

1 Introduction



Glen Smart/USFWS

Hooded Merganser

The U.S. Fish and Wildlife Service (Service, USFWS) has developed this draft comprehensive conservation plan (CCP) to provide a foundation for the management and use of the Pathfinder National Wildlife Refuge (NWR) located in central Wyoming near the city of Casper (figure 1). When finalized, the CCP will serve as a working guide for management programs and actions over the next 15 years.

This draft CCP was developed in compliance with the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) and Part 602 (National Wildlife Refuge System Planning) of “The Fish and Wildlife Service Manual.” The actions described within this draft CCP and environmental assessment (EA) meet the requirements of the National Environmental Policy Act of 1969 (NEPA). Compliance with the NEPA is being achieved through the involvement of the public.

The final CCP will specify the necessary actions to achieve the vision and purposes of Pathfinder NWR. Wildlife is the first priority in refuge management, and public use (wildlife-dependent recreation) is allowed and encouraged as long as it is compatible with the refuge’s purpose.

The draft CCP and the EA have been prepared by a planning team comprised of representatives from various Service programs (refuge planning, education and visitor services, and ecological services), the Bureau of Reclamation (Reclamation), the Bureau of Land Management (BLM), and the Wyoming

Game and Fish Department (WGFD). In addition, the planning team incorporated public input. Public involvement and the planning process are described in section 1.6 below.

After reviewing a wide range of public comments and management needs, the planning team developed alternatives for management of the refuge. The team recommended one alternative to be the Service’s proposed action. This action addresses all substantive issues while determining how best to achieve the purpose of the refuge. The proposed action is the Service’s recommended course of action for management of the refuge. The proposed action is summarized in chapter 3, with its predicted effects described in chapter 5. The details of the proposed action compose the draft CCP (chapter 6).

1.1 PURPOSE AND NEED FOR THE PLAN

The purpose of this draft CCP is to identify the role that the refuge will play in support of the mission of the National Wildlife Refuge System (Refuge System), and to provide long-term guidance for management of refuge programs and activities. The CCP is needed:

- ❑ to communicate with the public and other partners in efforts to carry out the mission of the Refuge System;
- ❑ to provide a clear statement of direction for management of the refuge;

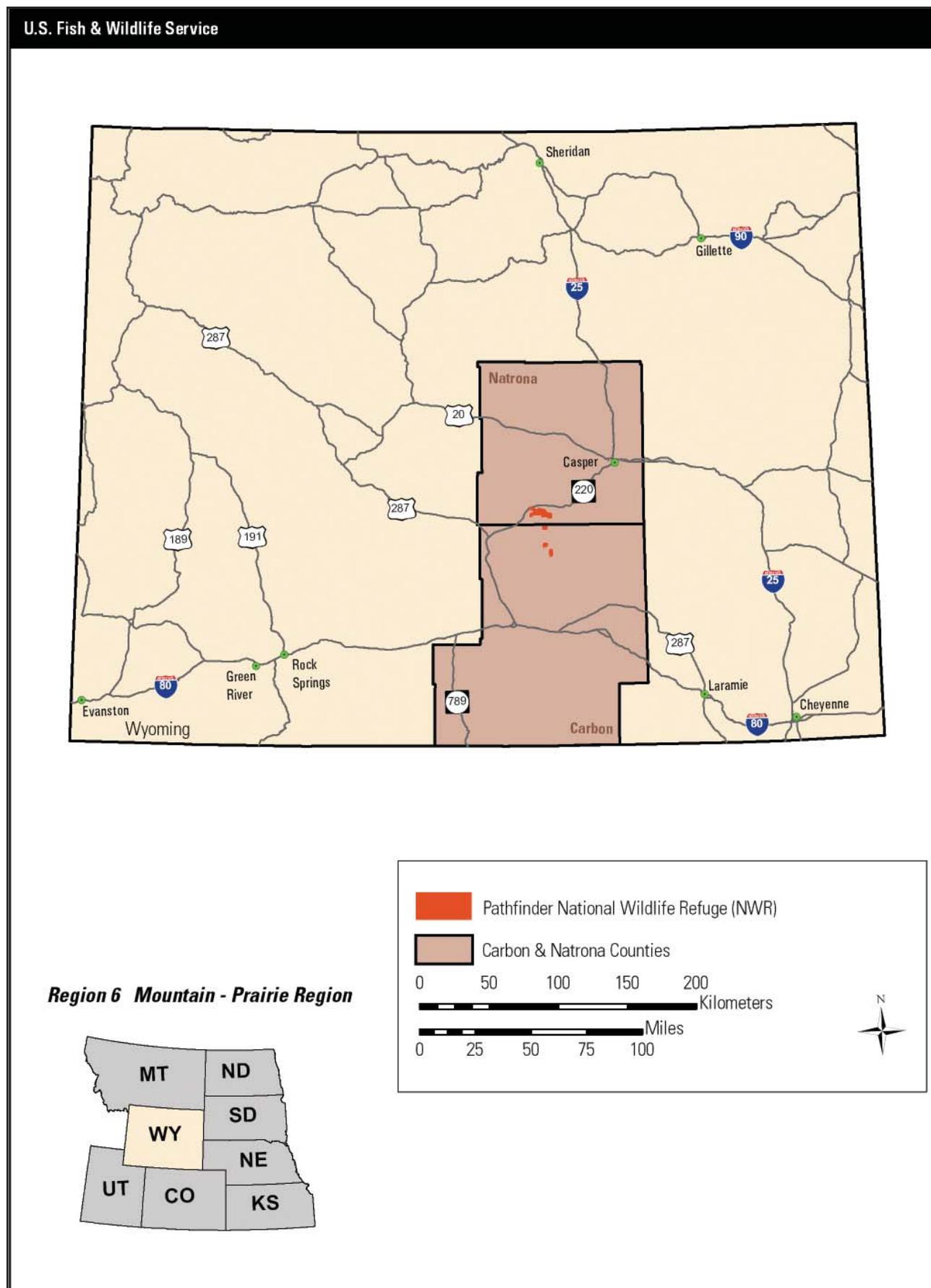


Figure 1. Vicinity map for Pathfinder NWR, Wyoming.

- ❑ to provide neighbors, visitors, and government officials with an understanding of the Service's management actions on and around the refuge;
- ❑ to ensure that the Service's management actions are consistent with the mandates of the Improvement Act;
- ❑ to ensure that management of the refuge is consistent with federal, state, and county plans;
- ❑ to provide a basis for development of budget requests for the refuge's operation, maintenance, and capital improvement needs.

Sustaining the nation's fish and wildlife resources is a task that can be accomplished only through the combined efforts of governments, businesses, and private citizens.

1.2 THE U.S. FISH AND WILDLIFE SERVICE AND THE REFUGE SYSTEM

The Service is the principal federal agency responsible for fish, wildlife, and plant conservation. The Refuge System is one of the Service's major programs.

U.S. FISH AND WILDLIFE SERVICE

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

Over a century ago, America's fish and wildlife resources were declining at an alarming rate. Concerned citizens, scientists, and hunting and angling groups joined together to restore and sustain America's national wildlife heritage. This was the genesis of the U.S. Fish and Wildlife Service.

Today, the Service enforces federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores vital wildlife habitat, protects and recovers endangered species, and helps other governments with conservation efforts. In addition, the Service administers a federal aid program that distributes hundreds of millions of dollars to states for fish and wildlife restoration, boating access, hunter education, and related programs across America.

NATIONAL WILDLIFE REFUGE SYSTEM

In 1903, President Theodore Roosevelt designated the 5.5-acre Pelican Island in Florida as the nation's first wildlife refuge for the protection of brown pelicans and other native, nesting birds. This small but significant designation was the beginning of the Refuge System.

One hundred years later, the Refuge System has become the largest collection of lands in the world specifically managed for wildlife, encompassing over 96 million acres within 546 refuges and over 3,000 small areas for waterfowl breeding and nesting. Today, there is at least one refuge in every state as well as Puerto Rico, Guam, and the U.S. Virgin Islands.

In 1997, the Improvement Act established a clear mission for the Refuge System.

The mission of the National Wildlife 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.

The Improvement Act states that each national wildlife refuge shall be managed

- ❑ to fulfill the mission of the Refuge System;
- ❑ to fulfill the individual purposes of each refuge;
- ❑ to consider the needs of fish and wildlife first;
- ❑ to fulfill the requirement of developing a CCP for each unit of the Refuge System and fully involve the public in the preparation of these plans;
- ❑ to maintain the biological integrity, diversity, and environmental health of the Refuge System;
- ❑ to recognize that the six wildlife-dependent recreation activities (hunting, fishing, wildlife observation and photography, and environmental education and interpretation) are legitimate and priority public uses;
- ❑ to retain the authority of refuge managers to determine compatible public uses.

In addition to the mission for the Refuge System, the wildlife and habitat vision for each unit of the Refuge System stresses the following principles:

- ❑ Wildlife comes first.
- ❑ Ecosystems, biodiversity, and wilderness are vital concepts.
- ❑ Habitats must be healthy.
- ❑ Growth of the Refuge System must be strategic.
- ❑ The Refuge System serves as a model for habitat management with broad participation from others.

Following passage of the Improvement Act, the Service immediately began to carry out the direction of the new legislation, including preparation of CCPs for all national wildlife refuges and wetland management districts. Consistent with the Improvement Act, the Service prepares all CCPs in conjunction with public involvement. Each refuge is required to complete its CCP within the 15-year schedule (by 2012).

PEOPLE AND THE REFUGE SYSTEM

The nation's fish and wildlife heritage contributes to the quality of American lives. Wildlife and wild places provide special opportunities to recreate, relax, and enjoy the natural world.

Whether through bird watching, fishing, hunting, photography, or other wildlife pursuits, wildlife recreation contributes millions of dollars to local economies. In 2006, nearly 35 million people visited the Refuge System, mostly to observe wildlife in their natural habitats (Carver and Caudill 2007). Visitors are most often accommodated through nature trails, auto tours, interpretive programs, and hunting and fishing opportunities. Significant economic benefits are being generated to the local communities that surround refuges. During fiscal year 2006, recreational use on national wildlife refuges generated almost \$1.7 billion of sales in regional economies, supported approximately 27,000 private sector jobs, produced about \$543 million in employment income, and generated nearly \$185.3 million in tax revenue at the local, county, state, and federal levels (Carver and Caudill 2007).

1.3 NATIONAL AND REGIONAL MANDATES

Refuge System units are managed to achieve the designated purpose of the refuge (as described in establishing legislation, executive orders, or other establishing documents) and the mission and goals of the Refuge System. Key concepts and guidance of the Refuge System are in the Refuge System Administration Act of 1966 (Administration Act), Title 50 of the Code of Federal Regulations (CFR), "The Fish and Wildlife Service Manual," and the Improvement Act.

The Improvement Act amends the Administration Act by providing a unifying mission for the Refuge System, a new process for determining compatible public uses on refuges, and a requirement that each refuge be managed under a CCP. The Improvement Act states that wildlife conservation is the priority of Refuge System lands and that the Secretary of the Interior will ensure the biological integrity, diversity, and environmental health of refuge lands are maintained. Each refuge must be managed to fulfill the Refuge System's mission and the specific purposes for which it was established. The

Improvement Act requires the Service to monitor the status and trends of fish, wildlife, and plants in each refuge.

A detailed description of these and other laws and executive orders that may affect the CCP or the Service's implementation of the CCP is in appendix A. Service policies on planning and day-to-day management of refuges are in the "Refuge System Manual" and "The Fish and Wildlife Service Manual."

1.4 REFUGE CONTRIBUTIONS TO NATIONAL AND REGIONAL PLANS

Pathfinder NWR contributes to the conservation efforts described here.

FULLFILLING THE PROMISE

A 1999 report, "Fulfilling the Promise: The National Wildlife Refuge System" (U.S. Fish and Wildlife Service [USFWS] 1999), is the culmination of a yearlong process by teams of Service employees to evaluate the Refuge System nationwide. This report was the focus of the first national Refuge System conference in 1998 attended by refuge managers, other Service employees, and representatives from leading conservation organizations.

The report contains 42 recommendations packaged with three vision statements dealing with wildlife and habitat, people, and leadership. This draft CCP deals with all three of these major topics. The planning team looked to the recommendations in the document for guidance during CCP planning.

PARTNERS IN FLIGHT

The Partners in Flight program began in 1990 with the recognition of declining population levels of many migratory bird species. The challenge, according to the program, is managing human population growth while maintaining functional natural ecosystems. To meet this challenge, Partners in Flight worked to establish priorities for conservation efforts and identify land bird species and habitat types. Partners in Flight activity has resulted in 52 bird conservation plans covering the continental United States.

The primary goal of Partners in Flight is to provide for the long-term health of the bird life of North America. The first priority is to prevent the rarest species from going extinct, the second is to prevent uncommon species from descending into threatened status, and the third is to "keep common birds common."

There are 58 physiographic areas, defined by similar physical geographic features, wholly or partially contained within the contiguous United States and several others wholly or partially in Alaska. Pathfinder NWR falls within physiographic area 86, the Wyoming Basin (figure 2).

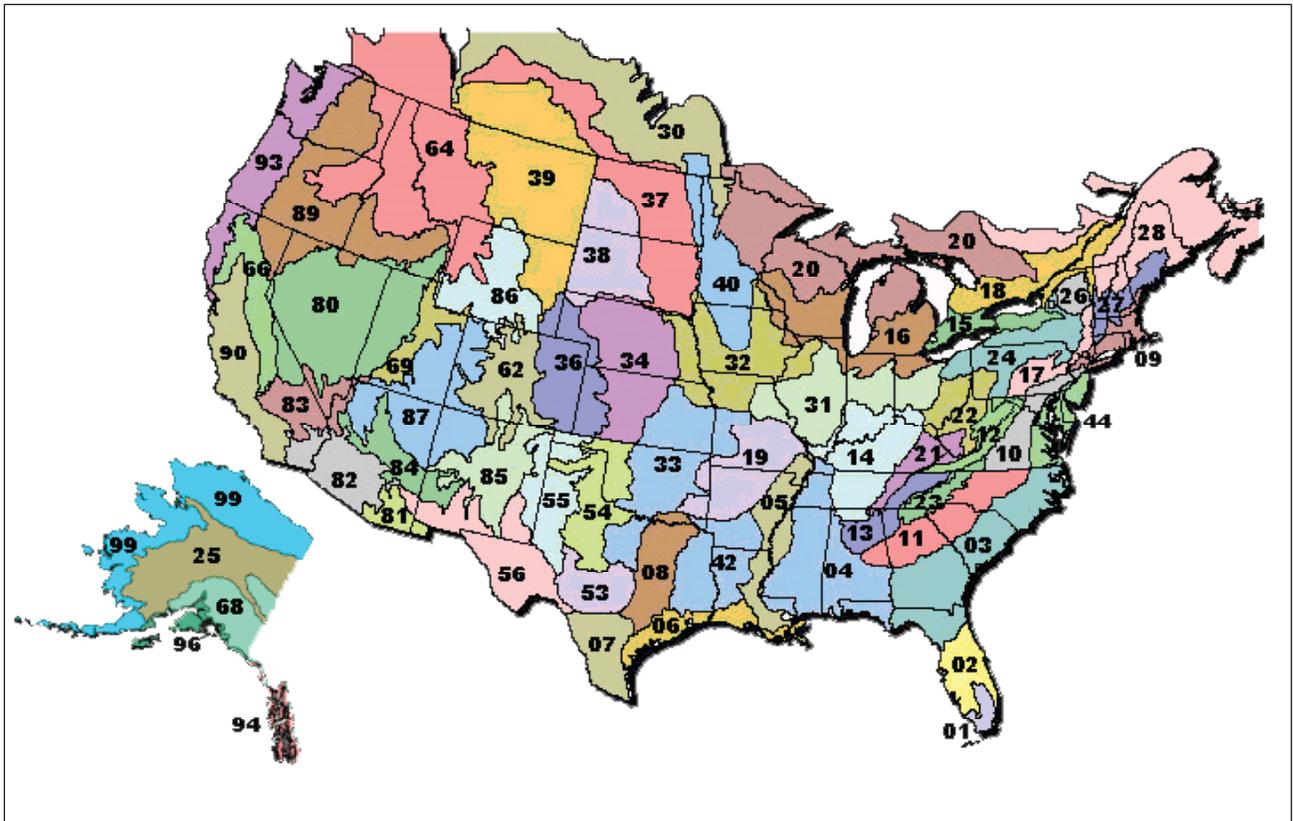


Figure 2. Pathfinder NWR is located in the Wyoming Basin, physiographic area 86.

The Wyoming Basin is primarily in Wyoming but also extends into northern Colorado, southern Montana, and very small parts of northeast Utah and southeast Idaho. The area consists of broad intermountain basins interrupted by isolated hills and low mountains that merge to the south into a dissected plateau. The Wyoming Basin is primarily shrub-steppe habitat, dominated by sagebrush and shadscale, interspersed with areas of short-grass prairie. Higher elevations are in mountain shrub vegetation, with coniferous forest atop the highest areas. Priority bird populations and habitats of the Wyoming Basin include:

Shrub-Steppe

Ferruginous hawk
 Prairie falcon
 Greater sage-grouse
 Cassin's kingbird
 Sage thrasher
 Brewer's sparrow
 Sage sparrow

Sagebrush Grasslands

Swainson's hawk
 Mountain plover
 McCowan's longspur

Montane Shrub

Lewis's woodpecker
 Virginia's warbler

Wetlands

American white pelican
 Wilson's phalarope

A large percentage of the Wyoming Basin is in public ownership, with the BLM owning much of the lower elevation shrub-steppe and grassland and the U.S. Forest Service owning a great deal of the higher-elevation wooded land. A checkerboard pattern of land ownership is a subtle problem that affects the consistency of land management over large areas. The primary land use in the Wyoming Basin has been for many years and continues to be grazing, although conversion to agriculture is also an issue. The effects of overgrazing and nonnative plant invasion should be mitigated to improve conditions for breeding birds. Maintenance of springs and riparian habitat may be crucial, particularly to sage-grouse. Fencing or changing grazing systems may be effective in maintaining water flow. Oil and gas extraction and hard rock mining are relatively recent factors that may negatively affect the greater landscape needs of the sage-grouse (Nicholoff 2003).

RECOVERY PLANS FOR FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES

Where federally listed threatened or endangered species occur at Pathfinder NWR, management goals and strategies in their respective recovery plans will be followed. The list of threatened or endangered species that occur at the refuge will change as species are listed or delisted, or as listed species are discovered on refuge lands. Currently, no federally listed threatened or endangered species occur at the refuge.

STATE COMPREHENSIVE CONSERVATION WILDLIFE STRATEGY

Over the past several decades, documented declines of wildlife populations have occurred nationwide. Congress created the State Wildlife Grant (SWG) program in 2001. This program provides states and territories with federal dollars to support conservation aimed at preventing wildlife from becoming endangered and in need of protection under the Endangered Species Act. The SWG program represents an ambitious endeavor to take a proactive role in keeping species from becoming threatened or endangered in the future.

According to the SWG program, each state or territory and the District of Columbia must have completed a comprehensive wildlife conservation strategy (CWCS) by October 1, 2005, to receive future funding.

These strategies will help define an integrated approach to the stewardship of all wildlife species, with additional emphasis on species of concern and habitats at risk. The goal is to shift focus from single-species management and highly specialized individual efforts to a geographically based, landscape-oriented, fish and wildlife conservation effort. The Service approves CWCSs and administers SWG program funding.

The CWCS for the state of Wyoming was reviewed and information therein was used during the development of the CCP. Implementation of CCP habitat goals and objectives will support the goals and objectives of the CWCS.

1.5 ECOSYSTEM DESCRIPTION AND THREATS

Pathfinder NWR is located within the Platte–Kansas Rivers ecosystem, which includes almost all of Nebraska, southeast Wyoming, northeast Colorado, and northern Kansas (figure 3). The ecosystem is home to the Nebraska Sandhills, the largest sand dune complex in the western hemisphere. This area and many others provide vital habitat for numerous threatened and endangered wildlife and plant species.

The ecosystem spans from snow-capped, barren mountain peaks in Colorado to lowland riparian cottonwood forests along the Missouri River in eastern Nebraska and Kansas. The mountainous regions are predominately a mixture of coniferous forests comprised of Douglas fir, ponderosa pine, lodgepole pine, Engelman spruce, and subalpine fir. Pinyon pine, juniper woodlands, and aspen communities are also common throughout. At high elevation, alpine meadows and lakes, willow shrublands, and barren, rocky areas are frequently found. Forests generally transition into shrub communities dominated by sagebrush with short grasses and forbs in eastern Wyoming and western Nebraska. Farther to the east, trees give way to short-grass prairie dominated by buffalo grass, blue gramma, hairy gramma, and western wheatgrass. The short-grass prairie turns into mixed-grass prairie in central Nebraska and Kansas, due primarily to greater annual rainfall.

Threats to the Platte–Kansas Rivers ecosystem that require attention include overgrazing of land, invasive plants, population growth and housing development, and groundwater and surface-water depletion. To overcome these threats, the priorities for the ecosystem will be to ensure that natural, healthy ecological processes dominate and that economic development complements environmental protection.

1.6 THE PLANNING PROCESS

This draft CCP and the EA for Pathfinder NWR is intended to comply with the Improvement Act and the NEPA as well as the implementing regulations of the acts. The Service issued its Refuge System planning policy in 2000, which established requirements and guidance for refuge plans—including CCPs and step-down management plans—to ensure that planning efforts comply with the Improvement Act. The planning policy identified several steps of the CCP and environmental analysis process (see figure 4).

Table 1 displays the planning process to date for this draft CCP and EA. The Service began the preplanning process in January 2006. The planning team consists of Service personnel from various programs including refuge planning, education and visitor services, and ecological services, as well as representatives from the BLM, Reclamation, and WGFD (appendix B). During preplanning, the team developed a mailing list, internal issues, and a special qualities list. The planning team identified current refuge program status, compiled and analyzed relevant data, and determined the purpose of the refuge.

Over the course of preplanning and scoping (the process of obtaining information from the public for input into the planning process), the planning team collected available information about the resources

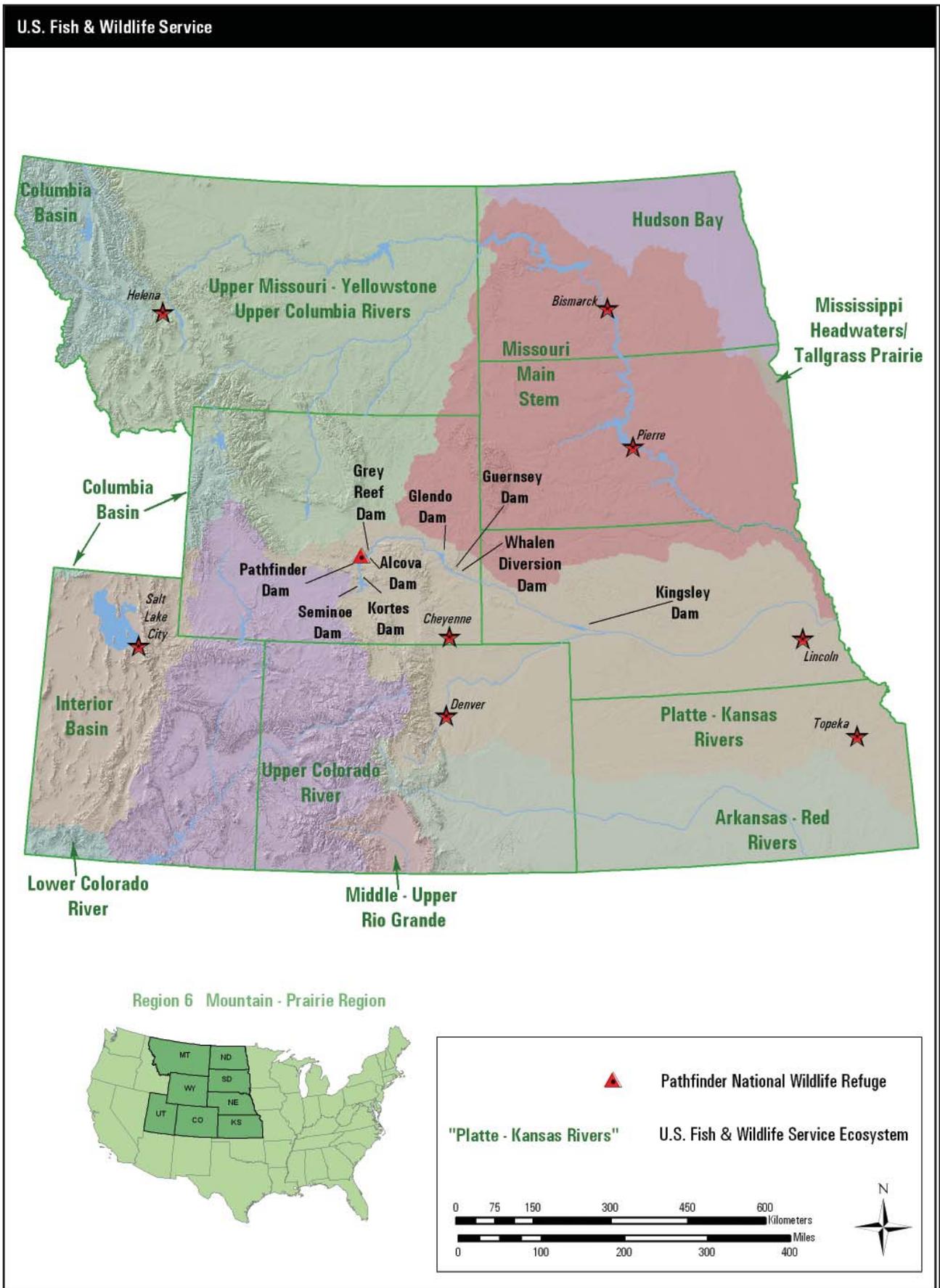


Figure 3. Platte-Kansas Rivers ecosystem.

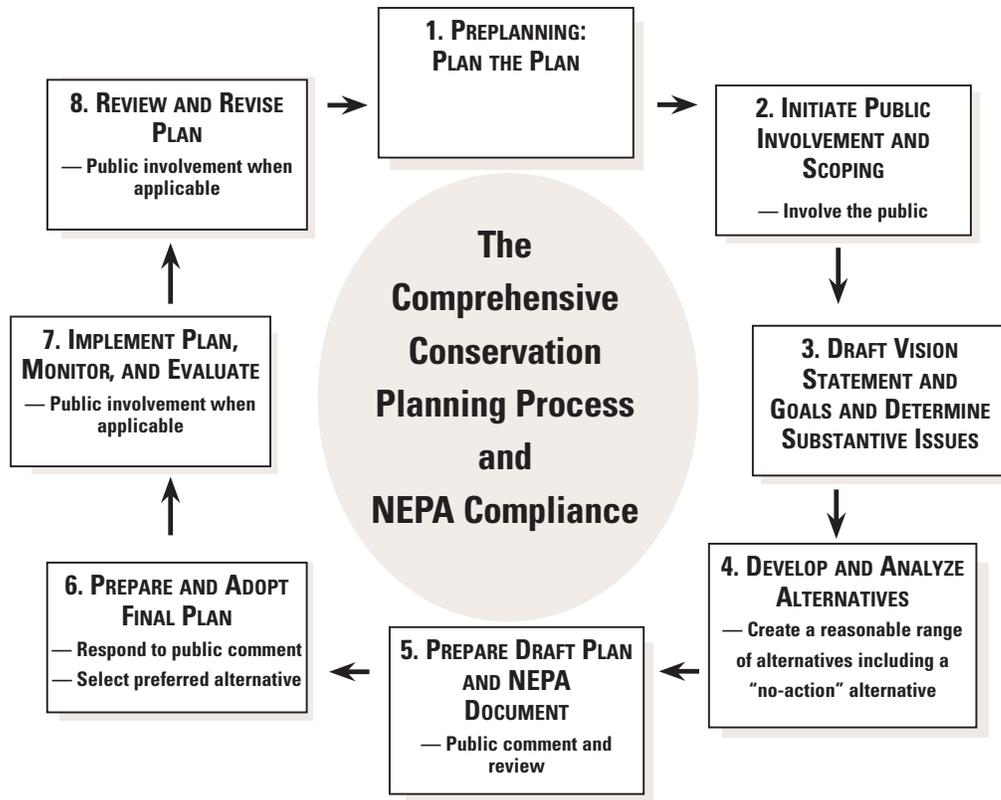


Figure 4. The planning process.

of the refuge and the surrounding areas. Chapter 4 summarizes this information.

The draft CCP (chapter 6) outlines long-term guidance for management decisions; sets forth proposed objectives and strategies to accomplish refuge purposes and meet goals; and identifies the Service's best estimate of future needs.

The draft CCP details program levels that are sometimes substantially above current budget allocations and, as such, are primarily for Service strategic planning purposes.

A notice of intent (NOI) to prepare the draft CCP and EA was published in the "Federal Register" on June 16, 2006. Public scoping began in May 2006 with public meetings in Casper and Laramie, Wyoming.

COORDINATION WITH THE PUBLIC

The Service held two public scoping meetings in May 2006 (see table 1 for details) announced by the local media. During the public meetings, a description of the CCP and NEPA process was provided. Participants were asked to provide suggestions on the scope of issues to be considered in the planning process, and comments were recorded and entered in the planning record. Attendees were encouraged to

ask questions and offer comments; each attendee was given a comment form to submit additional thoughts or questions in writing.

Approximately 51 people attended the public meetings. Attendees included local citizens and members of the Audubon Wyoming, the Wyoming Outdoor Council, and Biodiversity Conservation Alliance.

Written comments were due July 17, 2006. A total of 70 written comments were received throughout the scoping process. Input obtained from meetings and correspondence including email was considered in development of this draft CCP and EA.

A mailing list of more than 148 contacts includes private citizens; local, regional, and state government representatives and legislators; other federal agencies; and interested organizations (appendix C).

In September 2006, the first planning update was sent to everyone on the mailing list. Information was provided on the history of the refuge and the CCP process, along with an invitation to share ideas regarding refuge management with the planning team. Each planning update included a comment form and postage-paid envelope to give the public an opportunity to provide written comments.

Table 1. Planning process summary for Pathfinder NWR, Wyoming.

| <i>Date</i> | <i>Event</i> | <i>Outcome</i> |
|--------------------|--|---|
| January–March 2006 | Preplanning. | CCP overview; established planning team; identified purpose of the refuge, history, and establishing authority; developed planning schedule and CCP mailing list. |
| April 27, 2006 | Kickoff meeting. | Toured refuge; conducted internal scoping by developing issues and qualities list for the refuge; identified biological and mapping needs; developed a vision statement for the refuge. |
| May 8, 2006 | News release for public meeting sent to Wyoming media contacts. | Notified public of opportunities for involvement in the CCP process. |
| May 24, 2006 | Public meeting in Casper, WY. | Opportunity for the public to learn about the CCP and offer suggestions on the scope of issues to be considered in the planning process. |
| May 25, 2006 | Public meeting in Laramie, WY. | Opportunity for the public to learn about the CCP and offer suggestions on the scope of issues to be considered in the planning process. |
| June 16, 2006 | NOI (to prepare the CCP) published in the “Federal Register.” | Notified the public of the intention to prepare a CCP and EA for Pathfinder NWR. |
| August 31, 2006 | Goals and alternatives workshop. | Goals developed; alternatives discussed. |
| September 2006 | Planning update distributed to CCP mailing list. | Planning update (describing CCP process and providing opportunity for public suggestions on the scope of issues to be considered in the planning process). |
| January 25, 2007 | Environmental consequences workshop and identification of the proposed action. | Reviewed the anticipated environmental consequences; identified alternative C as the proposed action. |
| Spring 2008 | Internal review of the draft CCP and EA. | Received comments on the draft CCP and EA. |
| Summer 2008 | Release of draft CCP and EA for public review. | Draft CCP and EA presented to the public; received comments on the draft CCP and EA. |
| Summer 2008 | Public meeting in Casper, WY. | Increased public understanding of the draft CCP and EA; received public comments about the draft CCP and EA. |

STATE COORDINATION

On January 27, 2006, an invitation letter to participate in the CCP process was sent by the Service’s region 6 director to the director of the Wyoming Game and Fish Department. Two representatives from the WGFD are part of the CCP planning team. Local WGFD wildlife biologists and the refuge staff had established excellent and ongoing working relations before starting the CCP process.

The Wyoming Game and Fish Department is charged with providing “an adequate and flexible system for the control, management, protection,

and regulation of all Wyoming wildlife.” The WGFD maintains 36 Wildlife Habitat Management Areas and 96 Public Access Areas, encompassing 410,000 acres of managed lands for wildlife habitat and public recreation opportunity. These lands contain 121 miles of stream easements and about 21,014 surface acres of lakes and reservoirs for public access (Wyoming Game and Fish Department 2006).

TRIBAL COORDINATION

On October 17, 2006, five Native American tribal governments (Arapaho, Crow, Northern Cheyenne, Oglala Sioux, and Shoshone) were contacted through a letter signed by Service’s region 6 director. With

information about the upcoming CCP, the letter invited tribal recipients to serve on the planning team. Although Native American tribal governments did not express interest in participating on the planning team, the tribal governments remain on the CCP mailing list and will continue to receive CCP correspondence (planning updates, draft CCP and EA, final CCP) and will be given an opportunity to comment on the draft CCP and EA documents.

RESULTS OF SCOPING

Table 1 summarizes all scoping activities. Comments collected from scoping meetings and correspondence, including comment forms, were used in the development of a final list of issues to be addressed in this draft CCP and EA.

The Service determined which alternatives could best address these issues. The planning process ensures that issues with the greatest affect on the refuge are resolved or given priority over the life of the final CCP. Identified issues, along with a discussion of effects on resources, are summarized in chapter 2.

In addition, the Service considered suggested changes to current refuge management presented by the public and other groups.