



Chapter 1 Introduction and Background

Dave Ledig/USFWS

Chapter 1
Introduction and
Background

Chapter 2
Management
Direction

Chapter 3
Physical
Environment

Chapter 4
Biological
Environment

Chapter 5
Human
Environment

Appendices

Chapter 1. Introduction and Background

1.1 Introduction

Bandon Marsh National Wildlife Refuge (NWR or Refuge) is managed by the U.S. Fish and Wildlife Service (USFWS or Service) as part of the National Wildlife Refuge System (NWRS). The Oregon Coast National Wildlife Refuge Complex (Complex) comprises six individual National Wildlife Refuges that span the coast of Oregon and support a rich diversity of wildlife habitats including coastal rocks, reefs, and islands; forested and grass-covered headlands; estuaries; and freshwater marshes. The six National Wildlife Refuges include Cape Meares, Oregon Islands, Three Arch Rocks, Bandon Marsh, Nestucca Bay, and Siletz Bay (Figure 1-1). This Comprehensive Conservation Plan (CCP) applies only to Bandon Marsh NWR. The CCPs for Nestucca Bay and Siletz Bay NWRs are being developed concurrently, and the CCPs for the Complex's other three NWRs have been completed under a previous planning effort.

Bandon Marsh NWR consists of the 307-acre Bandon Marsh Unit and the 582-acre Ni-les'tun Unit (Figure 1-2). The total approved refuge boundary includes 1,000 acres. The Bandon Marsh Unit was established in 1983 and is located near the mouth of the Coquille River with approximately 25% of the Unit within the city limits of Bandon. The Ni-les'tun Unit was established in 2000 and is located on the east side of Highway 101 on the north bank of the Coquille River. The primary purpose for establishing the Bandon Marsh Unit was to protect the physical and biological integrity of the tidal salt marsh, and to conserve the last substantial tract of salt marsh in the Coquille River estuary (USFWS 1981). The Ni-les'tun Unit was established to protect and restore intertidal marsh, freshwater marsh, and riparian areas to provide a diversity of habitats for migratory birds including waterfowl, shorebirds, wading birds and songbirds, and to restore intertidal marsh habitat for anadromous fish such as Chinook and chum salmon, steelhead, cutthroat trout, and the threatened coho salmon (USFWS 1999a).

Over the past 100-150 years logging, road building dredging and agricultural activities throughout the Coquille River watershed have resulted in periods of intense flooding and siltation and by the mid-1980s it was estimated that the total estuary received an average of 100,000 tons of sediment each year, resulting in a steady development of Bandon Marsh's current tidally influenced tidal mudflat and salt marsh system (Brophy 2005, Byram and Witter 2000). During this period of accretion the Bandon Marsh Unit has not been significantly altered by humans; however, substantial filling of the tidelands south of the Refuge took place from the mid-1930s to the 1980s (USFWS 1985a). In Oregon, the Coquille River estuary has suffered the greatest loss of tidal wetlands with a reduction of 94% of the historical total acreage (Good 2000). The loss of tidal wetlands, through agricultural dike construction and subsequent draining, has been identified as a major factor contributing to the decline of fishery resources and overall estuarine productivity throughout coastal Oregon. Establishment of the Refuge afforded permanent protection to one of the few remaining unspoiled salt marshes in Oregon.

The Ni-les'tun Unit is an historic tidal wetland in the lower Coquille River watershed. It was diked and drained for agricultural purposes in the late 19th or early 20th century. Prior to the agricultural conversion, this tidal wetland was shaped by the periodic earthquakes and tsunamis within the Cascadia subduction zone and the daily tidal processes associated with the Coquille River. Twelve subduction earthquakes during the period between 6,500-6,700 years ago and the present (BP) have dropped the Coquille River estuary to tidal flat elevations (Witter et al. 2003). Each of these events

reduced local elevations and resulted in more flooding of the site. Over time, accretion of fine sediments resulted in formation of a classic tidal mudflat and marsh system (Byram and Witter 2000).

The Ni-les'tun Unit's tidal marsh restoration project, completed in summer 2011, restored 418 acres of historic tidal wetlands within the lower Coquille River estuary and is the largest tidal wetlands restoration project ever accomplished in Oregon. Until completion of restoration activities in August of 2011, this site had not experienced natural tidal flooding events for approximately 100 years. Most of the artificial features in this historic wetland, including drainage ditches, dikes, and tidegates, were removed during the restoration project, allowing natural tidal exchange to take place once again. The influx of varying levels of tidally driven brackish riverine water will allow re-establishment of mudflats and salt marsh plants, and development of sinuous interconnecting tidal channels providing wildlife habitat within the refuge unit. As the land and ecological processes return to a functioning intertidal marsh, young fish and flocks of resident and migratory birds will use the restored habitat. The restoration represents a significant increase in habitat available to native salmonids, migratory birds and other wildlife in the lower Coquille River estuary.

1.2 Significance of the Refuge

A great diversity of wading birds and shorebirds use the Coquille River estuary, especially the Bandon Marsh Unit, as stop-over habitat. The Coquille River and estuary support large runs of anadromous fish including Chinook and threatened coho salmon, cutthroat trout and steelhead. The estuary also provides important rearing habitat for several species of marine fish including starry flounder and English sole. In 1980, Bandon Marsh was ranked seventh in "Important Fish and Wildlife Habitats of Oregon" by the Service (USFWS 1980). The location encompassed by the Ni-les'tun Unit has been used for thousands of years by the Coquille people and there are several very important cultural sites found within the refuge unit. During the mid-1990s, the Coquille Indian Tribe conducted several archeological excavations in this area when some of the constructed dikes were eroding and the sites and the information they contained were recorded for the archaeological record. On receiving approval to establish the new refuge unit, the Service requested that the Coquille Indian Tribe name the new unit because of the cultural significance of the site. The Ni-les'tun (nee-lay'-tun) Unit is named after the Miluk phrase for "people by the small fish dam" and is a reference to the fish weirs, gates and basket traps used by ancestors of the Coquille and other Tribes to catch lamprey, salmon, flounder and other fish species that lived in the estuary.

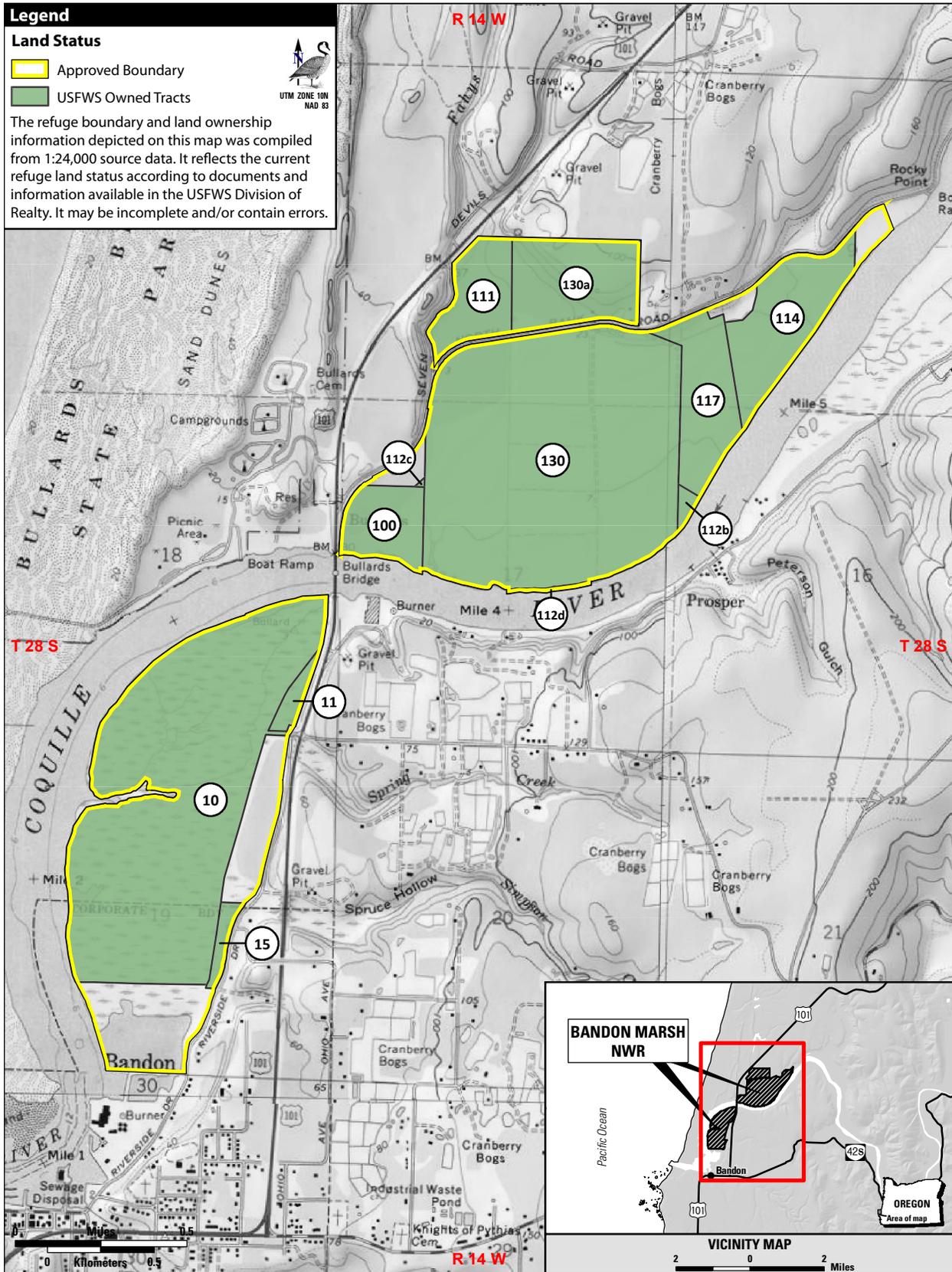
Within the approved boundary of Bandon Marsh NWR there are thirteen recorded archeological sites. Two of the sites have been document as long-term occupation locations. Three sites have major midden components and the rest are single fish weirs or a complex of weirs. This pattern and density of sites extends both up and down river from the Refuge and clearly demonstrates the significance of the area to the Coquille people (Tveskov and Cohen 2007).

Figure 1-1. Regional context.



The back sides of maps are blank to improve readability.

Figure 1-2. Land status.



The back sides of maps are blank to improve readability.

1.3 Proposed Action

We, the U.S. Fish and Wildlife Service (Service), manage wildlife refuges as part of the National Wildlife Refuge System. This document is the Refuge's Comprehensive Conservation Plan (CCP). A CCP sets forth management guidance for a refuge for a period of 15 years, as required by the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd -668ee, et seq.) (Refuge Administration Act), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57). The Refuge Administration Act requires CCPs to identify and describe:

- The purposes of the refuge;
- The fish, wildlife, and plant populations, their habitats, and the archaeological and cultural values found on the refuge;
- Significant problems that may adversely affect wildlife populations and habitats and ways to correct or mitigate those problems;
- Areas suitable for administrative sites or visitor facilities and opportunities for fish and wildlife dependent recreation.

The Service developed and examined alternatives for future management of Bandon Marsh Refuge through the CCP process. These were presented in the Draft Comprehensive Conservation Plan and Environmental Assessment (USFWS 2012a). We developed and evaluated three alternatives for the CCP and selected Alternative C as the preferred alternative.

The goals, objectives, and strategies under the preferred alternative best achieve the purpose and need for the CCP while maintaining balance among the varied management needs and programs. Thus, the preferred alternative represents the most balanced approach for achieving the Refuge's purposes, vision, and goals; contributing to the Refuge System's mission; addressing relevant issues and mandates; and managing the Refuge consistently with sound principles of fish and wildlife management. The preferred alternative was slightly modified between the draft and final documents based upon comments received from the public or other agencies and organizations (see Appendix K). The Service's Regional Director for the Pacific Region made the final decision about the alternative to be implemented. For details on the specific components of management direction for the Refuge over the next 15 years, see Chapter 2.

1.4 Purpose and Need for Action

The purpose of developing the 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. The CCP, when fully implemented, should 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. The CCP must be specific to the planning unit and identify the overarching wildlife, public use, or management needs for the Refuge (602 FW 3.4C1d).

The need for the CCP is to provide reasonable, scientifically-grounded guidance for ensuring that over a period of 15 years, Bandon Marsh NWR will achieve the following purposes:

- Enhance, maintain, and protect refuge habitats (including upland forests; forested wetlands; and estuarine and stream-riparian habitats) and other lands for the benefit of migratory birds and other wildlife.
- Gather sufficient scientific information to guide responsible adaptive management decisions.
- Provide visitors compatible wildlife-dependent public use opportunities that foster an appreciation and understanding of the Refuge’s fish, wildlife, plants, and their habitats, and have limited impacts to wildlife.
- Initiate and nurture relationships and develop cooperative opportunities to promote the importance of the Refuge’s wildlife habitat, and support refuge stewardship.
- Protect and manage the Refuge’s cultural resources, and identify new ways to gain an understanding of the Refuge’s history and cultural resources.

1.5 Legal and Policy Guidance

1.5.1 The U.S. Fish and Wildlife Service

All refuges are managed by the Service, an agency within the Department of the Interior. The Service is the principal Federal agency responsible for conserving, protecting, and enhancing the Nation’s fish and wildlife populations and their habitats.

The mission of the Service is “working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.” Although we share this responsibility with other Federal, state, tribal, local, and private entities, the Service has specific trust responsibilities for migratory birds, endangered and threatened species, and certain anadromous fish and marine mammals. The Service has similar trust responsibilities for the lands and waters we administer to support the conservation and enhancement of fish, wildlife, plants, and their habitats. The Service also enforces Federal wildlife laws and international treaties for importing and exporting wildlife, assists with state fish and wildlife programs, and helps other countries develop wildlife conservation programs.

1.5.2 National Wildlife Refuge System

A refuge is managed as part of the National Wildlife Refuge System within a framework provided by legal and policy guidelines. The Refuge System is the world’s largest network of public lands and waters set aside specifically for conserving wildlife and protecting ecosystems.

The needs of wildlife and their habitats come first on refuges, in contrast to other public lands that are managed for multiple uses. Refuges are guided by various Federal laws and executive orders, Service policies, and international treaties. Fundamental are the mission and goals of the Refuge System and the designated purposes of the refuge unit as described in establishing legislation, executive orders, or other documents establishing, authorizing, or expanding a refuge.

Key concepts and guidance of the Refuge System derive from the National Wildlife Refuge System Administration Act of 1966 as amended (16 U.S.C. 688dd -688ee), the Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4), as amended, Title 50 of the Code of Federal Regulations, and the Fish and Wildlife Service Manual. The Refuge Administration Act is implemented through regulations covering the Refuge System, published in Title 50, subchapter C of the Code of Federal Regulations. These regulations govern general administration of units of the Refuge System.

National Wildlife Refuge System Mission and Goals

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” (National Wildlife Refuge System Administration Act of 1966, as amended)(16 U.S.C. 668dd et seq.)

The goals of the Refuge System, as articulated in the Mission Goals and Purposes policy (601 FW 1) are:

- Conserve a diversity of fish, wildlife, and plants and their habitats, including species that are endangered or threatened with becoming endangered.
- Develop and maintain a network of habitats for migratory birds, anadromous and inter-jurisdictional fish, and marine mammal populations that is strategically distributed and carefully managed to meet important life history needs of these species across their 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 and photography, and environmental education and interpretation).
- Foster understanding and instill appreciation of the diversity and interconnectedness of fish, wildlife, and plants and their habitats.

Law and Policy Pertaining to the Refuge System

Refuges are guided by various Federal laws and executive orders, Service policies, and international treaties. Fundamental to the management of every refuge are the mission and goals of the Refuge System and the designated purposes of the refuge unit as described in establishing legislation, executive orders, or other documents establishing, authorizing, or expanding a refuge.

Key concepts and guidance of the Refuge System derive from the National Wildlife Refuge System Administration Act of 1966 (Administration Act) as amended (16 U.S.C. 668dd-668ee); the Refuge Recreation Act of 1962 as amended (16 U.S.C. 460k-460k-4); Title 50 of the Code of Federal Regulations; and the Service Manual. The Administration Act is implemented through regulations covering the Refuge System, published in Title 50, subchapter C of the Code of Federal Regulations and policies contained in the Service Manual. These regulations and policies govern general administration of units of the Refuge System.

Many other laws apply to the U.S. Fish and Wildlife Service and management of Refuge System lands. Examples include the Endangered Species Act of 1973, as amended, and the National Historic Preservation Act of 1966, as amended. Brief descriptions of laws pertinent to Bandon Marsh Refuge are included in this chapter. A complete list of laws pertaining to the Fish and Wildlife Service and the Refuge System can be found at <http://laws.fws.gov>.

Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4). The Refuge Recreation Act authorized the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use, when such uses do not interfere with the area’s primary purposes. It provided for

public use fees and permits, and penalties for violating regulations. It also authorized the acceptance of donated funds and real and personal property, to assist in carrying out its purposes. Enforcement provisions were amended in 1978 and 1984 to make violations misdemeanors in accordance with the uniform sentencing provisions of 18 U.S.C. 3551-3586.

National Wildlife Refuge System Administration Act (16 U.S.C. 668dd et seq.) as amended by the National Wildlife Refuge System Improvement Act (Public Law 105-57). Of all the laws governing activities on national wildlife refuges, the Refuge Administration Act exerts the greatest influence. The National Wildlife Refuge System Improvement Act of 1997 (Refuge Improvement Act) amended the Administration Act by defining a unifying mission for all refuges, including a new process for determining compatible uses on refuges, and requiring that each refuge be managed under a comprehensive conservation plan. Key provisions of the Refuge Administration Act follow.

- Comprehensive conservation planning. A CCP must be completed for each refuge by the year 2012, as is required by the Refuge Administration Act. Each CCP will be revised every 15 years or earlier if monitoring and evaluation determine that changes are needed to achieve the refuge's purposes, vision, goals, or objectives. The Refuge Administration Act also requires that CCPs be developed with the participation of the public. Public comments, issues, and concerns are considered during the development of a CCP, and together, with the formal guidance, can play a role in selecting the preferred alternative. Information on public involvement can be found in Appendix J. The CCP provides guidance in the form of goals, objectives, and strategies for refuge programs, but may lack some of the specifics needed for implementation. Therefore, step-down management plans will be developed for individual program areas as needed, following completion of the CCP. The step-down plans are founded on management goals, objectives and strategies outlined in a CCP, and require appropriate NEPA compliance.
- Wildlife conservation; biological diversity, integrity and environmental health. The Refuge Administration Act expressly states that the conservation of fish, wildlife and plants, and their habitats is the priority of Refuge System lands, and that the Secretary of the Interior shall ensure that the biological integrity, diversity, and environmental health of refuge lands are maintained. House Report 105-106 accompanying the Improvement Act states "... the fundamental mission of our System is wildlife conservation: wildlife and wildlife conservation must come first."
- Refuge purposes. Each refuge must be managed to fulfill the Refuge System mission and the specific purpose(s) for which the refuge was established. The purposes of a refuge are specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit. When a conflict exists between the Refuge System mission and the purpose of an individual refuge, the refuge purpose may supersede the mission.
- Priority public uses on refuges. The Administration Act superseded some key provisions of the Refuge Recreation Act regarding compatibility, and also provided significant additional guidance regarding recreational and other public uses on units of the Refuge System. The
- Refuge Administration Act identifies six priority wildlife-dependent recreational uses. These uses are hunting, fishing, wildlife observation and photography, and environmental education and interpretation. The Service is to grant these six wildlife-dependent public uses special consideration during planning for, management of, and establishment and expansion of units of the Refuge System. When determined compatible on a refuge-specific basis, these six uses

assume priority status among all uses of the refuge in question. The Service is to make extra efforts to facilitate priority wildlife-dependent public use opportunities.

Compatibility and Appropriate Refuge Uses Policies (603 FW 2 and 1). With few exceptions, lands and waters within the Refuge System are different from multiple-use public lands in that they are closed to all public access and use unless specifically and legally opened. No refuge use may be allowed or continued unless it is determined to be appropriate and compatible. Generally, an appropriate use is one that contributes to fulfilling the refuge purpose(s), the Refuge System mission, or goals or objectives described in a refuge management plan. A compatible use is a use that in the sound professional judgment of the refuge manager will not materially interfere with or detract from the fulfillment of the mission of the Refuge System or the purposes of the refuge.

The six wildlife-dependent recreational uses described in the Refuge Administration Act (hunting, fishing, wildlife observation and photography, and environmental education and interpretation) are defined as appropriate. When determined to be compatible, they receive priority consideration over other public uses in planning and management. Other non-wildlife-dependent uses on a refuge are reviewed by the refuge manager to determine if the uses are appropriate. If a use is determined appropriate, then a compatibility determination is completed.

When preparing a CCP, refuge managers must re-evaluate all general public, recreational, and economic uses (even those occurring to further refuge habitat management goals) occurring or proposed on a refuge for appropriateness and compatibility. Updated appropriate use and compatibility determinations for existing and planned uses for Bandon Marsh NWR are in Appendices A (Appropriateness) and B (Compatibility) of this CCP.

Biological Integrity, Diversity, and Environmental Health Policy (601 FW 3). The Refuge Administration Act directs the Service to “ensure that the biological integrity, diversity, and environmental health of the National Wildlife Refuge System are maintained for the benefit of present and future generations of Americans.” The policy is an additional directive for refuge managers to follow while achieving refuge purpose(s) and the Refuge System mission. It provides for the consideration and protection of a broad spectrum of native fish, wildlife, and habitat resources found on refuges and associated ecosystems. When evaluating the appropriate management direction for refuges (e.g., in compatibility determinations), refuge managers will use sound professional judgment to determine their refuge’s contribution to biological integrity, diversity, and environmental health at multiple landscape scales. Sound professional judgment incorporates field experience, knowledge of refuge resources, an understanding of the refuge’s role within an ecosystem, applicable laws, and best available science, including consultation with others both inside and outside the Service. The policy states that “the highest measure of biological integrity, diversity, and environmental health is viewed as those intact and self-sustaining habitats and wildlife populations that existed during historic conditions.”

Wildlife-dependent Recreation Policies (605 FW 1-7). The Refuge Administration Act states that “compatible wildlife-dependent recreation is a legitimate and appropriate general public use of the System.” A series of recreation policies provide additional guidance and requirements to consider after a recreational use has been determined to be compatible. These policies also establish a quality standard for visitor services on national wildlife refuges. Through these policies, we are to simultaneously enhance wildlife-dependent recreational opportunities, provide access to quality visitor experiences, and manage refuge resources to conserve fish, wildlife, plants, and their habitats. New and ongoing recreational uses should help visitors focus on wildlife and other natural resources,

and provide an opportunity to display resource issues, management plans, and how the refuge contributes to the Refuge System and the Service's mission. The policies also require development of a visitor services plan.

1.5.3 Other Laws and Mandates

Many other Federal laws, executive orders, Service policies, and international treaties govern the Service and Refuge System lands. Examples include the Migratory Bird Treaty Act of 1918, Refuge Recreation Act of 1962, National Historic Preservation Act of 1966, and the Endangered Species Act of 1973. For additional information on laws and other mandates, a list and brief description of Federal laws of interest to the Service can be found in the Laws Digest at <http://www.fws.gov/laws/Lawsdigest.html>.

In addition, over the last few years, the Service has developed or revised numerous policies and Director's Orders to reflect the mandates and intent of the Refuge Administration Act. Some of these key policies include the Biological Integrity, Diversity, and Environmental Health Policy (601 FW 3); the Compatibility Policy (603 FW 2); the Comprehensive Conservation Planning Policy (602 FW 3); Mission, Goals, and Purposes (601 FW 1), Appropriate Refuge Uses (603 FW 1); Wildlife-Dependent Public Uses (605 FW 1); wilderness-related policies (610 FW 1-5) and the Director's Order for Coordination and Cooperative Work with State Fish and Wildlife Agency Representatives on Management of the National Wildlife Refuge System. These policies and others in draft or under development can be found at <http://refuges.fws.gov/policymakers/nwrpolicies.html>.

In developing a CCP, refuges must consider these broader laws and policies as well as Refuge System and ecosystem goals and visions. The CCP must be consistent with these and also with the refuge purpose.

1.6 Refuge Establishment and Purposes

1.6.1 Legal Significance of the Refuge Purpose

The purpose for which a refuge was established or acquired is of key importance in refuge planning. Purposes must form the foundation for management decisions. The refuge purposes are the driving force in the development of the refuge vision statements, goals, objectives, and strategies in a CCP and are critical to determining the compatibility of existing and planned refuge uses.

The purposes of a refuge are specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit.

Unless the establishing law, order, or other document indicates otherwise, purposes dealing with the conservation, management, and restoration of fish, wildlife, plants, and the habitats on which they depend, take precedence over other purposes in the management and administration of any unit. Where a refuge has multiple purposes related to fish, wildlife, and plant conservation, the more specific purpose will take precedence in instances of conflict. When an additional unit is acquired under an authority different from the authority used to establish the original unit, the addition takes on the purpose(s) of the original unit, but the original unit does not take on the purpose(s) of the

newer addition. When a conflict exists between the Refuge System mission and the purpose of an individual refuge, the refuge purpose may supersede the mission of the System.

1.6.2 Purpose and History of Refuge Establishment

Bandon Marsh National Wildlife Refuge (NWR) was authorized by Public Law 97-137, of December 29, 1981 “for the preservation and enhancement of the highly significant wildlife habitat of the area known as Bandon Marsh, in the estuary of the Coquille River in the State of Oregon, for the protection of migratory waterfowl, numerous species of shorebirds and fish, including Chinook and silver salmon, and to provide opportunity for wildlife-oriented recreation and nature study on the marsh.” This purpose applies to all portions of Bandon Marsh NWR. The original 289 acres acquired from the Port of Bandon were also authorized by the Transfer of Certain Real Property for Wildlife Conservation Purposes Act of May 19, 1948, Public Law 80-537, (16 U.S.C. 667b-667d; 62 Stat. 240), as amended, because of its “particular value in carrying out the national migratory bird management program.”

Most of the tracts that make up the Refuge were authorized by the same Public Law and purchased with funds authorized by Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j), as amended. This Act authorized the acquisition of refuge lands “for development, advancement, management, conservation, and protection of fish and wildlife resources... 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.” Section 7(a)(1) of the Land and Water Conservation Fund Act (16 U.S.C. 4601-9) provides authority to use Land and Water Conservation Fund (LWCF) monies for acquisition under this Act. Purposes of the Land and Water Conservation Fund Act of 1965, as amended, include acquisition of “(d) any areas authorized for the National Wildlife Refuge System by specific Acts” (16 U.S.C. 4601-9).

1.6.3 Land Status and Ownership

Bandon Marsh NWR was established in 1983 with the acquisition of 289 acres of salt marsh, mudflats, and tidal sloughs. Bandon Marsh NWR consists of the Bandon Marsh Unit and the Ni-les'tun Unit (Figure 1-2). The Bandon Marsh Unit is located near the mouth of the Coquille River with approximately 25% of the Unit within the city limits of Bandon. Additional acquisitions to the Bandon Marsh Unit were completed in 1992 when 17 acres of tidal salt marsh and Sitka spruce/red alder forest were acquired. In 2000, the Ni-les'tun Unit of Bandon Marsh NWR was established and a total of 582 acres has been acquired within this unit including historic salt marsh that had been converted to diked lowland pastures, former Sitka spruce forest that had been converted to pasture, and forested freshwater wetlands. The Ni-les'tun Unit is located on the east side of Highway 101 on the north bank of the Coquille River. The total land base of Bandon Marsh NWR is 889 acres. The total approved refuge boundary includes 1,000 acres.

Just south of the existing refuge boundary a former large tidal flat was filled to create the site of a lumber mill industrial site, including dock facilities (Moore Mill personal communication). The threat existed for additional tideflats and tidal marsh within the current boundary of Bandon Marsh NWR to be converted by dredging and/or filling for industrial and/or commercial purposes. In 1980 the marsh was owned by the Port of Bandon, which was interested in acquiring an abandoned U.S. Coast Guard station located at the edge of the Coquille River in the port area. The building rested half on federal land and half on private property. Originally, the private property was donated to the federal government with the stipulation that it would revert to its former owner(s) if the Coast Guard

Station was ever abandoned. The Port was willing to trade Bandon Marsh for the Coast Guard Station. To facilitate this process, the Trust for Public Lands offered to purchase the private property and exchange it with the Port of Bandon for the marsh. Meanwhile, in a desire to assure preservation of an historic site and structure (the Coast Guard Station), the General Services Administration of the Federal Government offered to give the federally owned half of the land, and the entire building, to the Port of Bandon. Thus, the Port Authority would acquire the entire Coast Guard station, and the Service would then purchase the marsh from the Trust for Public Land. In order to accomplish this process the heirs of the former owners who had originally donated the land to the Coast Guard had to be contacted and relinquish any claims to the land. This complicated set of transactions did in fact take place. Following the signing of the Finding of No Significant Impact in June 1981 and the concurrent introduction of legislation (H.R. 2241 and S. 1148), the 289-acre Bandon Marsh National Wildlife Refuge was established on December 29, 1981 with the passage of Public Laws 97-137 and 80-537.

The Service took ownership of the land on February 14, 1983 (Tract 10). At this time the Refuge contained the mudflats and tidal marsh habitats within the estuary, but no adjacent lands, so the only way the public could access the Refuge was by boat. In order to provide easy public access to the Refuge from Riverside Drive, and to protect the fringing forested wetlands and uplands, the refuge boundary was expanded by 100 acres in 1991 to include the lands between the marsh and Riverside Drive. In 1992, two parcels totaling 17 acres were acquired from willing sellers along Riverside Drive and added to the Refuge (Tracts 11 and 15).

In 1998 the Service began the planning process to expand Bandon Marsh NWR by approximately 600 acres, within the lower Coquille estuary just upstream from the Bandon Marsh Unit on the east side of U. S. Highway 101. This addition was proposed due to the availability of lands from willing sellers; the potential to construct a large tidal marsh restoration project; the opportunity to provide additional public use; and the potential ability to protect important archaeological resources. The core of the expansion area was the Bussmann property, formerly known as the Philpott Ranch. The Philpott Ranch was managed as a dairy farm, but was converted to a beef livestock grazing ranch by Bussmann. If the refuge boundary was expanded, the Service indicated a desire to purchase the property through the Archaeological Conservancy, a non-profit group dedicated to seeking permanent protection of archaeological sites in the United States. Archaeologists from the University of Oregon and the Coquille Indian Tribe had been studying the site for the previous five years and had been investigating the remains of 400 years of fishing camps and summer villages that had been uncovered by erosion in an exposed cross section of the property. The Archaeological Conservancy obtained an option to purchase the Philpott Ranch from Bussmann, and planned to exercise their option to purchase the ranch only if the Service decided to expand the Refuge. The Conservancy would then sell the tracts to the Refuge (Tracts 130 and 130a).

In early 2000, Section 102 of Public Law 97-137 increased the size of the Bandon Marsh NWR boundary from 300 acres to 1,000 acres. Expansion of the refuge boundary authorized the Service to begin negotiating with other willing sellers in accordance with Service policy to acquire private lands within the new boundary. In January 2000, the Service purchased the former Philpott Ranch from The Archaeological Conservancy establishing the Ni-les'tun Unit. A second lowland parcel of 53 acres was purchased by The Nature Conservancy in mid-2002 and sold to the Service in 2003 for addition to the new unit (Tract 117), and late in 2002 another 55 acres of former tidal marsh was parceled off from the house, barn, and uplands and added to the Ni-les'tun Unit (Tract 114). In mid-2003, a generous and unexpected donation of an anadromous fish creek that flows through the unit, forested wetlands, abandoned cranberry bogs and a residential site added another 34 acres to the unit

(Tract 111). Additional tracts of the former ranch and intact estuary were acquired in 2003 and 2004 that filled in the gaps to make a complete land unit ready for estuary restoration (Tracts 100, 112b, 112c, and 112d).

1.7 Relationship to Other Planning Efforts

When developing a CCP, the Service considers the goals and objectives of existing national, regional, state, and ecosystem plans and/or assessments. The CCP is expected to be consistent, as much as possible, with existing plans and assist in meeting their conservation goals and objectives (602 FW 3). This section summarizes some of the key plans reviewed by members of the core team while developing the CCP.

1.7.1 Refuge Plans

Key plans utilized for the Bandon Marsh Unit of the Refuge include the Environmental Assessment for the Proposed Acquisition of Bandon Marsh National Wildlife Refuge, produced in 1981 by the Service. This plan includes a history of the area and its various ownerships, the rationale for proposing its inclusion into the Refuge System, a description of historical and current uses and threats, detailed descriptions of wildlife and habitats included in the proposed refuge, and an evaluation of the biological, social and economic effects of establishing this refuge. The Bandon Marsh Refuge Management Plan (1985a) contains a detailed listing of establishing authorities as well as a description of habitat and wildlife resource changes through time, up to the date of publication. Goals, objectives and management strategies provided direction for the management of the new refuge and were utilized in developing updated goals and objectives for this CCP. Outdated compatibility determinations were also reviewed for an understanding of the initial rationale for allowing public uses that will be continued under this CCP. Some additional information useful for the Physical Environment (Chapter 3) and Biological Environment (Chapter 4) was found in the Habitat Management Plan (USFWS 1989) and included climate data, plant and wildlife species listings, and specific salt marsh, mudflat and upland topography and microclimate information for Bandon Marsh. The Preliminary Project Proposal for expanding the Bandon Marsh Unit (USFWS 1990a) provided biological information as well as historical uses for the tracts adjoining Riverside Drive.

In addition to describing the need for further expanding the Refuge to include lands east of the Highway 101, the Environmental Assessment and Land Protection Plan for the Ni-les'tun Unit addition (USFWS 1999a) contains detailed descriptions of the wildlife and habitat resources of the area and evaluates the environmental and socio-economic effects of expanding the refuge boundary and acquiring additional lands. Threats to existing sensitive resources are detailed in the Land Protection Plan along with a clear explanation of the purpose of the proposed expansion. The subsequent Conceptual Management Plan for the Ni-les'tun Unit (USFWS 1999b) describes proposed actions to be undertaken under that Environmental Assessment's preferred alternative of expanding the refuge boundary. These actions detail the key areas of management focus, such as habitat management, tidal marsh restoration, population monitoring, facilities development, and wildlife-dependent recreational opportunities.

The Environmental Assessment for the Ni-les'tun Unit of Bandon Marsh National Wildlife Refuge Wetland Restoration and North Bank Lane Improvement Project (USFWS and FHA 2009) was referenced for biological information pertaining to the restored tidal marsh. Specific information on

the Ni-les'tun tidal marsh restoration, including the need for action, planning and concurrent project needs, critical partnerships, and a thorough evaluation of potential effects are also contained in this EA. Additional information on hunting and fishing trends and opportunities is contained in the Sport Hunting and Fishing Decision Document Package for Bandon Marsh NWR (USFWS 1985b). Information on wildfire risk and suppression options as well as sensitive habitats to be considered in planning for fire risk reduction and suppression actions, is contained in the Fire Management Plan for Bandon Marsh NWR (USFWS 2004).

1.7.2 Other Plans and Assessments

When developing a CCP, the Service considers the goals, objectives, strategies, and other information available in existing national, regional, and ecosystem plans, state fish and wildlife conservation plans, and other landscape-scale plans developed for the same watershed or ecosystem in which the refuge is located. To the extent possible, the CCP is expected to be consistent with the existing plans and assist in meeting their conservation goals and objectives. The following list identifies some of the key plans which were reviewed by members of the core team while developing the CCP.

- Birds of Conservation Concern (USFWS 2008a)
- Birds of Management Concern (BMC) – Region 1 (USFWS 2005)
- The U.S. Shorebird Conservation Plan (Brown et al. 2001)
- Coquille Sub-basin Plan (Coquille Indian Tribe 1997)
- Rising to the Challenge: Strategic Plan for Responding to Accelerating Climate Change (USFWS 2010a)
- Strategic Plan for Inventories and Monitoring on National Wildlife Refuges: Adapting to Environmental Change (USFWS 2010b)
- Estuarine Resources Goal 16 for the City of Bandon Master Plan (City of Bandon 2011)
- Conservation Plan for the Western Sandpiper, version 1.1 (Fernández et al. 2010)
- Important Fish and Wildlife Habitats in Oregon (USFWS 1980)
- North American Waterbird Conservation Plan (Kushlan et al. 2002)
- North American Waterfowl Management Plan (NAWMP Plan Committee 2004)
- Northern Pacific Coast Regional Shorebird Management Plan (Drut and Buchanan 2000)
- Oregon Biodiversity Information Center (ORBIC 2010)
- Partners In Flight Species Assessment Database (PIF 2010)
- State of Oregon Conservation Strategy (ODFW 2006)
- Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon (ODFW 2012a)
- Identifying Resources of Concern and Management Priorities for a Refuge: A Handbook (USFWS 2008b)

1.8 Special Designation Lands

1.8.1 Important Bird Areas (IBA)

The Important Bird Areas (IBA) program is a global effort to identify the most important areas for maintaining bird populations and focusing conservation efforts on protecting these sites. Within the U.S., the program has been promoted and maintained by the American Bird Conservancy (ABC) and the National Audubon Society (NAS). The ABC is coordinating the identification of nationally

significant IBAs while NAS is working to identify sites in individual states. NAS is working within each state to identify a network of sites across the U.S. that provide critical habitat for birds. This effort recognizes that habitat loss and fragmentation are the most serious threats to birds across North America and around the world. By working through partnerships, principally the North American Bird Conservation Initiative, to identify those places that are critical to birds during some part of their life cycle (breeding, wintering, feeding, migrating), the intent is to minimize the effects that habitat loss and degradation have on bird populations. The IBA program has become a key component of many bird conservation efforts. More information is available at <http://www.audubon.org/bird/iba/index.html>.

The goals of the IBA program are to identify the sites that are the most essential for long-term conservation of birds and to take action to ensure the conservation of these sites (Cullinan 2001). An IBA is a site that provides essential habitat for one or more species of birds. The IBA selection process examines sites based on the presence and abundance of birds and/or the condition and quality of habitat. IBAs are chosen using standard biological criteria and expert ornithologists' review. All sites nominated as potential IBAs are rigorously evaluated to determine whether they meet the necessary qualifications. IBAs represent discrete sites, both aquatic and terrestrial, that are critically important to birds during their annual life cycle (e.g., breeding, migration, and/or wintering periods).

The 900-acre Bandon Marsh NWR IBA at the mouth of the Coquille River consists of the Bandon Marsh Unit and the newly restored (2011) areas in the Ni-les'tun Unit east of Highway 101. This site contains the largest remaining tract of salt marsh in the Coquille River Estuary and is considered an important migratory stop-over site along the Pacific Coast for migrating shorebirds. Other habitats present include mudflats, sloughs, and riparian alder forest. The newly restored Ni-les'tun Unit contains intertidal marsh, freshwater marsh, mudflats and riparian areas. Bandon Marsh may be the premium shorebird site on the Oregon Coast, with numbers peaking in spring (late April-early May) and fall (August-October). Thousands of shorebirds of numerous species are routinely found here, with peak counts including 75,000 western sandpiper, 6,000 dunlin, 2,500 least sandpiper, and 2,000 short-billed dowitcher. Additional sightings include semipalmated plover, black-bellied plover, Pacific golden plover, red phalarope, whimbrel, and occasional Asiatic rarities like sharp-tailed sandpiper and ruff.

1.9 Planning Process and Issue Identification

1.9.1 Planning Process

Planning Team: The core planning team for Bandon Marsh NWR consists of the project leader, deputy project leader, refuge manager, visitor services manager, biologist, and natural resource planner. An extended team consisting of biologists; cultural resource, public use, and realty specialists; economists; and law enforcement officers from the Regional Office, other Federal agencies, State agencies, the Coquille Indian Tribe, and a private environmental consultant assisted in the development of this CCP, particularly in providing comments at key milestones. The full list of core and extended team members and their roles is provided in Appendix I.

Resources of Concern: The planning process began when the planning team reviewed refuge purposes and considered other plans and reports, and sought input from Oregon State conservation agencies and non-governmental organizations. The planning team then identified the top priority species, groups, and communities for the Refuge. A comprehensive list of potential resources of

concern was compiled based upon review of the plans referenced above, many of which highlight priority species or habitats for conservation. From this list, those species and habitats that are most representative of refuge purposes and habitats, BIDEH, as well as other FWS and ecosystem priorities, were chosen as priority resources of concern (habitat types) and focal resources (plant and animal species). This list was then provided to participants in the Wildlife and Habitat Review which was held on March 16, 2010 and included the extended team as well as Oregon Department of Fish and Wildlife biologists. The participants raised important issues and provided feedback that was used to refine the Priority Resources of Concern table. This table includes focal species, also called conservation targets, which were selected as representatives or indicators for the overall condition of important refuge habitats. Most of the biological emphasis of the CCP is focused on protecting and restoring these species. See Appendix E for the Comprehensive Resources of Concern and Priority Resources of Concern.

Public Use Planning: Public use planning centered on developing goals, objectives and strategies around the six wildlife-dependent recreational uses that are defined in Service policy as priority, appropriate public uses for refuge lands. A Visitor Services Review for Bandon Marsh NWR was held on April 13, 2010 with representatives from the extended team, public use specialists from Oregon Parks and Recreation Department, and several state law enforcement officers. A background document including existing uses and visitor facilities was provided to participants prior to the Visitor Services Review. The participants' input was used by the planning team to assess past, current, and future management issues surrounding public use while developing objectives and strategies during the Comprehensive Conservation Plan process. In addition, the Service hired a contractor to conduct a Facilities Review which provided insight and conceptual plans for the future of administrative and visitor facilities at Bandon Marsh NWR. This information was also incorporated into the alternatives and some ideas were included as strategies to achieve broader goals for future management of this refuge.

Public Involvement: Public scoping began in November 2010 with a notice in the Federal Register [November 29, 2010, Volume 75, Number 228] and a public meeting December 2, 2010 in Bandon. Public input was also solicited through distribution of planning updates to our mailing list and meetings with key stakeholder groups (Appendix J). The comments and suggestions made through this process helped further develop and refine the management alternatives for the CCP, including the preferred alternative. A second planning update containing preliminary draft alternatives was distributed in November 2011 and another public open house meeting was held in Bandon on November 9, 2011 to explain the alternatives and take comments. The Bandon Marsh Refuge Draft Comprehensive Conservation Plan and Environmental Assessment (DCCP/EA) was issued for public review and comment on September 17, 2012. The availability of the plan was announced through a notice in the Federal Register [September 17, 2012, Volume 77, Number 180] and via direct contact with approximately 600 people on our mailing list. The plan was made available for downloading on the Oregon Coast National Wildlife Refuge Complex Planning website and was made available upon request in CD or printed format. Printed copies of the DCCP/EA were available at local public libraries, and upon request. All changes made as a result of public and agency comments were documented. A summary of public involvement is included in Appendix J; public comments on the DCCP/EA and the Service's responses to comments are included in Appendix K.

1.9.2 Key Issues Addressed in the CCP

The core planning team evaluated the issues and concerns raised during public scoping. The Service defines an issue as "Any unsettled matter that requires a management decision, e.g., an initiative,

opportunity, resource management problem, threat to the resources of the unit, conflict in uses, public concern, or the presence of an undesirable resource condition (602 FW 1 1.6 K).” Issues are important to the planning process because they identify topics to be addressed in the CCP, pinpoint the types of information to gather, and help define alternatives for the CCP. It is the Service’s responsibility to focus planning and the analysis on the major issues. Major issues typically suggest different actions or alternative solutions, are within the Refuge’s jurisdiction, and have a positive or negative effect on the resource. The following issues are within the scope of the CCP and were considered by the Service to be the major issues to address in this planning process:

Wildlife and Habitat Management: What actions should the Service take to sustain and restore priority species and habitats over a period of 15 years? Should the Service place highest priority on restoring hydrologic function, historic water flows, tidal flows and floodplain functions on the Refuge, and would this emphasis allow maintenance of a balance between diverse habitat types including some rare habitats that are least well-represented? Are there opportunities to restore upland forest, forested wetlands, and riparian areas? How will the Service prioritize inventory, control, and monitoring of invasive species?

Climate Change: What actions should the Service take to address anticipated impacts to refuge resources from climate change/sea level rise, including species range shifts, phenological changes, decoupling of species assemblages, hydrological changes, ocean acidification, and changes in disturbance regimes? Are there focal species that will be adversely affected (directly or indirectly) by climate change/sea level rise, and what might be done to mitigate for that? How can cumulative stresses be reduced (e.g., among climate stress and other anthropogenic stresses, which do we have most control over)? Many of these threats are much larger in scope than just Bandon Marsh NWR. They will be addressed at various scales depending on available information and what is most appropriate and relevant to the Refuge.

Public Uses: What public use opportunities will best support refuge purposes and increase visitor awareness of the Service’s and Refuge System mission and goals? Should the Service consider opening new areas of the Refuge to public access, and what activities should be allowed in these areas? Where would new trails and other wildlife observation facilities be compatible and desirable on Bandon Marsh NWR, and if constructed how can these be designed to enhance the public’s wildlife enjoyment, understanding, appreciation, and stewardship of refuge resources? Should the Service consider opening portions of the Refuge to waterfowl hunting and fishing, and if so, where? Should the existing waterfowl hunting program at Bandon Marsh Unit be changed, and would this improve the waterfowl hunting experience on that unit?

Facilities: Is there a need for a Service-owned visitor contact station, interpretive displays, or visitor and education center at this refuge or in the adjacent community? Should the Service place high priority on securing or constructing a visitor contact station and/or visitor and education center at Bandon Marsh NWR? Do facilities exist already in the community that could serve this purpose?

1.9.3 Issues outside the Scope of the CCP

While CCPs are comprehensive plans, no single plan can cover all issues. The planning team has compiled a list of issues which are currently considered to be outside the scope of this CCP.

Refuge Boundary Expansion Study. Although Bandon Marsh National Wildlife Refuge, currently consisting of 889 acres of fee title ownership within an approved boundary of 1,000 acres, represents

a valuable contribution to the protection of biodiversity in the Coquille River estuary, several scientific assessments indicate that much of the region's fish and wildlife and habitats would benefit from further protection, enhancement, and/or restoration (e.g., OWJV 1994, OCSRI 1997, CWA 2003, ODFW 2006, Vander Schaaf et al. 2006, Coquille Indian Tribe 2007, ODFW 2007). To address this need, the Service is conducting a separate Land Protection Planning (LPP) process to study options for possibly expanding the approved refuge boundary adjacent to and upstream from the existing boundary. The identified study area totals approximately 4,636 acres and is located in the lower Coquille River estuary, between River Miles 0.5 and 10.4, which corresponds with the upstream extent of historic tidal marsh.

The concept of a boundary expansion study was formerly within the scope of the CCP and introduced as one of the preliminary draft alternatives within the CCP in November 2011. However, in early February 2012 due to the need for greater public involvement and additional time for detailed study, the Service made the decision to separate CCP development from the LPP process. Thus, the question of whether the approved refuge boundary should be expanded is outside of the scope of the CCP.

The LPP process is an evaluation, planning, and compliance process. It is used by the Service to study land conservation opportunities including adding lands to the National Wildlife Refuge System. Protection can be accomplished through a variety of approaches such as purchasing land or a conservation easement or establishing a long-term lease. The LPP process is initiated when wildlife habitat areas of interest are identified in long-term resource plans or are brought to our attention by another agency, conservation group, or interested individual. The Service then evaluates the area to determine if detailed planning—which includes developing a National Environmental Policy Act (NEPA) compliance document, Land Protection Plan, and Conceptual Management Plan—is appropriate. After reviewing the evaluation, the Director of the U.S. Fish and Wildlife Service (Director) makes the determination whether to continue with detailed planning. A proposal to conduct a land protection study for the lower Coquille River estuary area was forwarded to the Director of the U.S. Fish and Wildlife Service on July 28, 2011 and approved on September 6, 2011.

During the LPP process, the Service will solicit public involvement, conduct socioeconomic analyses, and apply spatially-explicit biological planning and conservation design to evaluate habitat conservation and refuge boundary expansion options within the LPP study area. The Service will describe, analyze, and publish for public review and comment the following documents: which constitute “compliance”:

- A NEPA analysis—either an Environmental Assessment (EA) or Environmental Impact Statement (EIS)—evaluates the effects each alternative would have on the physical, biological, social, and economic environment.
- A Land Protection Plan describes resource protection needs, a proposed refuge boundary, and generally prioritizes ownerships that may be acquired from willing sellers. It also describes other conservation opportunities including easements and cooperative management agreements with willing landowners.
- A Conceptual Management Plan (CMP) describes potential refuge management needs, activities, and public uses, and determines which public uses would be compatible with the purpose of the proposed refuge.

Public comments will be reviewed and considered during development of the final decision documents which are forwarded to the Regional Director and Director for approval. The Director

reviews the documents and decides what course of action, if any, the Service will take. The Director's approval is necessary to expand the refuge boundary and implement the LPP and CMP. If the Director makes the decision that expansion of the refuge boundary is not justified, then the boundary will not be expanded. If the Director approves the boundary expansion proposal, then the Service may move forward and begin the process of identifying funding needs and opportunities and initiate discussions with any interested landowner within the new approved boundary.

1.10 Refuge Vision and Goals

1.10.1 Vision Statement

Where the sinuous Coquille River meets the Pacific Ocean, their cool nutrient rich waters slowly ebb and flow over the mudflats, salt marshes, and forested wetlands at Bandon Marsh National Wildlife Refuge. The invertebrate laden mudflats fuel the migration of tens of thousands of shorebirds every spring and fall making it an essential stop-over site. Before their journey at sea begins, young salmon and cutthroat trout find sanctuary in steep-banked tidal channels and driftwood anchored in the estuary.

For centuries both people and wildlife have flourished in the marsh amid geologic and human induced changes. Through restoration of tidal flows and natural cycles, the estuary will continue to sustain fish, wildlife, and people. The Refuge works with partners, friends, and volunteers to protect, restore, and monitor the estuarine ecosystem and provide opportunities for people to understand and appreciate the Refuge.

1.10.2 Refuge Goals

Refuge management goals are descriptive, open-ended, and often broad statements of desired future conditions that convey a purpose, but do not define measurable units. Goals must support the refuge vision and describe the desired end result.

Wildlife and Habitat Goals:

1. Restore, protect, and maintain upland forests characteristic of the North Pacific Coastal Ecosystem.
2. Restore, protect, and maintain forested wetlands and stream-riparian habitat characteristic of the North Pacific Coastal Ecosystem.
3. Restore, protect, and maintain estuarine habitats characteristic of the North Pacific Coastal Ecosystem.
4. Enhance, protect, and maintain instream aquatic habitat for all dependent species including anadromous fish.
5. Research and monitoring. Gather scientific information (surveys, research, and assessments) to support adaptive management decisions.

Public Use Goals:

6. Provide and manage quality opportunities for visitors of all abilities to spend time outdoors observing and/or photographing freshwater wetland and estuarine dependent wildlife thus fostering an appreciation of and understanding for coastal wildlife and habitat.

7. In cooperation with our friends and partners, offer scientifically based environmental education and place-based interpretation for all ages that advances a connection with and an appreciation of fish and wildlife that use tidal and freshwater marshes.
8. Provide and manage safe, enjoyable, and high quality hunting and fishing opportunities for people of all ages that furthers the tradition of wildlife conservation and stewardship.
9. Provide facilities and materials that welcome and orient children and adults to the natural wonders of the fish and wildlife that use tidal and freshwater marshes, Sitka spruce forest, and riparian habitats.