



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

New Jersey Field Office

Ecological Services

927 North Main Street, Building D

Pleasantville, New Jersey 08232

Tel: 609/646 9310

Fax: 609/646 0352

<http://www.fws.gov/northeast/njfieldoffice>

In Reply Refer to:

2008-F-0495

JUL 14 2008

Minas M. Arabatzis, Chief  
Planning Division  
Philadelphia District  
U.S. Army Corps of Engineers  
100 Penn Square East  
Philadelphia, Pennsylvania 19107-3390

Dear Mr. Arabatzis:

This U.S. Fish and Wildlife Service (Service) letter documents review of the U.S. Army Corps of Engineers, Philadelphia District (Corps) Draft Environmental Assessment for the *Alternative Offshore Borrow Area for the Cape May Inlet to Lower Township Storm Damage Reduction Project and the Lower Cape May Meadows – Cape May Point Environmental Restoration Project, Cape May County, New Jersey*. This letter also serves as formal consultation for beach nourishment activities conducted by the Corps within the Cape May Inlet – Lower Township and the Lower Cape May Meadows – Cape May Point Project Areas, Cape May County, New Jersey. This project constitutes a Tier 2 individual project under the Service's December 2005 Tier 1 Programmatic Biological Opinion on the effects of Federal beach nourishment, renourishment, stabilization, and restoration activities along the Atlantic Coast of New Jersey within the Corps' Philadelphia District on the federally listed (threatened) piping plover (*Charadrius melodus*) and seabeach amaranth (*Amaranthus pumilus*). This Tier 2 (streamlined) consultation covers only this Cape May renourishment event from September 5, 2008 to January 30, 2009, and potential impacts to federally listed species that may occur prior to any subsequent renourishment events. Subsequent renourishment events will be considered separate federal actions and will require individual Tier 2 consultations.

### **AUTHORITY**

This response is provided pursuant to the National Environmental Policy Act (83 Stat. 852, as amended; 42 U.S.C. 4321 *et seq.*) (NEPA) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA).

## CONSULTATION HISTORY

- May 19, 2008                      The Service received the Corps' May 15, 2008 letter requesting initiation of streamlined (Tier 2) formal consultation for the Federal beach renourishment of Cape May Inlet – Lower Township and Lower Cape May Meadows – Cape May Point (Cape May Project Areas) pursuant to the December 2005 Tier 1 Programmatic Biological Opinion.
- June 2008                              The Service and the Corps coordinated via telephone to exchange additional information.

## PROJECT DESCRIPTION

Renourishment of the project is scheduled to begin after September 5, 2008 and conclude January 30, 2009. Approximately 425,000 cubic yards of material will be placed on the USCG Training Center beach between Cape May Inlet and Wilmington Avenue of Cape May City (Cape May Inlet Project Area) on approximately 4,400 linear feet of oceanfront beach. Approximately 375,000 cubic yards of material will be placed on Cape May Point State Park and the Borough of Cape May Point groin cells (Nos. 1, 4, and 5) (Cape May Point Project Area) on approximately 4,500 linear feet of oceanfront beach. The renourishment activities for the Cape May Inlet Project Area will replace sand to return the beach profile to the design criteria of a berm at an elevation of +6.7 feet NAVD with a variable width of 0 to 100 feet. The renourishment activities for the Cape May Point Project Area will replace sand to return the beach profile to the design criteria of a berm at an elevation of +6.75 NAVD with a variable width of 0 to 150 feet. Sand is proposed to be obtained from an alternate borrow area (Borrow Area K) offshore of the Cape May Inlet Project Area. Re-nourishment of the Cape May Inlet Project Area is anticipated on a 2-year cycle, while the Cape May Point Project Area is anticipated on a 4-year cycle.

The Corps proposes to use Borrow Area K, which is approximately 480 acres and lies approximately 14,000 to 19,000 feet offshore of Cape May Inlet. Borrow Area K was evaluated as a potential borrow site in the Corps NEPA documents in 1980, 1994, and 2008, but was previously eliminated in favor of borrow areas closer to the renourishment areas in past Corps projects.

In 2007, Borrow Area K underwent benthic, geotechnical, and cultural evaluations. Investigations indicate that Borrow Area K would be acceptable for use on the Cape May Project Areas. Analysis of benthic community samples found that the abundance and biomass parameters were not significantly different from previously used borrow areas and was similar to other benthic communities found in and along the New Jersey coast. Geotechnical analyses of the sand showed small to medium grain size with a mean grain size of 0.37 mm, compatible (*i.e.*,  $\geq 90$  % clean sand fill material) with the existing beach. Cultural investigations revealed three potentially significant targets within the borrow site. The Corps is proposing 300-foot radii buffer zones around each target until further investigations are completed to determine if they are culturally significant.

## **ADHERANCE TO MEASURES TO MINIMIZE IMPACTS TO FEDERALLY LISTED SPECIES**

Relevant conservation measures proposed by the Corps for protection of federally listed species and reasonable and prudent measures imposed by the Service to minimize take of federally listed species are specified within the Service's December 2005 Tier 1 Programmatic Biological Opinion and are applicable to all Tier 2 projects carried out under the Corps program. All applicable measures were incorporated as appropriate into the Tier 2 Cape May beach renourishment project.

## **STATUS OF THE SPECIES**

Relevant biological and ecological information for the piping plover and seabeach amaranth was previously provided to the Corps in the Service's December 2005 Tier 1 Programmatic Biological Opinion. That information remains pertinent and was considered by the Service in formulating this Tier 2 (streamlined) Biological Opinion.

## **ENVIRONMENTAL BASELINE**

The environmental baseline for the Corps overall program for Federal beach nourishment, renourishment, stabilization, and restoration activities along the Atlantic Coast of New Jersey within the Philadelphia District was established and fully described within the Service's December 2005 Tier 1 Programmatic Biological Opinion. No seabeach amaranth plants were found within the Cape May Inlet Project Area during surveys for the plant in 2007 and none have been recorded there since the plant's rediscovery in the Cape May Point Project Area in 2003. On the Cape May Inlet Project Area, piping plovers have nested on the USCG Training Center beaches since at least 1997 (with the exception of no pairs in 2006). Two pairs have nested on the USCG Training Center beach for the 2008 season. One pair nested on Cape May City beach for the 2008 season, but previously there have been no pairs since 2004. On the Cape May Point Project Area, piping plovers have nested since at least 1997. Eight pairs have nested for the 2008 season, 4 pairs on the Cape May Point State Park site and 4 pairs on The Nature Conservancy site. Adjacent to the renourishment project area (north), 2 pairs of piping plovers have been identified on the USCG LORAN site (no nests found to date) for the 2008 season. One pair nested on the USCG LORAN beach in 2007 but produced no fledglings. Six seabeach amaranth plants were found in 2005 on the USCG LORAN beach; however this site is separated by the Cape May Inlet. Therefore, the renourishment should have no effect on either piping plover or seabeach amaranth at the USCG LORAN site. All other information described within the December 2005 Tier 1 Programmatic Biological Opinion remains pertinent and was considered by the Service in formulating this Tier 2 Biological Opinion.

## **EFFECTS OF THE ACTION**

Following review of the information provided by the Corps regarding the Cape May Inlet and Cape May Point Project Areas, the Service has determined that the potential effects of the project are consistent with those addressed in the December 2005 Tier 1 Programmatic Biological

Opinion and are hereby incorporated by reference. The work is being conducted outside the piping plover nesting season and approximately half of the seabeach amaranth growing season (no plants have been observed since 2003); therefore, no direct adverse impacts to these species are anticipated. The Corps will conduct surveys for seabeach amaranth before renourishment begins and will either fence or relocate any plants found, coordinating any efforts with the Service. Past shoreline stabilizations within the Cape May Project Areas have interfered with formation and maintenance of natural habitats for piping plover and seabeach amaranth. The project perpetuates shoreline stabilization that has essentially stopped the natural process of shoreline retreat and, consequently, prevents the natural formation of optimal habitats for piping plovers and seabeach amaranth (*e.g.*, inlets and overwash areas). Further, the beach renourishment plan selected for the Cape May Project Areas will result in creation of sub-optimal beach and dune habitats for piping plover and seabeach amaranth. Therefore, renourishment of the Cape May Project Areas will preclude formation of natural habitats and create sub-optimal beach and dune habitats for piping plover and seabeach amaranth along approximately 1.69 linear miles of Atlantic coastal shoreline. Further, burial of prey resources and disturbance to nesting piping plovers from recreational uses on Corps-nourished beaches may result in reduced piping plover productivity.

## **CONCLUSION**

Actions and effects associated with the renourishment of the Cape May Project Areas are consistent with those identified and discussed within the Service's December 2005 Tier 1 Programmatic Biological Opinion. After reviewing the size and scope of the project, the environmental baseline, the status of federally listed species within the project area, and the effects of the action, it is the Service's Biological Opinion that the September 5, 2008 to January 30, 2009 renourishment of the Cape May Project Areas renourishment project are not likely to jeopardize the continued existence of the piping plover or seabeach amaranth. No Critical Habitat has been designated for these species within the project area; therefore, no Critical Habitat will be affected.

## **INCIDENTAL TAKE STATEMENT**

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 reasonable and prudent measures nor terms and conditions, were provided for seabeach amaranth within the Service's December 2005 Tier 1 Programmatic Biological Opinion or are provided within this Tier 2 Biological Opinion.

The indirect effects of the renourishment of the Cape May Project Areas are anticipated to result in harm in the form of reduced habitat quality along approximately 1.69 linear miles of oceanfront beach annually over the anticipated 2-4 year life of the renourishment events. The type and amount of anticipated incidental take is consistent with that described in the Service's December 2005 Tier 1 Programmatic Biological Opinion and does not cause the total annual level of incidental take in the December 2005 Tier 1 Programmatic Biological Opinion to be exceeded.

The indirect effects of the nourishment of the Cape May Project Areas are also anticipated to result in harassment of piping plovers, which would result in reduced productivity on Corps-stabilized beaches. Reduced productivity in nesting pairs attributed to perpetuation of low productivity from harassment will result in a loss of 0.9 to 1.65 piping plover chicks per year (based on productivity of 0.15 chicks per pair for approximately 6 to 11 nesting piping plover pairs in the Cape May Project Areas in the last five years [2004-2008]). This is consistent with the anticipated take attributed to lost productivity from the indirect effects of the Corps Program within the December 2005 Tier 1 Programmatic Biological Opinion.

## **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 reasonable and prudent measures and terms and conditions, as stipulated in the Service's December 2005 Tier 1 Programmatic Biological Opinion, to minimize the impact of anticipated incidental take of piping plovers. The Service has determined that no new reasonable and prudent measures, beyond those specified in the December 2005 Tier 1 Programmatic Biological Opinion, are needed to minimize the impact of incidental take anticipated for the Cape May Project Areas renourishment projects.

## **REINITIATION**

This concludes Tier 2 formal consultation on the effects of beach renourishment conducted by the Corps, Philadelphia District the within Cape May Inlet and the Cape May Point Project Areas in Cape May 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 Tier 2 consultation covers the Cape May Project Areas renourishment events (from September 5, 2008 to January 30, 2009) only and potential impacts to federally listed species that may occur prior to any subsequent renourishment events. Subsequent renourishment events will be considered separate Federal actions and will require individual Tier 2 consultations.

### **ADDITIONAL SERVICE RECOMMENDATIONS FOR BORROW AREA K**

Should the Corps move forward with the alternative Borrow Area K for the Cape May Project Areas, the Service recommends the following.

1. Ensure that any borrow site alternatives minimize adverse impacts to surf clam communities through coordination with the New Jersey Bureau of Shellfisheries.
2. Conduct each renourishment phase in a limited section of the borrow area(s) and alternate locations for each subsequent renourishment cycle.
3. Avoid creating excessively deep, poorly flushed (anoxic) pits at the borrow sites.
4. Avoid dredging during shellfish or finfish spawning activities (the typical spawning period and early life stages of winter flounder are between January 1 and May 31).
5. Use hydraulic-pipeline dredging rather than hopper dredging in order to minimize turbidity at the borrow sites and potential impacts on federally listed sea turtles.
6. Contact the National Marine Fisheries Service regarding potential adverse impacts on federally listed (threatened or endangered) sea turtle and marine mammal species under its jurisdiction.
7. Coordinate with the New Jersey Bureau of Marine Fisheries regarding the selection of borrow sites.

Please contact Stephanie Egger of my staff at (609) 383-3938, extension 47, if you have any questions regarding these comments or require further assistance regarding threatened or endangered species.

Sincerely,



J. Eric Davis Jr.  
Supervisor