue to support a joint Service-ENSP effort to assist Long Branch City and Seven Presidents Oceanfront County Park with the preparation of Beach Management Plans (Plan) for the protection of listed species. When complete, the Plans must be approved by the appropriate bodies within Long Branch City and Monmouth County governments. The Plans will be developed with full input of those local officials or staff directly responsible for beach management including mechanical beach raking, trash removal, life guards, and law enforcement. Plans must be consistent with the Service's 1994 *Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitats on the U.S. Atlantic Coast to Avoid Take Under Section 9 of the Endangered Species Act*, and must address issues including but not limited to: symbolic fencing (on both public and private portions of the beach), mechanical beach raking, trash collection and beach clean-ups, sand fencing, vegetation management, predator control, enforcement of pet laws and New Jersey Coastal Zone Management rules, operation of vehicles on the beach, designation of portions of beach as natural areas, and the local role in endangered species management. State Aid Agreements between the NJDEP's OEC and the local jurisdictions may stipulate that final Plans must be submitted after 18 months with drafts submitted after 6 months for newly written Plans.

16. Dune and Vegetation Management Guidelines. The New York District Corps will collaborate with the Service, ENSP, Corps' Philadelphia District, and any other key State or federal agencies in the development and implementation of the *Dune and Vegetation Management Guidelines for New Jersey Beaches that Support Listed Species* (Dune Guidelines), to serve as a technical reference that will assist local beach managers to establish and maintain dunes that are compatible with habitat for listed species and assist the Corps in designing and constructing beach profiles in nesting areas to maximize habitat suitability for piping plovers and seabeach amaranth. Upon final adoption by all relevant agencies, the Dune Guidelines would take the place of PBO Terms and Conditions #9 (prohibiting sand fencing and vegetation planting in areas that support nesting plovers), and will also assist the Corps in implementing PBO Conservation Recommendation #1 (adjusting beach profiles to maximize habitat suitability for listed species). The Dune Guidelines are currently being developed and will be agreed upon by the interagency team of federal and State agency representatives before implementation.
17. Invasive Species Surveys. The Corps will conduct, under the Dune Guidelines (to be developed), non-native Asiatic sand sedge (*Carex kobomugi*) surveys and any other invasive vegetative species surveys (exotic and native), to document the extent of invasion in the Project Area. The Corps will eradicate invasive vegetative species that are degrading or eliminating habitat for listed species. The Dune Guidelines are currently being developed and will be agreed upon by the interagency team of federal and State agency representatives before implementation.
18. Adaptive Management. The Corps will work with managers of Seven Presidents Oceanfront County Park, the Service, and the ENSP to determine if the existing and planned beach profile can be adjusted within the park's two shoreline restoration areas to increase habitat quality for listed species. Additional habitat improvements (*e.g.*, beach profiles with unbroken gentle slope, wide band of sparse vegetation) may be possible if tapers extend into southern Monmouth Beach Borough. The Corps will work with the Service and any other relevant parties to determine the quantitative data necessary to adjust the beach profile. The Corps will implement any adjustments to the beach profile that are agreed upon by all parties to benefit listed species.

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

RPM 1: *Schedule sand placement in nesting areas to allow maximum recovery time of benthic prey resources, development of the wrack line, and adjustment of the beach profile.*

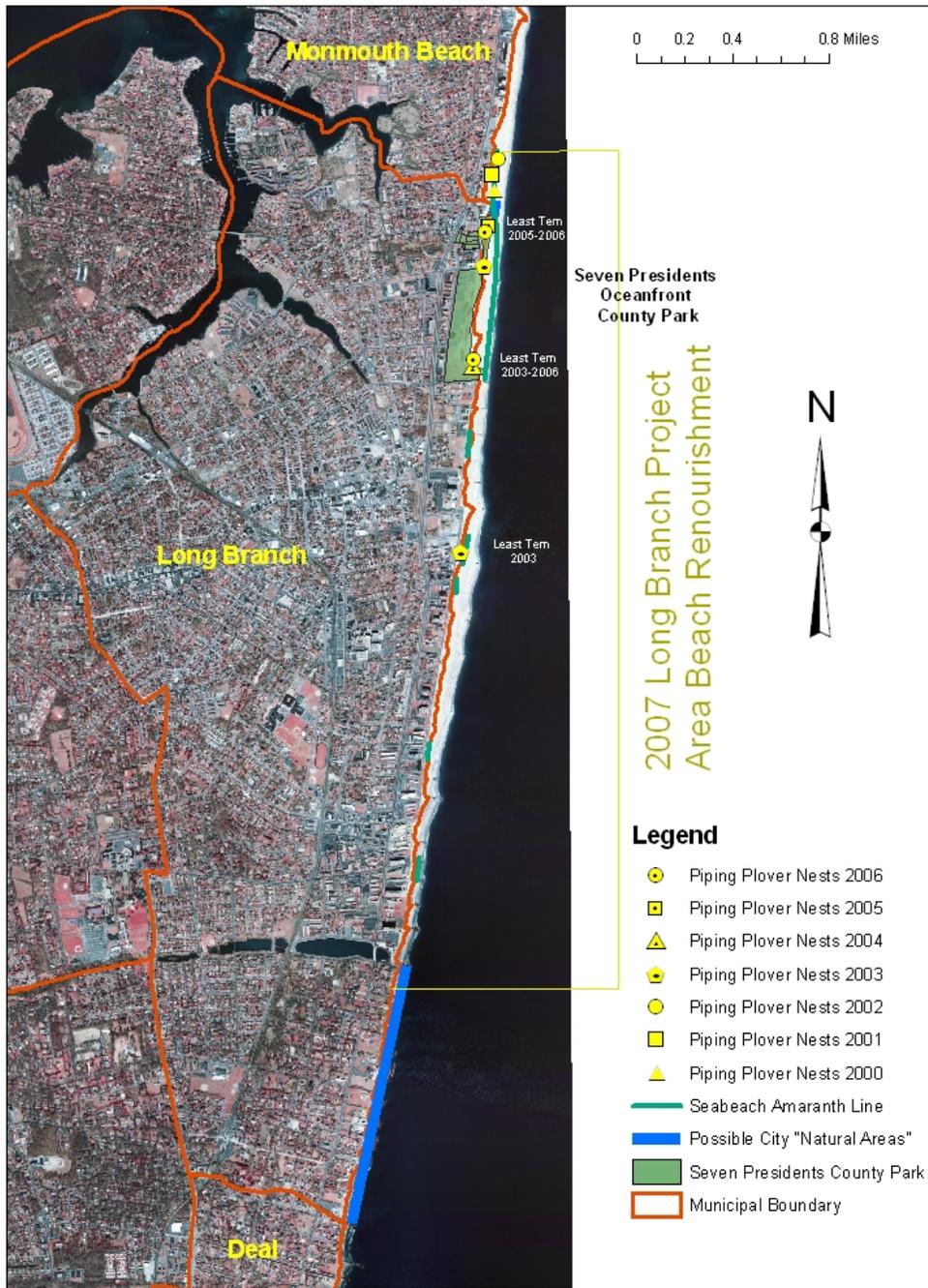
RPM 1: Term and Condition

- 1.1 Conduct renourishment of piping plover nesting areas as soon as possible following fledging of the last chick in the 2007 Project Area, starting in late August or September 2007 and finishing by November 15, 2007 (or by September 2008 to November 2008) (if Project funding allows for renourishment of Seven Presidents Oceanfront County Park).

RPM 2: Continue the adaptive management practices of the ESMP.

RPM 2: Term and Condition

- 2.1 Evaluate the ESMP annually, and with Service input, adapt the Program as needed to maintain species protection at levels at least equal to those of the 2003-2006 nesting seasons. As species distributions and/or threats may change, different levels and/or methods of species management may be necessary to maintain current levels of protection (*i.e.*, more or less effort than one full-time, seasonal, local monitor may be needed).



Approximate Species Distribution Map. More detailed maps can be provided by the Corps to the contractors selected to conduct 2007 renourishment of Long Branch, including Seven Presidents Oceanfront County Park. Species distributions may change in 2007 and/or 2008 nesting seasons. Species must be protected where they occur according to the provisions of the U.S. Fish and Wildlife Service’s 2007 Streamlined Biological Opinion. The Corps will provide updated maps periodically.