

Appendix F



USFWS

Loggerhead sea turtle hatchlings are released from their nest cages immediately after emerging—often very late at night or the very early morning

Intra-service Section 7 Biological Evaluation Form

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

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Date: May 13, 2008

I. Region:

Region 5 (Northeast)

II. Service Activity (Program):

National Wildlife Refuge System

III. Pertinent Species and Habitat:

A. Listed species potentially present within the action area:

Federally-designated Endangered and Threatened Species:

- 1) Piping Plover (*Charadrius melodus*) [Threatened]
- 2) Atlantic Ridley (*Lepidochelys kempi*) [Endangered]
- 3) Loggerhead (*Caretta caretta caretta*) [Threatened]
- 4) Green Sea Turtle (*Chelonia mydas*) [Threatened]
- 5) NE Beach Tiger Beetle (*Cicindela dorsalis dorsalis*) [Threatened]

Back Bay National Wildlife Refuge is in the process of preparing a Comprehensive Conservation Plan (CCP) that is vital for the management of the Refuge. The final CCP will provide strategic management direction over the next 15 years, by

- providing a clear statement of desired future conditions for habitat, wildlife, visitor services, and facilities;
- providing Refuge neighbors, visitors, and partners with a clear understanding of the reasons for management actions;
- ensuring Refuge management reflects the policies and goals of the System and legal mandates;
- ensuring the compatibility of current and future public uses;
- providing long-term continuity and direction for Refuge management; and
- providing direction for staffing, operations, maintenance, and developing budget requests.

The need to develop a CCP for the Refuge is two-fold. First, the Refuge Improvement Act requires that all national wildlife refuges have a CCP in place by 2012 to help fulfill the mission of the System. Second, the Refuge lacks a master plan that clearly establishes priorities and ensures consistent, integrated management among its various programs (i.e. biological, visitor services, administrative, and maintenance).

With the Refuge located in the mid-Atlantic region of the U.S., it provides significant, even critical amounts of habitat for the majority of wildlife species known to occur along the east coast. The Refuge inhabits “southern” wildlife species at the northern limits of their range as well as northern species in the southern limits of their range. Nearly 500 vertebrate species and approximately 590 species of vascular plants have been documented at the Refuge. Many invertebrate species also live on the Refuge. The Refuge consists of over 9,035 acres with 15 different habitat classifications, which in-turn provide habitat for a variety of wildlife ranging from forest interior nesting Neotropical migrant birds to marine mammals. The coastal location of the Refuge also makes them part of a major migration corridor for a variety of birds, including waterfowl, waterbirds, raptors, and songbirds. Appendix C lists birds, mammals, reptiles, amphibians, fish, butterflies, and plants that can be found at the Refuge.

State-listed endangered or threatened species at the Refuge, not already federally-listed, include the Eastern big-eared bat (*Corynorhinus rafinesquii*) and Eastern glass lizard (*Ophisaurus ventralis*).

There is no Federally-designated critical habitat within the action area.

B. Proposed species and/or proposed critical habitat within the action area

None

C. Candidate species within the action area:

None

American Eel Status Review

A Status review for the American eel (*Anquilla rostrata*) is currently being undertaken pursuant to the Endangered Species Act. The American eel may be found in a variety of aquatic habitats throughout Back Bay and its watershed, both as adults and young (elvers). The young occasionally gather at Refuge water control structures during impoundment draw-downs.

D. Include species/habitat occurrence on a map.

N/A

IV. Geographic area or station name and action:

Back Bay National Wildlife Refuge – Comprehensive Conservation Plan. The Refuge is located in SE Virginia, in the City of Virginia Beach.

V. Location:

Maps are found in Chapters 1 through 3 of the draft CCP/EA.

A. Ecoregion Number and Name:

The Mid-Atlantic Coastal Ecoregion

B. County and State:

Virginia Beach, Virginia

C. Section, township, and range (or latitude and longitude):

The Refuge headquarters is located at latitude 36 degrees, 40'19" and longitude -75 degrees, 54'55" (plus or minus 16' GPS error).

D. Distance (miles) and direction to nearest town:

The Refuge is in the rural southeastern part of the City of Virginia Beach, approximately 10 miles from the more urban areas to the north.

E. Species/habitat occurrence:

- 1) **Piping plovers** are associated with intertidal or strand habitats. Although far from optimum due to steep sand dune slopes, the “North Mile” beach provides the best possible breeding habitat on the Refuge.
- 2) **Atlantic ridley** has not been found nesting on the Refuge beach; however, stranded (dead and live) Atlantic ridleys have been documented.
- 3) **Loggerhead sea turtles** regularly nest on the four miles of Refuge beach and five miles of beachfront on False Cape State Park, immediately to the south.
- 4) One **Green sea turtle** is known to have nested on Sandbridge beach (2005), immediately north of the Refuge, which raises the possibility for additional nests to be found on the Refuge.
- 5) **American eel** habitat can be found in the waters of Back Bay and its associated tributaries.

- 6) **NE Beach Tiger Beetles** were seen on July 26, 2000 by Natural Heritage entomologists on the sand dike that separates G and H Pools. They probably also exist in the sand dunes further east.

For more information and details, please refer to chapter 3, "Affected Environment" of the draft CCP/EA.

VI. Description of proposed action (attach additional pages as needed):

The proposed actions and alternatives selected by the Service are described in Chapter 2 of the draft CCP/EA.

VII. Determination of effects:

A. Explanation of effects of the action on species in item III:

Refer to Chapter 4 of the draft CCP/EA for more information and details.

The proposed actions provide more potential habitat for fish and wildlife species native to the waters, wetlands, and forest associated with the Mid Atlantic Coastal Ecoregion. Back Bay National Wildlife Refuge plans to preserve, manage, and restore some of the last significant natural areas for wildlife in Virginia Beach, Virginia. The Refuge's proposed actions will incorporate methods such as restoration, habitat management, and/or monitoring of important wildlife habitats, ranging from coastal systems to mature forests. The proposed management actions presented in the CCP will provide support for threatened and endangered species in addition to hundreds of species of migratory birds and other wildlife within the Atlantic Flyway. Future actions will be coordinated with the Virginia Dept. of Game and Inland Fisheries, Virginia Aquarium and Marine Stranding Center, Virginia Dept. of Environmental Quality, Virginia Dept. of Conservation & Recreation and the USFWS Virginia Ecological Services Field Office in Gloucester, VA.

From the draft CCP/EA, (Chapter 2, Actions Common to All Alternatives), Goal Four states we will provide healthy natural environments for native fish, wildlife, and plant populations (with special consideration to those species whose survival is in jeopardy). Proposed actions include patrolling beaches for active sea turtle nests and relocating all nests to a nursery site on the Refuge. We specifically would like to maintain a nest success rate of 90% or higher for all Refuge sea turtle nests on Sandbridge, Refuge and False Cape State Park ocean-front beaches. Refuge biological staff have carefully studied differences between relocated sea turtle nests, and those left in place ('in situ') during 2003-2005. In addition, Refuge biologists have developed an extensive and detailed protocol for nest relocations during the past 15 years. Using Refuge protocols, nearly all viable, relocated turtle nests have experienced much higher hatching success rates, than those left "in situ."

The Service announced in July 2007 the final decision to remove the bald eagle from the list of threatened and endangered species. After 40 years of conservation efforts, eagle populations have rebounded and no longer need Endangered Species Act protection.

The North Bay Marshes area of the Refuge has an active Bald eagle nest. The Service will effectively monitor the species in cooperation with the states for a minimum of five years after delisting. The post-delisting monitoring plan provides a solid framework for surveying eagles and documenting eagle success after delisting. The monitoring plan is designed to track the population status of bald eagles in the lower 48 states by sampling the number of breeding pairs, similar to the current monitoring methods. The monitoring plan is not intended to monitor causal factors such as circumstances that “disturb” bald eagles or their habitat, a term defined under Bald and Golden Eagle Protection Act. We will continue to monitor that nest and any new ones located on the Refuge. Bald eagles are protected by two other major federal laws: the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

We will continue to work in cooperation with the State Nongame/Endangered Species Biologists to conduct periodic surveys for the glass lizard.

Information on the occurrence of listed species and their habitats is frequently updated; thus, Refuge staff will continue to consult with the Service’s Ecological Services (ES) Branch and the Virginia Department of Conservation & Recreation’s Natural Heritage Division, prior to initiation of any action that may affect State- or Federally-listed species or their habitat.

B. Explanation of actions to be implemented to reduce adverse effects:

As explained above, we believe that implementation of the proposed alternative in the CCP will result in either completely beneficial effects to the listed species described above; or that any direct, indirect, or cumulative adverse effects that may result will be no more than insignificant or discountable. In order to ensure that habitat restoration activities and other management actions in listed species habitat will have no adverse effects, these actions will be performed outside listed species growing/breeding seasonal windows.

VIII. Effect determination and response requested: [* = optional]

A. List species/designated critical habitat:

Determination

Response requested

No effect/No adverse modification

Species: Atlantic Ridley Sea Turtle,
NE Beach Tiger Beetle, American Eel

 * **Concurrence**

**May affect, but is not likely to adversely affect
species/adversely modify critical habitat**

Species:

- 1) Loggerhead Sea Turtle (any effects completely beneficial)
- 2) Piping Plover (any effects completely beneficial)
- 3) Green Sea Turtle (any effects completely beneficial)

 X **Concurrence**

**May affect, and is likely to adversely affect
species/adversely modify critical habitat**

Species: None

 Formal Consultation

Signature

Date

[Title/office of supervisor at originating station]

IX. Reviewing ESO Evaluation:

A. Concurrence X Nonconcurrence

B. Formal consultation required

C. Conference required

D. Informal conference required

E. Remarks (attach additional pages as needed):

Signature

Date

[Title/office of reviewing official]