

## 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:** September 10, 2010

- 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          | <i>(Charadrius melodus)</i> [Threatened]      |
| 2) | Atlantic ridley        | <i>(Lepidochelys kempii)</i> [Endangered]     |
| 3) | Loggerhead sea turtle  | <i>(Caretta caretta caretta)</i> [Threatened] |
| 4) | Green sea turtle       | <i>(Chelonia mydas)</i> [Threatened]          |
| 5) | Leatherback sea turtle | <i>(Dermochelys coriacea)</i> [Endangered]    |
| 6) | Seabeach amaranth      | <i>(Amaranthus pumilus)</i> [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 provides habitat for “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*). The American bald eagle (*Haliaeetus leucocephalus*) is a state threatened species.

**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:**  
Red Knot (*Calidris canutus rufa*)

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

**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. Plovers may use all beaches on the Refuge during migration.
- 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 nests to be found on the Refuge.
- 5) The **Leatherback sea turtle** is not known to occur on the Refuge, but nesting activity has been documented in Maryland, and there is some potential for the species to occur on the Refuge
- 6) **Seabeach amaranth** is not known to occur on the Refuge beaches, but habitat conditions may be suitable to support the species, and it may occur in the future.
- 7) The candidate **red knot** may occur on Atlantic coast beaches in Virginia during migration. They have been recorded on the Refuge, but are not known to occur in large numbers or for extended periods.

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 alternative 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 about proposed management under the CCP.

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 4 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 conducting appropriate management to protect sea turtle nests. The Refuge will work with partners to evaluate and reassess sea turtle nest management in light of the January 2009 revised loggerhead sea turtle recovery plan. Nest management may include relocation of turtle nests following Refuge protocols.

Consultation on sea turtle nest management will be completed separately following the reassessment of nest management practices in conjunction with Refuge partners and development of a detailed revised nest management protocol, if appropriate. Consultation on sea turtle nest management will be completed prior to May 2011, when sea turtle nest management activities are expected to begin again.

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". Refuge protocols are expected to be adopted for relocations that occur following the reassessment of sea turtle nest management procedures.

Limiting vehicle access and recreational uses on the Refuge will avoid and minimize potential disturbance of beach-associated species. However, Refuge activity, limited public use, and species and habitat monitoring activities, and other similar activities, may result in disturbance of beach-associated species. This disturbance is expected to be temporary and limited in extent and duration. Because of the relatively low likelihood of the occurrence of a listed species on the beach and the low likelihood, frequency, and duration of disturbance, the effects are anticipated to be insignificant and discountable.

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, implementation of the proposed alternative in the CCP will result in beneficial effects to the listed species described above; or that any direct, indirect, or cumulative adverse effects that may result will be insignificant or discountable. 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.



