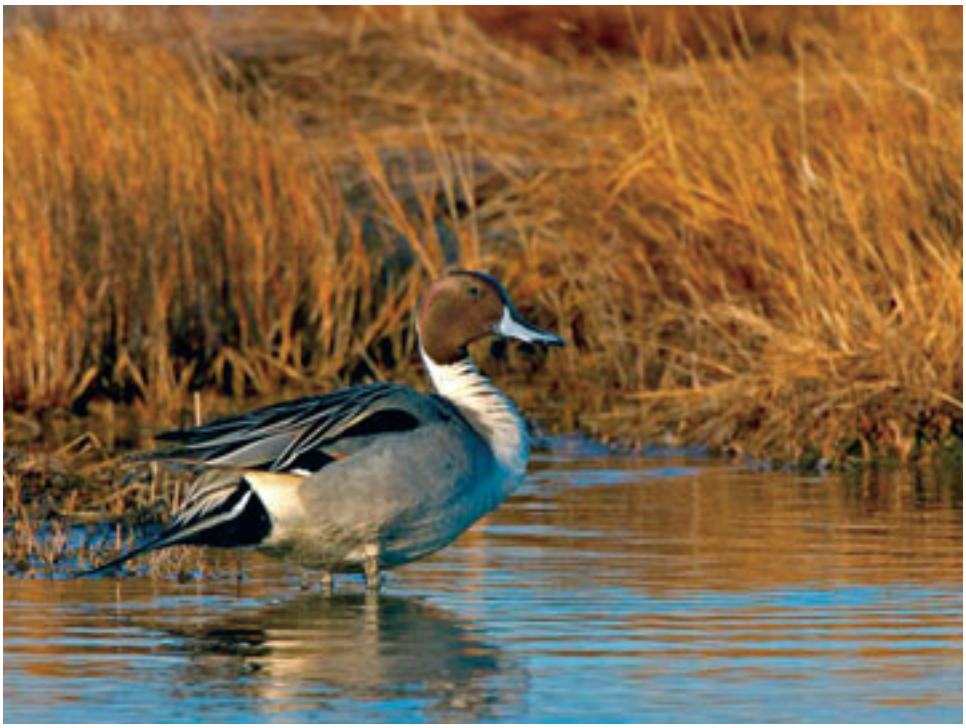
Chapter 1



USFWS

Male Northern pintail

The Purpose of and Need For Action

Introduction

This draft Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) for the Back Bay National Wildlife Refuge combines two documents required by Federal laws; a CCP required by the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 6688dd, et seq.; Refuge Improvement Act), and an EA required by the National Environmental Policy Act of 1969 (NEPA). The CCP will serve as a guide for the Refuge's management over the next 15 years.

This chapter:

- explains the purpose of and need for preparing a CCP/EA for Back Bay National Wildlife Refuge;
- describes the purposes for which the Refuge was established;
- identifies national and regional mandates and plans that influenced this document;
- presents the vision and goals for the Refuge;
- explains the planning process and how it is used to develop this document;
- describes the issues and concerns addressed during the planning process.

Chapter 2, "Alternatives, Including the Service-proposed Action," presents and analyzes three management alternatives, which offer different strategies in fulfilling the Refuge's goal and objectives and responding to key issues.

Chapter 3, "Description of the Affected Environment," describes the physical, biological, and human environment of the Refuge.

Chapter 4, "Environmental Consequence," evaluates the foreseeable consequences of implementing each of the three management alternatives.

Chapter 5, "Consultation and Coordination with Others," describes the public and partner involvement used throughout the planning process, and identifies those individuals involved in preparing this document.

Also included in this document, is a glossary of terms, a bibliography and six appendices.

The Purpose of and Need for Action

Our proposed action is to develop a CCP for the Refuge that best meets its primary purpose, goals and objectives, contributes to the mission of the National Wildlife Refuge System, abides by the U.S. Fish and Wildlife Service policies and mandates, addresses key issues, and responds to public concerns.

NEPA requires that a thorough analysis is made of a range of alternatives, including the proposed action and no action. We analyze the socioeconomic, biological, physical and cultural consequences of implementing each alternative. This draft CCP/EA evaluates three alternatives that represent different ways to achieve all or most of the criteria mentioned above. All three alternatives were generated with the potential to become fully developed into a final CCP.

Developing a CCP with partner and public involvement is vital to the success of management at every National Wildlife Refuge. The purpose of a CCP is to provide management direction for the next 15 years, by:

- stating clearly the desired future conditions of Refuge habitat, wildlife, visitor services, staffing, and facilities;
- providing State agencies, Refuge neighbors, visitors and partners with a clear understanding of the reasons for Refuge management actions;
- ensuring that Refuge management reflects the policies, legal mandates and the mission of the National Wildlife Refuge System;
- ensuring the appropriateness and compatibility of current and future public use meets Refuge purposes;
- providing long-term continuity in Refuge management; and,
- providing direction for our staffing, operating and maintenance, and annual budget requests.

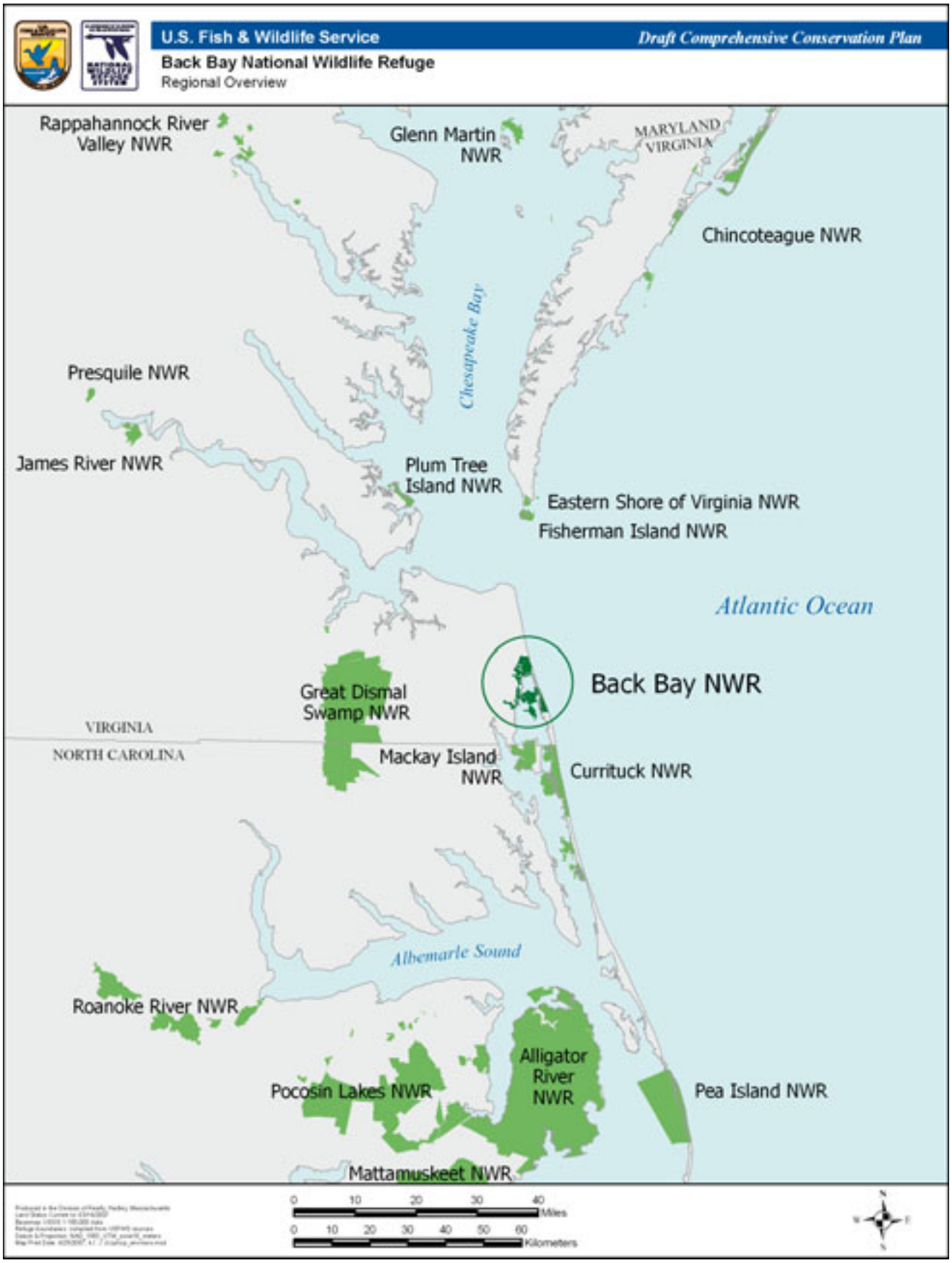
The need to develop a CCP is two-fold. First, there is currently no master plan to formally establish and ensure strategic management for the Refuge. A vision statement, goals, objectives and management strategies are all necessary for successful Refuge management. Public and partner involvement throughout the planning process will also help to resolve various management issues. Second, the National Wildlife Refuge System Improvement Act of 1997 requires that all National Wildlife Refuges have a CCP by 2012.

At its completion, the CCP will be reviewed, evaluated and subsequently updated at least every 15 years in accordance with the Refuge Improvement Act and Service planning policy (602 FWS 1, 3, and 4). Also, the Compatibility Determinations issued with the CCP may be revisited sooner then the mandatory date, or even before the CCP process is completed, if new information reveals unacceptable impacts or incompatibility with the Refuge purposes.

Project Area

The 9,120-acre Refuge is located in southeastern Virginia along the Atlantic Ocean and within the southern half of the city limits of Virginia Beach (Map 1-1). The City of Virginia Beach is bounded to the east by the Atlantic Ocean, to the south by Currituck County and North Carolina, to the west by the cities of Chesapeake and Norfolk, Virginia, and to the north by the Chesapeake Bay. Land use patterns divide the City into three sections. The northern section is the higher density urban and residential region. The southern section is the rural region. The mid-section or "Transition Zone," provides a mixed density transition between the urban north and rural south. The boundary between the urban north and Transition Zone is known as the "Green Line." Currituck Sound lies south of the City, with North Landing River and Back Bay being the primary water sources. The City of Virginia Beach is one of the biggest resort cities on the Atlantic coast and continues to expand as area tourism grows and the resident population continues to increase.

The Refuge exists within the Back Bay Watershed. It currently makes up roughly 25% of the watershed. The watershed has been defined as an oligohaline (nearly fresh) estuary (Norman 1990). The usual salinity of Refuge waters ranges from 0-3 parts per thousand (ppt). Back Bay is the northern tip of the Environmental Protection Agency (EPA)-recognized Albemarle-Pamlico National Estuarine System (APES). Most of APES runs south into coastal North Carolina, and consists of Currituck Sound, Albemarle Sound and Pamlico Sound and associated waterways. Because of its location, 80 miles north of the nearest ocean inlet (Oregon Inlet, NC), Back Bay experiences no lunar tidal action.


U.S. Fish & Wildlife Service
Draft Comprehensive Conservation Plan
Back Bay National Wildlife Refuge
Regional Overview
Rappahannock River Valley NWR
Glenn Martin NWR
MARYLAND
VIRGINIA
Chincoteague NWR
Chesapeake Bay
Presquile NWR
James River NWR
Plum Tree Island NWR
Eastern Shore of Virginia NWR
Fisherman Island NWR
Atlantic Ocean
Back Bay NWR
Great Dismal Swamp NWR
VIRGINIA
NORTH CAROLINA
Mackay Island NWR
Currituck NWR
Albemarle Sound
Roanoke River NWR
Alligator River NWR
Pocosin Lakes NWR
Pea Island NWR
Mattamuskeet NWR
0 10 20 30 40 Miles
0 10 20 30 40 50 60 Kilometers

Instead, the watershed experiences "wind tides" that keep Bay water levels high or low for prolonged periods, in keeping with the prevailing wind direction and speed. These wind tides, when coupled with precipitation and input from the watershed, determine salinity levels of Back Bay waters.

The Refuge consists mostly of open water, barrier island beach and sand dunes, shrub-scrub, bottomland and upland forests/woodlands, and emergent marshes. The immediate surrounding environment is residential, rural agriculture, barrier dunes, inland water, and ocean front. The area just north of the Refuge is urban. The Refuge's unique location mid-way along the Atlantic Coast provides for a high diversity of plant and animal species, because southeastern Virginia and northeastern North Carolina sustain both northern and southern species at their geographic range limits.

This section presents the Service, the National Wildlife Refuge System, Service policy, regulations, and mandates that directly influenced the development of this draft CCP/EA.

The Service, its Policies and Legal Mandates

The U.S. Fish and Wildlife Service and it Mission

The U.S. Fish and Wildlife Service administers the National Wildlife Refuge System. The Service is an agency within the Department of the Interior. The Service mission is:

> *"Working with others, to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people."*

Congress entrusts natural resources to the Service for conservation and protection. These include migratory birds, Federal-listed endangered or threatened species, interjurisdictional fish, wetlands, certain marine mammals, and National Wildlife Refuges. The Service also enforces Federal wildlife laws and international treaties on importing and exporting wildlife, assists States with their fish and wildlife programs, and helps other countries develop conservation programs. Under the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884, as amended), we have consulted with the Service's Ecological Service Virginia Field Office to ensure that actions identified in this CCP do not jeopardize the continued existence of listed species or adversely modify critical habitat. The Intra-Service Section 7 Biological Evaluation Form is included as Appendix F.

The Service manual contains the standing and continuing directives to implement its authorities, responsibilities, and activities. You can view this manual at: http://www.fws.gov.directives/direct.html.

Special Service directives that affect the rights of citizens or the authorities of other agencies are published separately in the Code of Federal Regulations (CFR). Most of the current regulations that pertain to the Service are issued in 50 CFR parts 1 to 99. CFR's can be viewed at: http://www.access.gpo.gov/nara/cfr/index.html.

The National Wildlife Refuge System, its Mission, and Policies

The Refuge System is the world's largest collection of lands set aside specifically for the conservation of wildlife and ecosystem protection. The Refuge System began in 1903, when President Theodore Roosevelt designated Pelican Island, a pelican and heron rookery in Florida, as a bird sanctuary. Today, more than 545 National Wildlife Refuges are part of the National Wildlife Refuge System.

They encompass more than 95 million acres of lands and waters in all 50 states and several island territories. Over 40 million visitors hunt, fish, observe and photograph wildlife, or participate in environmental education and interpretive activities on Refuges across the nation each year.

In 1997, the National Wildlife Refuge System Improvement Act was passed. This law established a unifying mission for the Refuge System, a new process for determining compatible public use activities on the Refuges, and the requirement to prepare CCPs for each Refuge. The Refuge Improvement Act states first and foremost, that the Refuge System must focus on wildlife conservation. It further states that the national mission, coupled with the purpose(s) for which each Refuge was established, will provide the principal management direction for each Refuge. The mission of the Refuge System is:

> *"To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."*
>
> —Refuge Improvement Act; Public Law 105-57

The Refuge Improvement Act identifies six wildlife-dependent public uses – hunting, fishing, wildlife observation and photography, environmental education and interpretation – that will receive priority consideration on refuges and in CCPs. The Act also declares that all existing or proposed refuge uses must be "compatible" with the refuge's purpose and consistent with public safety. The refuge manager determines if an existing or proposed use is "compatible" by evaluating its potential impact on refuge resources, insuring that the use supports the System mission, and does not materially interfere with or detract from the purpose for which the refuge was established.

The Refuge System manual provides a central reference for current policy governing the operation and management of the Refuge System not covered by the Service manual, including technical information on implementing Refuge policies and guidelines. This manual can be reviewed at Refuge Headquarters.

Refuge System Planning Policy
The planning policy provides guidance, systematic direction, and minimum requirements for developing all CCPs and step-down management plans, and provides a systematic decision-making process that fulfills those requirements. It states that we will manage all Refuges in accordance with an approved CCP, which when implemented, will achieve Refuge purposes; help fulfill the Refuge System mission; maintain and, where appropriate, restore the ecological integrity of each Refuge and the Refuge System; help achieve the goals of the National Wilderness Preservation System; and meet other mandates [Fish and Wildlife Service Manual (602 FW 1,2,3)].

The Improvement Act of 1997 stipulates that each Comprehensive Conservation Plan "shall identify and describe:

A) the purposes of each refuge comprising the planning unit [*found in this chapter*];

B) the distribution, migration patterns, and abundance of fish, wildlife, and plant populations and related habitats within the planning unit [*Chapter 3, Affected Environment*];

C) the archaeological and cultural values of the planning unit [*Chapter 3*];

D) such areas within the planning unit that are suitable for use as administrative sites or visitor facilities [*Chapter 2, Alternatives*];

E) significant problems that may adversely affect the populations and habitats of fish, wildlife, and plants within the planning unit and the actions necessary to correct or mitigate such problems [*Chapters 1,2 and 3*]; and

F) opportunities for compatible wildlife-dependent recreational uses [*Chapter 2*]."

Appropriate Refuge Uses Policy
This policy provides a national framework and procedure for refuge managers to follow when deciding if uses are appropriate on a refuge. It also clarifies and expands on the compatibility policy (603 FW 2.10D), which describes when refuge managers should deny a proposed use without determining compatibility. When we find a use is appropriate, we must then determine if the use is compatible before we allow it on a refuge. This policy applies to all proposed and existing uses in the Refuge System only when we have jurisdiction over the use and does not apply to refuge management activities or situations where reserved rights or legal mandates provide we must allow certain uses (603 FW 1). Appendix A further describes the Appropriate Refuge Uses Policy and describes its relationship to the CCP process.

Compatibility Policy
Federal law and Service policy provide the direction and planning framework to protect the Refuge System from incompatible or harmful human activities and ensure that Americans can enjoy Refuge System lands and waters. The Refuge Improvement Act is the key legislation regarding management of public uses and compatibility. The compatibility requirements of the Refuge Improvement Act were adopted in the USFWS Final Compatibility Regulations and Final Compatibility Policy, published October 18, 2000 (Federal Register, Vol. 65, No. 202, pp. 62458 to 62496). This Compatibility Rule changed or modified Service regulations contained in Chapter 50, Parts 25, 26, and 29 of the Code of Federal Regulations (USFWS 2000). The compatibility determinations for Back Bay Refuge can be found in Appendix A along with additional information on the process. To view the policy and regulations online, visit *http://policy.fws.gov/library/00fr62483.pdf.*

Wildlife-Dependent Recreation Policy
The Improvement Act defines and establishes that compatible wildlife dependent recreational uses (hunting, fishing, wildlife observation and photography, and environmental education and interpretation) are the priority general public uses of the Refuge System and will receive enhanced and priority consideration in refuge planning and management over other general public uses. The Wildlife Dependent Recreation Policy explains how we will provide visitors with opportunities for those priority public uses on units of the Refuge System and how we will facilitate these uses. We are incorporating this policy as Part 605, Chapters 1 to 7, of the Fish and Wildlife Service Manual.

Maintaining Biological Integrity, Diversity and Environmental Health Policy
This policy provides guidance on maintaining or restoring the biological integrity, diversity and environmental health of the Refuge System including the protection of a broad spectrum of fish, wildlife and habitat resources found in Refuge ecosystems. Refuge managers are provided with a process for evaluating the best management direction to prevent the additional degradation of environmental conditions and restore lost or severely degraded environmental components. Guidelines are also provided for dealing with external threats to the biological integrity, diversity and environmental health of a Refuge and its ecosystem (601 FW 3).

Fulfilling the Promise
The 1999 report, "Fulfilling the Promise, The National Wildlife Refuge System; Visions for Wildlife, Habitat, People and Leadership" (USFWS 1999a), is a

culmination of a year-long process by teams of Service employees to create a vision for the Refuge System nation-wide. This report was a result of the first-ever System Conference held in Keystone, Colorado in October 1998. It was attended by every Refuge manager in the country, other Service employees, and scores of conservation organizations. The report contains 42 recommendations packaged with three vision statements dealing with wildlife and habitat, people, and leadership. We have often looked to the recommendations in the document for guidance when writing this draft CCP/EA. For example, the 1999 report recommends forging new alliances through citizen and community partnerships, and strengthening partnerships with the business community. One of the goals in our CCP is devoted almost entirely to the development of community partnerships, while several of our strategies focus on forging new partnerships or strengthening existing ones.

Other Mandates
Although Service and Refuge System policy and the Refuge's purposes provide foundation for its management, other federal laws, executive orders, treaties, interstate compacts, and regulations on the conservation and protection of natural and cultural resources also affect how National Wildlife Refuges are managed. The Digest of Federal Resource Laws of Interest to the USFWS lists many of them, and can be accessed at: *http://law.fws.gov/lawsdigest/indx.html.*

Conservation Plans and Initiatives Guiding the Project

North American Waterfowl Management Plan (NAWMP; update 2004)

The North American Waterfowl Management Plan was originally written in 1986 and envisioned a 15-year effort to achieve landscape conditions that could sustain waterfowl populations. This plan outlined a strategy among the United States, Canada, and Mexico to protect North America's remaining wetlands and to restore waterfowl populations through habitat protection, restoration, and enhancement. The 2004 Plan establishes a new 15-year planning horizon for waterfowl conservation in North America by assessing the needs, priorities, and strategies required to guide waterfowl conservation in the 21st century. The 2004 update for the North American Waterfowl Management Plan can be accessed at: *http://www.fws.gov/birdhabitat/NAWMP/images/NAWMP2004.pdf*

Implementation of this plan is accomplished at the regional level within 15 regional habitat "Joint Venture" areas. A "joint venture" is a self-directed partnership of agencies, organizations, corporations, tribes, or individuals that has formally accepted the responsibility of implementing national or international bird conservation plans within a specific geographic area or for a specific taxonomic group, and has received general acceptance in the bird conservation community for such responsibility. In support of bird conservation goals, joint venture partners conduct biological planning, project development and implementation, monitoring and evaluation, and communications and outreach. Back Bay National Wildlife Refuge is located within the Atlantic Coast Joint Venture (ACJV) area, which covers all the Atlantic Flyway states from Maine to Florida and Puerto Rico. The goal for the ACJV is to:

> *"Protect and manage priority wetland habitats for migration, wintering, and production of waterfowl, with special consideration to black ducks, and to benefit other wildlife in the joint venture area."*

The ACJV Implementation Plan was revised in 2005 (USFWS 2005). It steps down continental and regional waterfowl population and habitat goals from the NAWMP 2004 Update to the ACJV area. It presents habitat conservation goals and population indices for the ACJV consistent with the 2004 Update, provides current status assessments for waterfowl and their habitats in the

joint venture, and updates focus area narratives and maps for each state. This revised version of the Implementation Plan also provides a baseline of information needed to move forward with a thorough approach for setting future habitat goals. Back Bay National Wildlife Refuge lies within the Southeast Virginia Focus Area, one of eight focus areas in Virginia, within which the plan designates 30,097 acres of habitat to be protected and 6,019 acres for enhancement. The 2005 update of the Implementation Plan can be accessed at: *http://www.acjv.org/wip/acjv_wip_main.pdf*

Partners in Flight: Mid-Atlantic Coastal Plain Bird Conservation Plan (Physiographic Area #44)

The Partners in Flight (PIF) Program has developed a draft plan for the Mid-Atlantic Coastal Plain Physiographic Area (USFWS 1999b). According to the plan, the greatest conservation challenge facing land managers today is increasing population growth. To meet this challenge, the plan identifies priority land bird species and habitat types, and recommends specific objectives aimed at protecting those species and their habitats. We use components of this plan to guide bird management on the Refuge. The plan ranks species conservation importance within a regional area based on a variety of factors including global threats to the species, high concern for regional or local populations, or responsibility for conserving large or important populations of the species. Examples of high priority species at Back Bay National Wildlife Refuge include the piping plover, American black duck, king rail, least bittern, bald eagle, seaside sparrow, field sparrow, Henslow's sparrow, prothonotary warbler, prairie warbler and wood thrush. The PIF draft plan also ranks habitats based on overall conservation priority. Six of the eight habitat types identified in the plan are found on the Refuge. Those six habitat types include: early successional, forested wetland, pine savannah, beach and barrier dunes, mixed upland forest and fresh/oligohaline marsh. The Mid-Atlantic Coast Plain Bird Conservation Plan can be accessed at: *http://www.blm.gov/wildlife/pl_44sum.htm*

U.S. Shorebird Conservation Plan

The United States Conservation Plan (Brown et al. 2001) was developed with the purpose of creating conservation goals, identifying critical habitat and promoting education and outreach programs to facilitate shorebird conservation. Several groups and individuals, including local, state, and federal agencies, non-governmental organizations, business-related sectors, researchers, educators, and policy makers helped with the development of this plan. The plan has set goals at the hemispheric, national and regional levels. At the regional level, Back Bay National Wildlife Refuge is part of the Southeastern Coastal Plain/Piedmont Planning Region (SECPR). The Southeastern Coastal Plains/Piedmont Region is critical for breeding shorebirds as well as for supporting transient species during both northbound and southbound migrations. Species of highest regional priority that occasionally use Back Bay NWR include: the American oystercatcher, Wilson's plover, and piping plover. High regional priority species include: the pectoral sandpiper, red knot, semipalmated sandpiper and short-billed dowitcher. Three habitat goals under the Conservation Plan are: (1) to provide optimal breeding habitat to maintain and increase populations of priority species, (2) to provide high quality habitat to support requirements of species migrating through or spending winter in the region, and (3) to restrain human disturbance to tolerable levels. Proposed strategies within the CCP address these habitat goals as well as protect those high priority species mentioned above. The U.S. Shorebird Conservation Plan can be accessed at: *http://www.fws.gov/shorebirdplan/USShorebird/downloads/USShorebirdPlan2Ed.pdf*

If you would like to view the SECPR Plan, please visit: *http://www.fws.gov/shorebirdplan/RegionalShorebird/downloads/SECPCRRev02.pdf*

The Neotropical Migratory Songbird Coastal Corridor Study

This study examined the distribution and habitat associations of fall migrating landbirds within the coastal regions of four states along the Atlantic Coast (Mabey et al. 1993). These states include: New Jersey, Delaware, Maryland and Virginia. Together, these states make up the Cape May and Delmarva

peninsulas. These two areas are well known for their contribution of stopover habitat for migratory birds. The study revealed that neotropical migrants are not randomly or evenly distributed over the Cape May and Delmarva peninsula during stop-over, but rather are concentrated in particular geographic areas within the region. More specifically the study suggested that migrant birds are more abundant in areas close to the coastlines (within 0 to 0.9 miles) than they are in equivalent areas farther from the coast. The study also revealed that migrants are associated with particular habitats on a species-specific basis. This study has shaped some of our strategies within Alternative B. For example, we intend to focus some of our research efforts on studying the use of the Refuge by neotropical migrant birds.

National Bald Eagle Management Guidelines (May 2007)

In July 2007, the Service issued a final ruling to officially remove the bald eagle from the Federal list of endangered and threatened species. The bald eagle continues to be protected by the Bald and Golden Eagle protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA). The Service developed these National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the Eagle Act may apply to their activities. The Guidelines are intended to help people minimize such impacts to bald eagles, particularly where they may constitute disturbance," which is prohibited by the Eagle Act. The plan is designed to: (1) Publicize the provisions of the Eagle Act that continue to protect bald eagles, in order to reduce the possibility that people will violate the law, (2) Advise landowners, land managers and the general public of the potential for various human activities to disturb bald eagles, and (3) Encourage additional nonbinding land management practices that benefit bald eagles. The document is intended primarily as a tool for landowners and planners who seek information and recommendations regarding how to avoid disturbing bald eagles. You can view these management guidelines at: *http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf*. We referred to these guidelines as we developed management objectives and strategies for bald eagle.

Regional Wetland Concept Plan B Emergency Wetlands Resource Act, Northeast Region

The Emergency Wetlands Resources Act was enacted in 1986 to promote the conservation of wetlands nation-wide. Through this act, the Department of the Interior was directed to develop a National Wetlands Priority Conservation Plan identifying the location and types of wetlands that should receive priority attention for acquisition by Federal and State agencies using Land and Water Conservation Fund appropriations. In 1990, the Service's Northeast Region completed a Regional Wetlands Concept Plan that complemented the National Plan by providing more detailed information about the wetland resources of the northeastern states (USFWS 1990a). The Regional Wetlands Concept Plan identifies 850 wetland sites that warrant consideration for acquisition. It also describes wetland functions and values as well as identifies wetland loss and threats to those wetlands remaining in the region. Of the total 205 wetland sites identified for the state of Virginia, five are located near the Refuge. Those five sites include: Back Bay Wetlands (3,800 acres), Blackwater Creek (500 acres), North Landing River Wetlands (19,000), Stumpy Lake (500), and West Neck Creek (2,800).

Virginia's Comprehensive Wildlife Conservation Strategy

In 2001, Congress began to provide Virginia with annual funding to supplement existing state fish and wildlife conservation programs. With that came the responsibility for each state and territory to develop a Comprehensive Wildlife Conservation Strategy (CWCS) by October 1, 2005 (VDGIF 2005). This Strategy provides a blueprint and vision for effective and efficient wildlife conservation within Virginia. The plan divides the state up into six different ecological regions (ecoregions) to help facilitate strategic planning. Back Bay National Wildlife Refuge resides in the Middle Atlantic Coastal Plain ecoregion. Some of the major issues addressed in this plan include: (1) A need for greater

coordination between conservation partners (2) Unprecedented fragmentation and development of habitat (3) Invasive non-native plants and animals negatively impacting native wildlife and habitats (4) Existing data gaps that impede effective conservation planning and implementation, and (5) A chronic shortfall in funding of conservation programs. Since the issues addressed in Virginia's CWCS and this CCP overlap, this plan has proved helpful when developing our goals and strategies. If you would like to view Virginia's Comprehensive Wildlife Conservation Strategy, please visit: *http://www.vawildlifestrategies.org/draft.html*

A Management Plan for Back Bay and City Comprehensive Plan, City of Virginia Beach

This 1984 Management Plan for Back Bay is an examination and analysis of the physical, chemical, and biological characteristics of Back Bay and its watershed. Existing ecological data, dating back to the late 19th Century, was examined in addition to site specific investigations of terrestrial and aquatic vegetation, water quality, and water quantity. The Plan also provided management recommendations for the watershed. This Plan's comprehensive analysis of the watershed provides a base-level comparison for determining the effects of past, current, and future management decisions through continued monitoring programs. The 2003 Comprehensive Plan for the City of Virginia Beach includes a chapter on natural resources and environmental quality (City of Virginia Beach 2003). This more recent plan provides local strategies for managing natural resources, including references to SWAMP (see below).

Southern Watershed Area Management Program (SWAMP), Hampton Roads Planning District Commission

This program's mission is to protect and enhance the natural resources, sensitive lands and water supplies of the southern watersheds of Chesapeake and Virginia Beach. The Program's purpose is to develop and implement collaborative watershed management to balance protection of natural resources with economic development. Due to increased development encroaching on the Refuge and the Back Bay Watershed, participating and partnering in the various initiatives of SWAMP is critical.

Recovery Plans

Atlantic Coast Piping Plover Recovery Plan
Refuge piping plover use occurs during the spring and fall migrations. Only four to five piping plovers are usually recorded during this time. As of July 2009, nesting has not yet occurred on Refuge beaches, probably because of the lack of suitable nesting areas. Refuge biological staff, conduct periodic shorebird surveys and are alert to piping plover nesting possibilities, and what to do in the event a nest is found.

In 1996, a revision was made to the original 1988 Atlantic Coast Piping Plover Recovery Plan (USFWS 1996). The primary objective of the revised recovery program is to remove the piping plover population from the List of Endangered and Threatened Wildlife and Plants. The plan is designed to: (1) achieve well-distributed increases in numbers and productivity of breeding pairs, and (2) provide for long-term protection of breeding and wintering plovers and their habitat. The strategies within the plan provide for the ensured long-term viability of piping plover populations in the wild. There are a total of 20 piping plover potential breeding sites in the state of Virginia. The closest site to the Refuge is Craney Island (VA-8). We were able to utilize this Recovery Plan as we developed some of our management strategies. If you would like to view the Atlantic Coast Piping Plover Recovery Plan, please visit:*http://www.fws.gov/northeast/pipingplover/recplan/*

Chesapeake Bay Region Bald Eagle Recovery Plan
Back Bay NWR hosted the first nesting bald eagle pair in Back Bay in 1992, following the purchase of Tract 104 (North Bay Marshes). Since then, bald eagle nests have increased to six in the Back Bay and North Landing River watersheds; with the newest nest occurring on nearby False Cape State Park in

2005. All nests are active, producing an average of two eaglets per year. Juvenile and adult bald eagles are now regularly seen in this area.

This plan describes the actions necessary to ensure the survival and recovery of bald eagles in the Chesapeake Bay region (USFWS 1990b). The primary goal of the plan was to reclassify the bald eagle from endangered to threatened, working toward full recovery and eventually the delisting of the bald eagle.

The Service has recently proposed nesting management guidelines and a regulatory definition of disturb to help landowners and others understand how they can help protect bald eagles consistent with existing law. Delisted from the Endangered Species Act, bald eagles continue to be protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Both acts protect bald eagles by prohibiting killing, selling or otherwise harming eagles, their nests or eggs. The BGEPA also protects eagles from disturbance.

If you would like to view the Chesapeake Bay Region Bald Eagle Recovery Plan please visit:*http://ecos.fws.gov/docs/recovery_plans/1990/900927.pdf*

A Recovery Plan for U.S. Populations of Loggerhead Turtle
Back Bay NWR has approximately five miles of Atlantic coast beach habitat. The Refuge partners with False Cape State Park, which owns another five miles of beach habitat, to monitor loggerhead sea turtle nesting activity. In most years, loggerhead sea turtles nest on these beaches and produce over 100 young from each nest. Refuge and Park staff implement Recovery Plan strategies of protecting beach nesting habitats and enhancing hatching success.

This plan describes the actions necessary to ensure the survival and recovery of loggerhead sea turtles (National Marine Fisheries Service & USFWS 1991). The primary goal of the plan is to contribute to the delisting of the turtle from its threatened status. The criteria for delisting the loggerhead sea turtle in the southeast region are, for over a period of 25 years, population levels in North Carolina, South Carolina and Georgia are at pre-listing nesting levels and increasing in Florida; at least 25% of all nesting beaches are in public ownership, is distributed over the entire nesting range and encompasses greater than 50% of the nesting activity; and, all priority one tasks have been successfully implemented. This plan provided direction during the development of our wildlife and habitat management strategies. If you would like to view the Loggerhead Turtle Recovery Plan please visit:*http://ecos.fws.gov/docs/recovery_plans/1991/911226a.pdf*

Refuge Establishment/ History and Purpose

Refuge Establishment History

The Back Bay area has long been famous as a wildfowler's paradise where once large concentrations of wintering waterfowl and shorebirds could be found. Before the Refuge's establishment on June 6, 1938 by Executive Order #7907, the Princess Anne and Ragged Island Hunting Clubs occupied the site. Other well-known hunt clubs in the Back Bay area include the Dudley Island Club, the False Cape Gunning Club, the Cedar Island Club, and the Back Bay Gunning Club. Many of these hunt clubs were founded in the late 1800s and attracted wealthy professionals from as far away as New York and Philadelphia. The Refuge was established in cooperation with the State of Virginia to protect valuable wintering waterfowl habitats, the estuarine system, and the water quality.

Prior to acquisition by the Federal government, the barrier beach portion was generally flat and sandy. The saline soils were unproductive. Periodic "northeasters" and hurricanes pushed large quantities of sea water across these flat beaches, and into Back Bay. During the early 1930's the Civilian

Conservation Corps built brush fences and planted cane and bulrush to catch moving sands; thus building and stabilizing new sand dune formations. Later, wooden sand fences were constructed, and many dunes were planted with beachgrass. These new dunes protected the bayside flats from oceanic waters and permitted formation of a brackish marsh that evolved into the existing oligohaline (salinity of <5 ppt) wetlands complex called Back Bay.

Refuge management activities have been principally aimed at providing productive wetland habitats for migratory birds—particularly waterfowl—and ensuring that those wetlands are properly protected. Early Refuge development focused on the creation of freshwater marsh on the barrier island portion of the Refuge to complement existing brackish and salt-water habitats already present. By 1970, approximately 650 acres of mostly unvegetated, salt flats had been converted to freshwater impoundments for waterfowl and shorebirds. Activities that included water level manipulations, discing, root-raking, plowing, prescribed burning and seeding were used to provide the desired freshwater marsh vegetation that exists to this day.

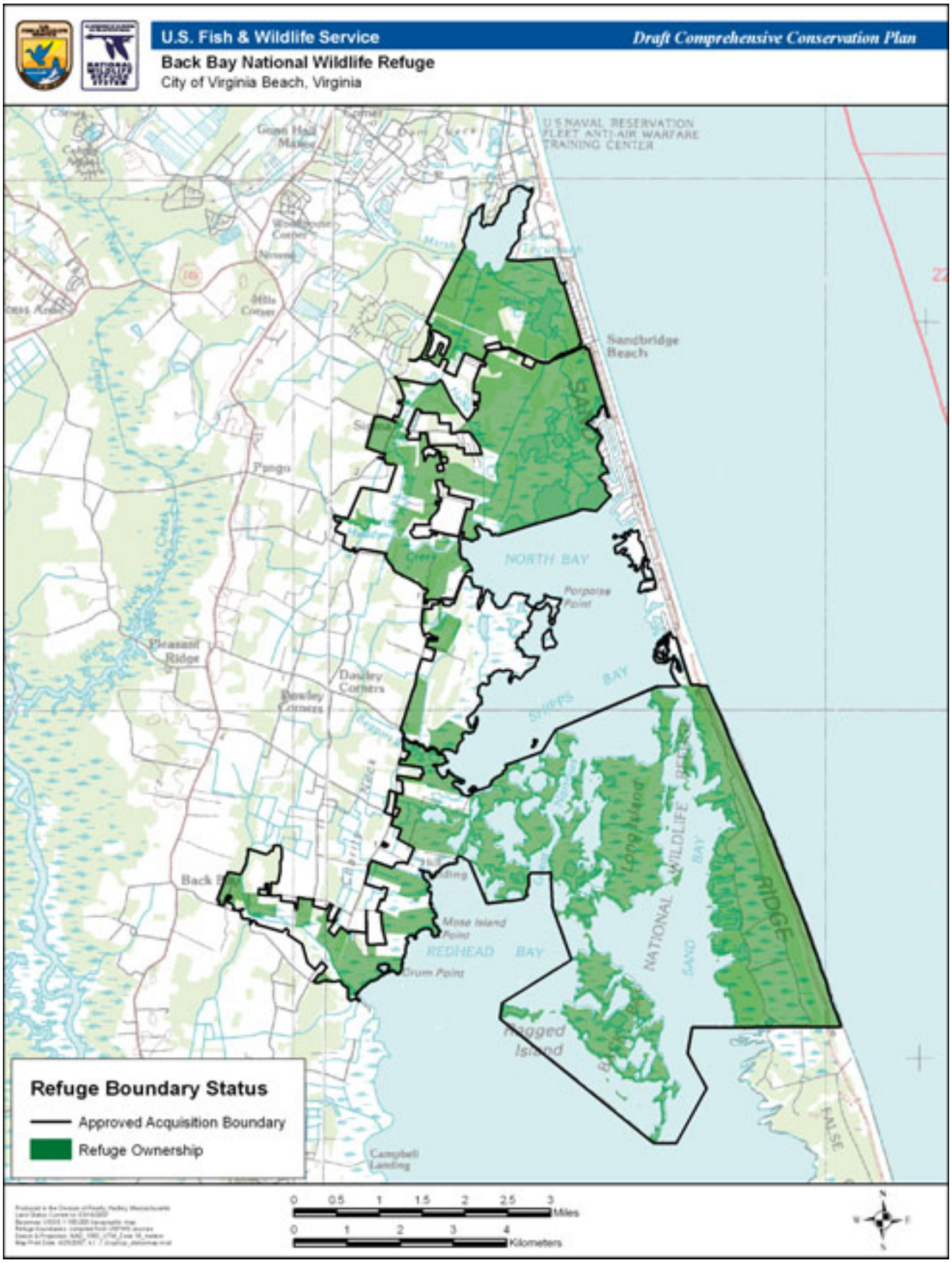
The Refuge has doubled its size since the early 1990s (Map 1-2). Recent land acquisitions open up possibilities for visitor facilities along the western border of the Refuge (Table 1.1). Current visitor facilities are located in the eastern, barrier island portion of the Refuge, where annual visitation is greater than 100,000.

Table 1.1. Land Acquisition History

Year of Acquisition	Acreage
1938	4588.76
1990	455.08
1991	95.03
1992	2096.23
1993	410.29
1994	229.13
1995	98.43
1996	275.25
1997	67.62
2000	327.14
2001	51.22
2002	201.54
2004	84.92
2005	14.06
2006	40.31
2007	74.93
2008	10.0
TOTALS	**9119.01**

Refuge Purpose

The original 1938 Executive Order established Back Bay NWR *"....as a Refuge and breeding ground for migratory birds and other wildlife."* Another of the Refuge's primary purposes (for lands acquired under the Migratory Bird Conservation Act) is "*… use as an inviolate sanctuary, or for any*


U.S. Fish & Wildlife Service
Draft Comprehensive Conservation Plan
Back Bay National Wildlife Refuge
City of Virginia Beach, Virginia
U.S. NAVAL RESERVATION
FLEET ANTI-AIR WARFARE
TRAINING CENTER
Sandbridge Beach
NORTH BAY
Porpoise Point
Pleasant Ridge
Dawley Corners
Pungo
Mose Island Point
REDHEAD BAY
Drum Point
Ragged Island
Long Island
BACK BAY NATIONAL WILDLIFE REFUGE
SAND RIDGE
FALSE
Campbell Landing
Refuge Boundary Status
Approved Acquisition Boundary
Refuge Ownership
0 0.5 1 1.5 2 2.5 3 Miles
0 1 2 3 4 Kilometers

other management purpose, for migratory birds." The Emergency Wetlands Resources Act of 1986 also authorizes purchase of wetlands for the purpose of "*… the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions …..,*" using money from the Land and Water Conservation Fund (LWCF).

In 1939, 4,600 acres of open bay waters within the Refuge boundary were closed to the taking of migratory birds by presidential proclamation. This boundary is referred to as the Refuge Presidential Proclamation Boundary.

The Refuge includes five miles of oceanfront beach, a 900-acre freshwater impoundment complex, numerous Bay islands, bottomland mixed forests, and freshwater wetlands adjacent to Back Bay and its tributary shorelines.

The Back Bay NWR Station Management Plan in 1993 expanded the role of the Refuge to include management emphases on other migratory bird groups, including threatened and endangered species, shorebirds, wading birds, marsh birds and songbirds/landbirds.

Existing Refuge Operational Plans

Step-Down Management Plans

The Service Manual (602 FW 4, "Refuge Planning Policy") lists more than 25 step-down management plans that may be appropriate to ensure safe, effective and efficient operation on every Refuge. These plans contain specific strategies and implementation schedules for achieving Refuge goals and objectives. Some plans require annual revisions; others are on a 5 to 10 year revision schedule. Some require additional NEPA analysis, public involvement, and compatibility determinations before they can be implemented.

These step-down plans are current and up-to-date:

- Fire Management Plan (FMP) (2002)
- Marsh and Water Management Plan* (MWMP) (1993)
- Croplands Management Plan* (CMP)
- Annual Habitat Management Plan (AHMP)
- Inventory and Monitoring Plan** (IMP) (1989)
- Disease Prevention & Control Plan (2007)
- Public Use Plan (1990, addendums in 1992 & 1994)
- Hunting Plan (2006)
- Law Enforcement Plan
- Safety Plan (2006)

This step-down plan is in draft form and is scheduled to be completed as follows:

- Habitat Management Plan (HMP) (2010)

**The HMP will include, and replace, these plans.*
***This plan will need updating to meet newer standards.*

Refuge Vision Statement

We propose the following vision statement for the Refuge to provide a guiding philosophy and sense of purpose for our planning effort.

> *Back Bay National Wildlife Refuge will work closely with partners and communities to provide a biologically healthy natural environment that restores abundant fish, wildlife and plant populations. Special consideration will be given to those species whose survival is in jeopardy. In keeping with the Refuge System mission, we will provide a healthy haven of land and water to support Back Bay's diverse wildlife communities, with an emphasis on migratory waterbird and songbird management. We will strive to promote active stewardship of these natural resources for present and future generations, while also providing opportunities for compatible public uses. In doing this, we hope to ensure a sound coexistence between wildlife and people that will allow people to share our passion and appreciation of Back Bay's many natural resources, while also enhancing the quality of life in Back Bay.*

Refuge Goals

Our planning team developed these draft goals after reviewing the Refuge purposes, the mission of the Service and Refuge System, our proposed vision, public and partner comments, and the mandates, plans and conservation strategies mentioned above.

Goal 1: Maintain and enhance a diversity of wetland habitats for migratory birds.

Goal 2: Enhance and preserve native woodland diversity and health.

Goal 3: Manage beach and dunes to preserve and protect migratory bird and other wildlife habitats.

Goal 4: Provide healthy natural environments for native fish, wildlife, and plant populations (with special consideration to those species whose survival is in jeopardy).

Goal 5: Provide additional viewing opportunities of migratory birds and other wildlife to increase the general public's appreciation and support of natural resources.

Goal 6: Provide and expand hunting and fishing opportunities to the public where compatible with Refuge purposes.

Goal 7: Promote understanding and appreciation for the conservation of fish, wildlife and their habitats and the role of the Refuge in this effort through effective community outreach programs and partnerships.

The Comprehensive Conservation Planning Process

Service policy establishes an eight-step planning process that also facilitates compliance with NEPA (Figure 1.1). Each of its individual steps is described in detail in the planning policy and CCP training materials (602 FWS 3, "The Comprehensive Conservation Planning Process"). The planning policy can be accessed at:*http://policy.fws.gov/602fw3.html*

Planning Process

The key to effective conservation begins with community involvement. To ensure future management of the Refuge takes into consideration the issues, concerns and opportunities expressed by the public, a variety of public involvement techniques were used.

Open Houses and Public Information Meetings were held throughout the Virginia Beach area at three different locations during January 2002. Meetings were advertised locally through news releases, paid advertisements, and our mailing list. For each meeting, the "open house" session was planned where people could informally learn of the project, and have their questions or concerns addressed in a "one-on-one" situation. The evening Public Information Meeting sessions usually included a presentation of the Refuge, a brief review of the Refuge System and the planning process, and a question and answer session. Participants were encouraged to actively express their opinions and suggestions. The public meetings allowed us to gather information and ideas from local residents, adjacent landowners, and various organizations and agencies.

An "Issues Workbook" was developed to encourage written comments on topics such as wildlife habitats, nuisance species, and public access to the Refuge. These workbooks were mailed to a diverse group of over 1,500 people on our mailing list, given to people who attended a public meeting, and distributed to anyone who requested one. More than 100 people returned completed workbooks.

After a 30-day public review of this draft CCP/EA, we will review and analyze all written and oral comments. All of the comments will be reviewed and considered in development of the Final CCP. The Final CCP will also identify the Service-preferred alternative. If no further NEPA review is required, a Finding of No Significant Impact (FONSI) will be written to certify that the final CCP has met all Service requirements and will achieve Refuge purposes and fulfill the mission of the National Wildlife Refuge System. The final CCP and FONSI will then be submitted to the Regional Director for final review and approval. As soon as the final CCP has been approved, implementation can begin.

Compatibility Policy/Compatibility Determinations
The Compatibility Determinations issued with the CCP may be revisited sooner then the mandatory date, or even before the CCP process is completed, if new information reveals unacceptable impacts or incompatibility with the Refuge purposes.

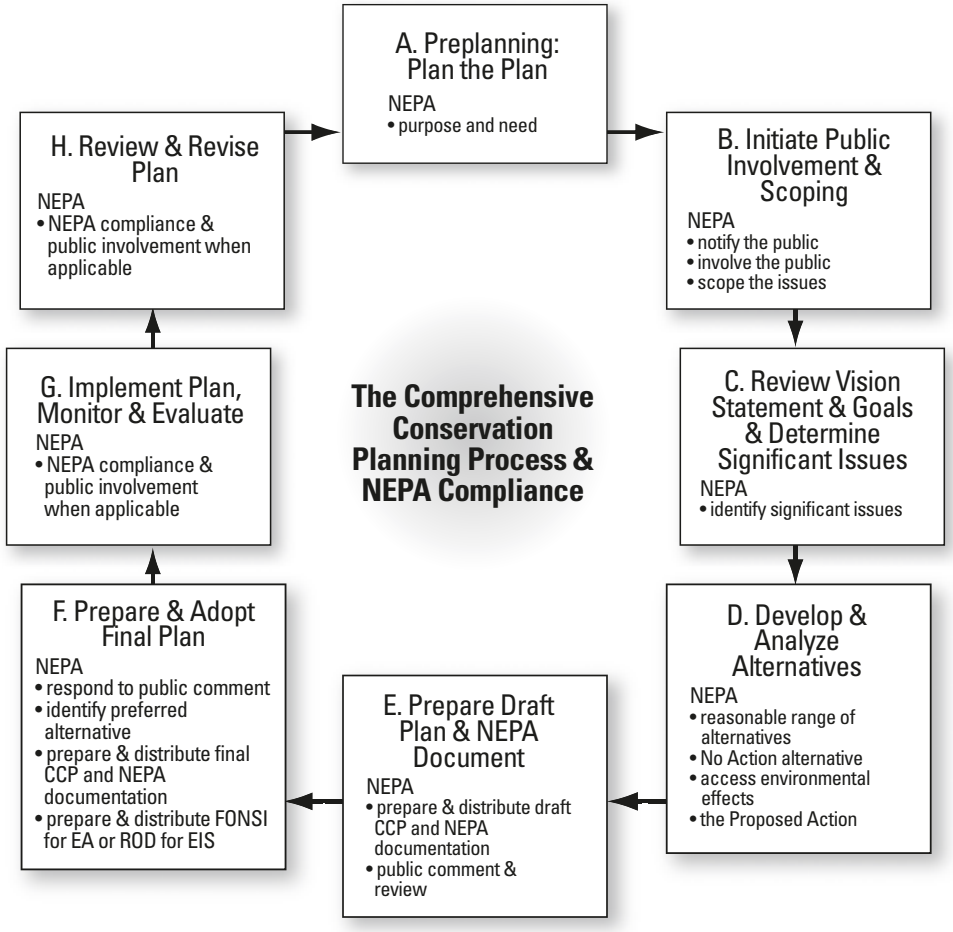


Figure 1.1. Steps in the Comprehensive Conservation Planning Process and its relationship to the National Environmental Policy Act of 1969.

Issues, Concerns and Opportunities

We developed a list of key issues and opportunities from our Issues Workbook, public and focus group meetings, and planning team meetings. Issues were sorted into two categories:

Key Issues: These are public, partner, or Service concerns without obvious solutions. Along with the goals stated above, these key issues formed the basis of our development and comparison of the proposed alternatives. The wide range of options of how to address these key issues generated the three alternatives that we present in Chapter 2, "Alternatives, including Service-preferred Alternative."

Other Issues to Address: Some issues and management concerns are also presented and discussed in Chapter 2, but not in as great detail as the key issues. Many of these types of issues are often resolved in a similar manner in all of the alternatives. Additionally, some issues fall outside the scope of this document. More specifically, they fall outside the purpose of and need for action as we described for this CCP/EA. These include, but are not limited to, military overflights, sea level rise, increasing salinity levels in Back Bay, and non-point source runoff. These issues may be discussed in the document, but cannot be resolved solely by the Service in the 15-year timeframe of the plan.

An example of such an issue is climate change. Global climate change and its long term effects are a considerable concern for the Back Bay NWR. A continuously growing body of unequivocal scientific evidence has emerged supporting the theory of global climate change. The Service takes this issue very seriously, and is beginning to look at how a rise in global temperatures may affect plants, fish and wildlife and how our wildlife management practices may have to change.

Key Issues

Prescribed Burning/Wildfires: As the City of Virginia Beach and the community of Sandbridge grow and develop there is an increase in the wildland/urban interface. Presently, Back Bay NWR maintains approximately 1.4 miles of fuel-break between forested/brushy Refuge habitats and the western edge of the residential community of Sandbridge. This fuel-break was cleared of mid-story vegetation (ladder fuels) to a width of 50 to 75 feet and is maintained by removal of vegetation. Mature trees are left in the fuel-break; without ladder fuels wildfires will be slowed and easily extinguished. The Refuge follows an approved Fire Management Plan that was completed in 2003. There is concern about the possibility of wildfire in the urban interface.

Invasive Plant Management: Non-native invasive plant species have taken over valuable habitat on the Refuge. Phragmites reed and Japanese stiltgrass are the non-native, invasive species most common to the Refuge. American lotus, although native, has potential to become invasive and a nuisance. These invasives greatly reduce species biodiversity outcompeting native species that are crucial sources of food for migratory birds.

Pest Species Management: The two pest animals with the greatest potential to negatively impact Refuge resources are the feral hog and resident Canada goose. (Some nutria are also present in the area, but are not deemed to be a problem as yet.) Non-native feral hogs root in soft wetland soils, eating the roots and tubers of waterbird food-plants, and decreasing the quantity and quality of plant material available to native animals and migratory waterfowl. Hog rooting along dike slopes increases the potential for erosion. Also, hogs will opportunistically eat birds, nestlings, reptiles, amphibians and small mammals. Present management includes a one-week feral hog hunt and selective shooting of individual animals by Refuge personnel outside the hunt period.

The resident Canada goose population has shown a gradual increase within the Refuge impoundment complex during the past 15 years. Much of this increase stems from their nesting within the impoundment complex and adjacent areas. As the population has grown to an estimated 100+ resident birds, increased grazing on impoundments' moist soil vegetation during the summer and fall was noticed, that directly conflicted with the Refuge goal of providing food for wintering waterfowl. In addition, local farmers began complaining of Canada goose depredation impacts on their agricultural crops to the west. Refuge biological staff began addressing this problem during 2001 by addling Canada goose eggs in located nests. However, this practice alone was inadequate, since local goose production continued. Recently, Refuge biologists have begun directly controlling the nesting Canada goose population by removing, when possible, nesting adults in the Refuge impoundment vicinity. Egg addling and goose removals are continuing, under the appropriate Federal permit.

A small feral horse population periodically moves through the Refuge barrier island area from North Carolina, and feeds on developing waterfowl food-plants within Refuge impoundments. They present another potential nuisance animal problem if the population increases (see below for further feral horse information).

Feral Horses Management: The public generally enjoy viewing horses on the Refuge, but feral horses destroy vegetation and spread non-native, undesirable plant seeds through their droppings. A fence was built by the Corolla Wild Horse Fund of North Carolina at the southern border of False Cape State Park where it abuts North Carolina. Occasionally horses get through, around, or over this fence. Volunteers round up and return horses when contacted by Refuge personnel or Sandbridge residents.

Mosquito Control: The City of Virginia Beach had concerns about the presence of West Nile Virus (WNV) and Eastern Equine Encephalitis (EEE) in local mosquito populations during the planning process. The Refuge shared those concerns, and cooperated with the local City Mosquito Control Biologist in mosquito monitoring and data sharing, both on and adjacent to the Refuge. To date, WNV and EEE have not been detected in mosquito populations that use the Refuge or adjacent lands.

Sea Turtle Management Program: The Refuge is located in the northernmost limit of the threatened loggerhead sea turtle nesting range. From May through the end of August, Refuge staff and volunteers patrol local beaches by ATV or 4WD vehicle for sea turtle crawls. When a patrol encounters signs of nesting, they contact a Refuge biologist. Because the Refuge supports a relatively low number of nests (less than 9) per year, more intensive management actions can be undertaken to insure nest success. All nests are relocated to a secluded Refuge nursery behind the primary dune, and protected from predation by placing wire cages around them. Nests are carefully monitored when close to hatching. Sea turtle hatchlings from relocated nests are transported to the beach and protected from predation as they enter the ocean. Data from the Refuge sea turtle nesting program is collected and summarized into an annual report that is shared with many other Federal and State agencies. Use of volunteers, interns and FCSP staff are critical to the success of the Refuge sea turtle management program. Some state biologists have concerns with transplanting nests. The Refuge is also concerned with how declining budgets might impact the sea turtle program.

Wilderness Review: The Refuge Planning Policy requires a formal Wilderness Review to determine if any lands and waters held in fee title ownership are suitable for designation as a Wilderness Area under the terms of the Wilderness Act. Some of the eligibility criteria include; lands that are 5,000 acres of contiguous land, roadless islands, or are of sufficient size to make practical its preservation and use in an unimpaired condition. The planning team determined that areas previously proposed in 1974 as suitable for inclusion as wilderness no longer meet the minimum criteria. Further examination and analysis is included in the rest of this CCP/EA, and a Wilderness Review is attached as Appendix B.

Cooperative Farming Program: Presently, Back Bay NWR has approximately 100 acres of upland and prior-converted wetlands in 4 tracts leased out to four local farmers for growing crops. The farmers provide direct payment or payment-in-kind in the form of Refuge habitat improvements using their heavy equipment. At issue is the relationship of cooperative farming to new Refuge policies regarding biological integrity, and also compatibility. Some agricultural lands were wetlands prior to conversion to farmland. Under present management, farmers are allowed to continue farming. The Refuge benefits because land is kept free from encroachment of undesirable plant species before possible habitat restoration begins. These areas may be subject to wetlands restoration, shrub-scrub habitat creation, or natural regeneration to forest (to close up fragmented forest habitats) when funding and personnel become available. If cooperative farmers voluntarily withdraw from the program then those areas will be revegetated with native trees and shrubs.

Wildlife Disturbance Law Enforcement: The Refuge maintains a proactive law enforcement program and enforces Federal, State, and local laws. USFWS Refuge Officers patrol Refuge property; primary enforcement efforts concentrate on the protection of natural resources and enforcing the Refuge-specific regulations. While the majority of violations on Refuge property are enforced through the Federal court system, there are rare occasions when a case may be transferred to the city court system for prosecution.

The Refuge manages approximately 3,500 acres of land that has not been formally identified for public use activities. This includes islands in Back Bay and tracts of land to the north and west of Back Bay. Law enforcement problems on these tracts range from trespassing, illegal hunting, dumping, and human-caused wildfires, to use of metal detectors.

Realty/Ownership: There is concern over encroachment onto the Refuge by adjacent property owners. This includes piers/docks where the Refuge owns the bottom of the Bay and canals, and swimming pools and fence lines that are on our lands. Also, the Refuge is concerned about new City roads and infrastructure impacting Refuge wildlife, habitat and resources.

Jurisdiction: Currently, there is not concurrent jurisdiction among the various law enforcement agencies (City, State, Federal) to enforce regulations on the Refuge. This issue was raised several years ago in an effort to put all national wildlife refuges under concurrent jurisdiction; however, it was never passed by State legislators. Concurrent jurisdiction would allow increased cooperative work between the three entities and their staff. One option would be to obtain jurisdictional control over the lands and waters which surround the islands to provide protection of wildlife values.

Off-Refuge Land Development: The Refuge is experiencing increasing development pressure within the northwestern portion of the Back Bay watershed and immediately north of the Refuge headquarters, on the barrier island portion. These development pressures take the form of single family housing developments, a five story condominium complex and a proposed recreational mooring facility. Such pressures present conflicts to critical Refuge resources including migratory bird use, water quality, existing Back Bay recovery programs, the declining Bay ecology, and a variety of other important issues.

Refuge Access: The Refuge has a seasonal dike trail closure from November 1 through March 31 annually, to prevent disturbance of wintering waterfowl within the impoundments. Several groups and individuals have requested that the impoundments be open year round for recreation activities. The Refuge manages approximately five miles of beach – the “north mile” is closed to visitors, and acts as a safeguard between the high-use area of Little Island City Park and the Refuge.

Boat/water access: In 1939, 4,600 acres of bay waters within the Refuge boundary were set aside by Presidential Proclamation as a waterfowl sanctuary. The area is closed to waterfowl hunting to assure long term protection of waterfowl and other wetland dependent species. The Refuge has no jurisdiction over water uses of the Bay, except for the migratory bird hunting.

Motor Vehicle Access Permit Program: For many years, Back Bay NWR was open to vehicular beach access and use by the general public. In 1969, with visitation reaching 348,000 yearly, it became evident that the increased Refuge and beach use had resulted in environmental degradation and a serious conflict

of the Refuge's intended purpose. In 1972, the Refuge beach became closed to all unauthorized vehicular traffic. In 1973, after a final rulemaking in the Federal Register, permits were issued for vehicular beach use to property owners and businesses south of Back Bay NWR up to a point 1600 feet south of the Currituck Lighthouse in North Carolina. These permits were issued to individuals providing proof of residency and to businesses at the time of enactment requiring beach access to reach Virginia. Originally, 100 permits were issued. Permits are non-transferable and non-inheritable; therefore through attrition, only 15 residential, 5 commercial, and 9 cooperatives (i.e., utility companies, emergency responders, Currituck NWR and FCSP) presently maintain permits.

Entrance Fees: Back Bay NWR currently collects an entrance fee. Two seasonal fee collectors collected approximately $50,000 in Fiscal Year 2006. The entrance station operation, staffed from April through October, provides a checkpoint to ensure appropriate resource use and protection, and to provide another source for visitor information. Funds generated from the fee collection program are used to cover the cost of collection and to provide revenue enhancement for public use facility operation and maintenance, as well as for various habitat management projects. Fee collection is suspended for the months of November through March, annually. Some visitors have commented that they believe no entrance fee should be charged to access public lands.

Tram Tours: Tram tours are available at various times of the year, primarily to provide visitor access to and from FCSP, and to give visitors additional opportunities to see wildlife. Tram tours are provided daily from Memorial Day through Labor Day (weather permitting), Friday/Saturday/Sunday during shoulder months (April-May, and September-October), and twice per month during the November through March impoundment closure. The trams are currently operated by the Back Bay Restoration Foundation (BBRF) but maintained by Refuge staff. Future changes made to the tram program could be an issue to the public and partners.

Hunting: The Refuge, in conjunction with False Cape State Park, runs a seven-day annual hunt for white-tailed deer and feral hogs. Hunters are selected using a lottery system. There are eight designated hunt zones on the Refuge, including Long Island where there are only deer, and which is accessible only by boat. One hunting zone is set aside for disabled hunters. The hunt serves a dual purpose of providing public opportunity for hunting, and reducing the numbers of deer and hog, which is a necessity for proper habitat management. Requests have been made to the Refuge to open up the west and north sides to deer hunting. The Refuge is considering it, but fragmented land ownership interlaced with private property makes it more challenging. There are also advocacy groups that are against hunting altogether.

Dog walking on the Refuge: Currently leashed dogs are permitted in opened areas on the Refuge from October 1 through March 31. There are requests to allow dog walking on the Refuge year-round amid concerns that dog walking could be damaging to wildlife use of the Refuge, particularly within the impoundment complex.

Horseback riding on the Refuge: Currently horseback riding is not permitted on the Refuge but several groups have expressed their dissatisfaction with that regulation.

Opportunities

Establish new trails to enhance opportunities for wildlife observation, photography, and environmental education/interpretation: Since the late 1980's when the Refuge acquisition boundary was expanded, numerous parcels have

been acquired throughout the Back Bay Watershed. These new lands provide opportunities to promote outdoor experiences through a network of trails and overlooks.

Construction of new headquarters, Visitor Center and maintenance compound: The visitor center, headquarters office and maintenance compound are all currently located at the barrier island in Sandbridge. With the additional land base on the west side of Back Bay, it is proposed to construct a new headquarters, visitor center, environmental education center and maintenance compound on New Bridge Road (Tracts #244 and #141). There is concern facilities should be more accessible to the public and closer to the center of town. This location would be centrally located to all Refuge property and assets.

Establish new and strengthen current partnerships with conservation organizations and individuals: The Refuge relies on partnerships with several organizations and individuals for helping with Refuge programs, biological surveys, environmental education, and other efforts.

Decision to Be Made

Our Regional Director will select a preferred alternative based on the Service and Refuge System missions, the purposes for which the Refuge was established, other legal mandates, and public and partner responses to this draft CCP/EA. The alternative selected could be the proposed action in the draft CCP/EA, the no action alternative, or a combination of actions or alternatives presented. The final decision will identify the desired combination of species protection, habitat management, public use and access, and administration for the Refuge.

The Service determined during the planning process that an EA would be a more appropriate document than an EIS to accompany the CCP. The need to prepare an EIS is a matter of professional judgment requiring consideration of all issues in question. If the EA determines that the CCP will constitute a major Federal action significantly affecting the quality of the human environment, an EIS will then be prepared. If not, a Finding of No Significant Impact (FONSI) is prepared that briefly describes why the proposed action will not have a significant effect on the human environment. The FONSI also certifies that we have met agency compliance requirements and that the CCP, when implemented, will achieve the purposes of the Refuge and help fulfill the Refuge System mission. Once the Regional Director has signed the FONSI and we have completed the CCP for the Refuge, we will notify the public in the Federal Register, and implementation can begin.