

Chapter 1



USFWS

American Oystercatcher

Introduction and Background

- 1.1 Introduction
- 1.2 Purpose of, and Need for, Plan
- 1.3 Regional Context and Project Area
- 1.4 Description of the Refuge Area
- 1.5 Refuge Purposes
- 1.6 U.S. Fish and Wildlife Service Policies and Mandates
- 1.7 Refuge Vision

Chapter 1: Introduction and Background

1.1 Introduction

The U.S. Fish and Wildlife Service (USFWS, we, our) developed this Comprehensive Conservation Plan (CCP) for Chincoteague National Wildlife Refuge (NWR) and Wallops Island NWR, collectively referred to as “the refuge.” The refuge is part of the National Wildlife Refuge System (Refuge System) — a national network of lands managed for the conservation of fish, wildlife, and plants. This document meets the requirements of a CCP, as required by the Refuge System Administration Act of 1966 as amended by the Refuge System Improvement Act of 1997 (Improvement Act).

This chapter achieves the following:

- defines our planning analysis area;
- explains the purpose of and need for preparing this CCP;
- documents the mission, policies, and mandates that affect the development of this CCP;
- describes the refuge and its purposes;
- presents the vision that will direct refuge management; and

1.2 Purpose of, and Need for, Plan

1.2.1 Need

Since we released the previous refuge management document, the Master Plan: Chincoteague National Wildlife Refuge (1993) and its corresponding EIS (1992), both natural processes and human uses have contributed to drastic changes to the refuge’s environment. Climate change, sea level rise, and natural processes have altered and will continue to alter the coastal environment. Over the past 20 years, national directives from Congress and USFWS for managing uses and planning for units of the Refuge System have become more comprehensive and attuned to the essential features of natural systems. We designed this CCP to address management and protection of valuable natural resources into the future, a future where continued change is even more likely to occur.

Public visitation, which has stayed consistent over the past decade with approximately 1.25 million visits annually, is important to raising awareness and appreciation of the refuge and to generating revenue that supports public and wildlife services. Such high visitation provides a need to implement management strategies and direction to minimize human disruption to the natural environment.

Our development of this CCP addressed three major needs. First, the Improvement Act (1997) requires that all national wildlife refuges have a CCP to help fulfill the mission of the Refuge System.

Second, the refuge currently has an outdated master plan. Since 1993, environmental factors affecting the coastal landscape of the refuge result in a need to revisit our vision statement, goals, objectives, and strategies to successfully manage the refuge now and into the future. Developing

this CCP provided us with an opportunity to solicit public and partner involvement throughout the planning process, and to inform the framework and direction with which to manage the refuge.

Third, our management practices should be consistent with current mandates. This new CCP will ensure the refuge conforms to all relevant current law and policies.

1.2.2 Purpose

We must evaluate and plan for the changing environmental conditions that the refuge currently faces; the natural environment, human uses, and management direction have all changed over the past 20 years. We designed the CCP to address management and protection of valuable natural resources into the future, anticipating to the extent possible how climate change and other factors will affect our ability to achieve refuge purposes. We will plan for approaches that are ecologically sound and sustainable in light of physical and biological change; practical, viable, or economically realistic; and responsive to issues, concerns, and policies.

Thus, in accordance with the Refuge System Planning Policy (Service Manual 602 FW 3), *the purpose of this CCP is to provide the refuge manager with a 15-year management plan for the conservation of fish, wildlife, and plant resources and their related habitats, while providing opportunities for compatible wildlife-dependent recreational uses.* Specifically this CCP is designed to provide a management plan that:

- (1) achieves the refuge's purposes;
- (2) fulfills the mission of the Refuge System;
- (3) maintains and, where appropriate, restores the ecological integrity of the refuge and the Refuge System;
- (4) helps achieve the goals of the National Wilderness Preservation System;
- (5) meets other mandates and the management goals set by the USFWS for the refuge; and
- (6) addresses other significant issues and concerns.

NEPA requires a thorough analysis of a *range of alternatives*, which are different ways to achieve the purpose of the CCP, and our vision and goals for the refuge. The purpose and need statement, along with our vision for the refuge, were key criteria in establishing a range of alternatives.

The CCP provides management direction for the next 15 years, and:

- states clearly the desired future conditions of refuge habitat, wildlife, and visitor services;
- provides state agencies, refuge neighbors, visitors, and partners with a clear understanding of the reasons for refuge management actions;
- ensures that refuge management reflects the policies, legal mandates and the mission of the USFWS and the Refuge System and the refuge purposes;
- ensures the compatibility of current and future public use;
- provides long-term continuity in refuge management; and
- provides justification for refuge staffing, facilities, operations and maintenance, and projected budget requests.

The CCP will be reviewed, evaluated, and subsequently updated approximately every 15 years. However, if and when significant new information becomes available, ecological conditions change, major refuge expansion occurs, or when we identify the need to do so, the plan can be reviewed sooner. All plan revisions will require NEPA compliance.

1.3 Regional Context and Project Area

The refuge is located on a system of barrier islands off the eastern shore of the Delmarva Peninsula, a large peninsula on the East Coast comprised of most of Delaware and portions of Virginia and Maryland (see Figure 1-1). The refuge primarily lies in Accomack County, Virginia. However, the planning area for the CCP also includes portions of Wicomico, Worcester, and Somerset Counties, Maryland, and Northampton County, Virginia (the Southern Delmarva Peninsula).

1.4 Description of the Refuge

This section provides the history and description of the two refuges that are the subject of this CCP.

1.4.1 Chincoteague National Wildlife Refuge

Chincoteague NWR includes approximately 14,000 acres of beach, dune, marsh, and forest habitats. Federal title to refuge land extends to the mean low water line. Actual acreage is difficult to measure due to land erosion and accretion. Under common law, title to accreted lands inures to the uplands owner.

Originally, Chincoteague NWR encompassed 8,808 acres acquired under the Migratory Bird Conservation Act (1929). This land was located primarily on the southern end of Assateague Island, which lies in Accomack County, Virginia, but also included Jerico and Hebron Islands, two small marshes adjacent to the island but located in Worcester County, Maryland. These islands are now managed by the National Park Service (NPS). The northern end of Assateague Island lies in Maryland and is managed by the NPS (Assateague Island National Seashore) and the Maryland Department of Natural Resources (Maryland Assateague State Park). Assateague Island National Seashore was designated in 1965 with provisions for the southern end of Assateague Island to remain a refuge under the management of the USFWS. Since the refuge's creation, the USFWS has acquired additional lands using the Migratory Bird Conservation Fund or the Land and Water Conservation Fund. Today, Chincoteague NWR encompasses approximately 14,032 acres, of which all but 418 acres (as previously mentioned) are located in Accomack County, Virginia. In addition to the Virginia part of Assateague Island, Chincoteague NWR includes all 427 acres of Morris Island (located between Chincoteague and Assateague Islands), 546 acres of the northern end of Chincoteague Island (known as Wildcat Marsh), all 1,434 acres of Assawoman Island, 174 acres of the northern end of Metompkin Island, and 1,412 acres in fee title and 600 acres in easements on Cedar Island. Portions of Assawoman and Metompkin islands were acquired most recently, in 1990. Acreage given is based on realty transaction accounts; the actual acreage changes with land accretion, erosion, and other factors.

We have created and manage approximately 2,600 acres of fresh and brackish-water impoundments on Chincoteague NWR for migrating and wintering waterfowl and other migratory birds. Chincoteague NWR also provides and manages habitat for American black ducks, as part of a long-term effort, in compliance with the NAWMP, to reverse significant drops

Figure 1-1. Overview Map of Chincoteague and Wallops Island NWRs Planning Area



in this species' populations. These efforts also benefit other wildlife, especially shore and wading birds.

Wildlife management strategies at Chincoteague NWR continue to provide quality habitat for migrating and wintering waterfowl which also benefits a greater variety of wildlife, such as wading birds, shorebirds, and neotropical migrants. The refuge supports breeding populations of the endangered Delmarva Peninsula fox squirrel and the threatened piping plover. The American bald eagle (de-listed or removed from the Federal List of Endangered and Threatened Wildlife and Plants in 2007) regularly nests on the refuge, and the American peregrine falcon (de-listed in 1999) is seen quite frequently during its annual autumn migration. The refuge's southern barrier islands are particularly important as spring stopover sites for migrating red knots between late April to early June, with numbers peaking in late May (Niles et al. 2010). Virginia hosts approximately 30 percent of the hemisphere's red knot rufa subspecies population, and Cedar and Metompkin Islands fall in the upper third of islands in terms of numbers of red knots counted during migration (The Nature Conservancy (TNC) 1996). Additionally, the Atlantic loggerhead sea turtle is a threatened species that nests occasionally on Chincoteague NWR. Refuge management programs are targeted to provide feeding and resting areas for birds in migration, and nesting and brood-rearing habitat for those birds that find Chincoteague NWR suitable for reproduction. To this end, Chincoteague NWR continues efforts toward acquiring land and water for increased conservation of migratory bird resources and to protect important wildlife habitat from the impacts of development.

Chincoteague NWR has been designated as part of a Globally Important Bird Area (IBA) by the American Bird Conservancy and the Audubon Society; one of the top 10 birding Hotspots by the National Audubon Society; and a Site of International Importance within the Western Hemisphere Shorebird Reserve Network (WHSRN), a conservation partnership of stewards and landowners led by the Manomet Center for Conservation Sciences. This coastal barrier island/lagoon system has been designated a World Biosphere Reserve by the United Nations Educational, Scientific, and Cultural Organization in recognition of its great ecological value. Moreover, the DOI designated the area a National Natural Landmark in recognition of its outstanding natural values.

Chincoteague NWR is also an important recreational destination, particularly for people living in the Washington, DC, Baltimore, Philadelphia, and New York City areas. With approximately 1.2 to 1.4 million visits annually, Chincoteague NWR is one of the most visited refuges in the United States, providing visitors with the six wildlife-dependent recreation opportunities (hunting, fishing, wildlife observation and photography, environmental education and interpretation) designated as priority general public uses of the Refuge System by Congress, as well as other public uses that have been deemed appropriate and compatible. The majority of visits are to the recreational beach, which is managed by the NPS under an agreement with USFWS, and subject to a congressional mandate from 1965 when the Assateague Island National Seashore was designated. Visitation to Chincoteague NWR supports the tourism economy of the town of Chincoteague, which is the refuge's gateway community and is located on Chincoteague Island, and through which visitors must travel to access Chincoteague NWR.

Chincoteague NWR Management Units

The management units for Chincoteague NWR are organized by island, with habitats as sub units. Table 1-1 summarizes the management units by name, and then breaks down individual acreage for each sub unit by habitat. Habitats for each management unit, or group of units, are then

described in more detail. The differences in habitat among the management units illustrate the need for different management. Figure 1-2 identifies the refuge management units.

Table 1-1. Management Units

Unit	Sub Unit by Habitat (acres)					Total Acreage
	Beach /Dune	Shrub/early successional	Forested Uplands	Impoundments	Salt Marsh	
Assateague Island	970	2,872	1,600	2,650	1,985	10,077
Wildcat Marsh	-	-	71	-	475	546
Morris Island	-	-	21	-	406	427
Assawoman Island	359	-	-	-	1,075	1,434
Metompkin Island	96	-	-	-	78	174
Cedar Island	402				1,610	2,012
Wallops Island NWR	-	57	121	-	195	373
Refuge Total	1,827	2,929	1,813	2,650	5,824	15,043

The areas assigned to each habitat type are approximate, based on a 1994 land cover map, and provide a rough idea of the proportion of each habitat type on the refuge. A dynamic environment and shoreline constantly modified by storm and extreme high tide means that the amount of beach/dune and salt marsh habitat varies from year-to-year and across seasons. Encroachment of shrubs and trees into impoundments further hinders the accurate estimation of cover types at any given point in time.

1.4.2 Wallops Island National Wildlife Refuge

Wallops Island NWR is located on the mainland, east of Wattsville in Accomack County, Virginia, immediately adjacent to Highway 175, which provides access to the Town of Chincoteague and Chincoteague NWR. Wallops Island NWR is comprised mainly of salt marsh and woodlands and contains habitat for a variety of species, including upland and wetland dependent migratory birds. Wallops Island NWR is managed as a satellite refuge of Chincoteague NWR.

Wallops Island NWR is adjacent to the NASA Wallops Flight Facility. In 1971, the Bureau of Sport Fisheries and Wildlife, the precursor to the USFWS, entered into a noninterference - nonexclusive use agreement with the NASA Wallops Flight Facility to manage property (approximately 3,000 acres, "...of any and all lands and marsh...") of Wallops Island, Virginia. These lands were entered into the national data base of land under control (but not ownership) of the USFWS. For the next 35 years this agreement was to be renewed every 5 years and administration and management of these lands were the responsibility of the Chincoteague NWR. These new lands under the nonexclusive use agreement assimilated the purpose(s) of Chincoteague NWR.

In 1975, NASA transferred 373 acres of upland and marsh that now comprise Wallops Island NWR to the USFWS for ownership. In 2006, the agreement between NASA and USFWS expired and NASA requested that the agreement not be renewed. Additionally, NASA asked the USFWS to remove the 3,000 acres it was managing from its national data base. This was done; however, the dialogue that took place between the NASA Wallops Flight Facility and the USFWS concerning the renewal of the use agreement produced a greater understanding of our individual agency missions and responsibilities. This led to extensive discussions concerning current and

Figure 1-2. Refuge Management Units



future challenges jointly faced by both our agencies in light of climate change and its corresponding sea level rise. It became readily apparent that the opportunities presented by working together as part of a larger collaborative effort would provide for a greater scientific understanding of our shared coastal environment, and that the advancements in the use of technologies for the study of these environments could be shared with others. On August 11, 2011, the NASA Wallops Flight Facility, The Marine Science Consortium, and the USFWS entered into a “Nonreimbursable Space Act Agreement” for the purpose of: Technical Collaboration for Data Collection and Studies related to Climate Change, Habitat Shifts, Algorithm Development, Instrument Development, and Small Satellite Development. This new agreement will form the backbone of many future collaborative efforts.

Since its creation in 1971, Wallops Island NWR has been unstaffed, with little monitoring or management, except by A&N Electric Cooperative (and previously by Delmarva Power), utility companies with a power line right-of-way that removes tall growing trees, primarily the non-native autumn olive, and some brush species. Both the NPS and U.S. Department of Agriculture (USDA) Wildlife Services have storage facilities and maintenance areas on the refuge.

Wallops Island NWR is closed to the public except for white-tailed deer hunting. It was opened to public hunting in 2002 to reduce effects of overbrowsing by white-tailed deer, and to reduce the potential of deer collision with vehicles on the adjacent Highway 175 and aircraft at the neighboring NASA flight facility.

1.5 Refuge Purposes

This CCP addresses both Chincoteague and Wallops Island NWRs and, therefore, the statutory purpose of each refuge is described below. Section 1.13 describes the vision statement and goals for the CCP that we developed with our partners to achieve both the purposes of the refuge and of the CCP.

1.5.1 Chincoteague National Wildlife Refuge

The Secretary of the Department of the Interior (DOI) established Chincoteague NWR in 1943 under authority of the Migratory Bird Conservation Act “...for use as an inviolate sanctuary or for any other management purpose, for migratory birds” (16 U.S.C. § 715d), especially migrating and wintering waterfowl. Since that time, the objectives have been expanded to include the protection and management of threatened and endangered species and other wildlife, and to provide for wildlife-oriented public use. Other refuge purposes, and their associated acquisition authorities, now also include:

- “... suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” 16 U.S.C. § 460k- “... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended);
- “... 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 ...” 16 U.S.C. § 3901(b) (Emergency Wetlands Resources Act of 1986);

- “... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956); and,
- “... for conservation purposes ...” 7 U.S.C. § 2002 (Consolidated Farm and Rural Development Act).

1.5.2 Wallops Island National Wildlife Refuge

Wallops Island NWR was created on March 11, 1971, when 373 acres of land were transferred to the USFWS from the National Aeronautics and Space Administration (NASA) Wallops Flight Center. Formally, Wallops Island NWR was established “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” (16 U.S.C. § 715d) and for “... particular value in carrying out the national migratory bird management program.” (16 U.S.C. § 667b)].

1.6 U.S. Fish and Wildlife Service Polices and Mandates

1.6.1 U.S. Fish and Wildlife Service and its Mission

The USFWS, as part of DOI, administers the Refuge System to safeguard the nation’s fish, wildlife, plants and their habitats.

The USFWS vision is to “...continue to be a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service.”

The USFWS 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.”

The USFWS is the primary Federal agency responsible for conserving, protecting, and enhancing America’s fish and wildlife populations and their habitats. These include migratory birds, federally listed endangered or threatened species, inter-jurisdictional fish, wetlands, certain marine mammals, and national wildlife refuges. We also enforce Federal wildlife laws and international treaties on importing and exporting wildlife, manage and protect migratory bird populations, restore national fisheries, administer the Endangered Species Act, and restore native plant habitats. The USFWS also assists states with their fish and wildlife programs and helps other countries develop conservation programs.

1.6.2 National Wildlife Refuge System Mission

The Refuge System is the world’s largest collection of lands set aside specifically for the conservation of wildlife and the protection of ecosystems. President Theodore Roosevelt established the first national wildlife refuge in 1903, and as of September 30, 2012, the Refuge System consisted of 560 national wildlife refuges, 209 Waterfowl Production Areas, and 50 Coordination Areas encompassing more than 150 million acres of lands and waters in all 50 states and several island territories. The Refuge System is home to more than 700 species of birds, 220 species of mammals, 250 reptile and amphibian species, and more than 1,000 species of fish, and it also provides critical habitat for more than 280 threatened and/or endangered plants and animals.

Each year, more than 45 million visitors hunt, fish, observe and photograph wildlife, or participate in environmental education and interpretive activities on refuges.

In 1997, President Clinton signed into law the Refuge System Improvement Act (PL 105-57, Improvement Act), which established a unifying mission for the Refuge System:

“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.”

The Improvement Act, which is discussed further in section 1.6.4, also established a new process for determining the compatibility of public uses on refuges, and requires us to prepare a CCP for each refuge and to focus on wildlife conservation.

1.6.3 Refuge System Goals

Through the planning process, the USFWS has proposed specific management goals for the refuge, further defined in section 1.13. The Refuge System has developed a number of goals to help guide the development of CCPs and to improve its administration, management, and growth in a unified and consistent manner. These goals, as captured in the USFWS Service Manual (601 FW 1), are:

- Conserve a diversity of fish, wildlife, plants, and their habitats, including species that are endangered or threatened with becoming endangered.
- Develop and maintain a network of habitats for migratory birds, fish, and marine mammal populations that are strategically distributed and carefully managed to meet important life history needs of these species across their habitat ranges.
- Conserve those ecosystems, plant communities, wetlands of national or international significance, and landscapes and seascapes that are unique, rare, declining, or underrepresented in existing protection efforts.
- Provide and enhance opportunities to participate in compatible wildlife-dependent recreation (hunting, fishing, wildlife observation, photography, environmental education, and interpretation).
- Foster understanding and instill appreciation of the diversity and interconnectedness of fish, wildlife, plants, and their habitats.

1.6.4 The Improvement Act (1997)

The Improvement Act amended the Refuge System Administrative Act of 1966 by codifying various USFWS policies and establishing a unifying mission, policy direction, and management standards. This law established several new mandates to make management of the Refuge System more cohesive and standardized and to ensure that the USFWS considers wildlife first when managing refuges. These mandates include a new process for determining the compatibility of public uses on refuges, a requirement to prepare a CCP for each refuge, and a requirement to focus on wildlife conservation.

The Improvement Act directs the Secretary of the DOI to ensure that the mission of the Refuge System and purposes of the individual refuges are carried out. It 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, as noted in the purpose statement of this CCP. It also requires the Secretary to maintain the biological integrity, diversity, and environmental health of the Refuge System, which is also included in the purpose of this CCP.

1.6.5 *The Endangered Species Act*

Mandated under section 4(f) of the ESA of 1973, three Recovery Plans are in effect to protect and enhance threatened and endangered species that are residents of Chincoteague and/or Wallops Island NWRs:

- *Recovery Plan for U.S. Populations of Loggerhead Turtle (Caretta caretta)* (National Marine Fisheries Service (NMFS) and USFWS 1993).
http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_loggerhead_atlantic.pdf
- *Recovery Plan for Seabeach Amaranth (Amarantus pumilus)* (USFWS 1996b).
http://www.cals.ncsu.edu/plantbiology/ncsc/rare/Recovery_Amaranthus.pdf
- *Atlantic Coast Piping Plover (Chadradius melodus) Recovery Plan* (USFWS 1996c).
http://www.fws.gov/northeast/pipingplover/pdf/entire_plan.pdf

A fourth recovery plan, for Delmarva fox squirrel, is still in effect. However, the species has been proposed for delisting. The red knot was proposed for listing as a Federal threatened species in September 2013 during development of the draft CCP/EIS, and was listed as threatened in December 2014. Current refuge management with respect to these federally listed species has been guided by these Recovery Plans and numerous ESA Section 7/Biological Opinions for refuge projects. For more detailed descriptions of these recovery plans and documents, see Appendix B, Appendix F, and Appendix O.

1.6.6 *Other Federal Mandates*

Although USFWS and Refuge System laws and policies, along with the purpose of each refuge, provide the foundation for managing the refuge, other Federal laws and executive orders affect how we manage refuges. These include, but are not limited to the following laws (as amended): the National Historic Preservation Act (NHPA) of 1966, the Clean Air Act of 1970, the Clean Water Act of 1977, the Coastal Zone Management Act (CZMA) of 1972, and the Migratory Bird Treaty Act (MBTA) of 1918.

The following Executive Orders (EOs) are also applicable and addressed in chapter 4: EO 1988, Floodplain Management; EO 11990, Protection of Wetlands; and EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Other laws and executive orders can be found on the USFWS Laws Digest Web site at:

<http://www.fws.gov/laws/Lawsdigest.html>; the laws listed here and others are also listed in Appendix C.

1.7 **Refuge Vision**

Our vision statement for the refuge is a synthesis of the refuge's purposes, the Refuge System mission and goals, and other biological, legal, and social concerns in which the refuge has a role. It is intended to be an expression of what the refuge will be like in the future in terms of natural resources and visitor experience. Our vision for the refuge, as developed for this CCP to help provide the core component of management strategies hereafter, is as follows:

Chincoteague and Wallops Island National Wildlife Refuges encompass extraordinary and ever-changing lands at the edge of the sea, a place where unique habitats and wildlife flourish. In partnership with others, the refuges are a vital part of a larger system of protected lands and waters on the Delmarva Peninsula critical to migratory birds. People from around the world can visit the refuges to learn, recreate, refresh themselves, be inspired by wildlife and wild lands, and renew their connection with nature.