

CHAPTER 2—The Refuge

For many years, resource professionals and conservation agencies recognized the unique wetland habitat of the Upper Bear River floodplain near Cokeville, Wyoming, in Lincoln County and its value to migratory birds. In the late 1970s and early 1980s, we and WGFD reviewed the potential for protecting the area’s habitat. In July 1987, we gained conditional support for a refuge proposal from WGFD.

This chapter discusses Cokeville Meadows Refuge’s establishment, management history, purposes, and special values as well as its proposed vision, goals, and planning issues.

2.1 ESTABLISHMENT, ACQUISITION, AND MANAGEMENT HISTORY

We prepared a land protection plan and accompanying environmental impact statement that resulted in a record of decision in 1992 that approved an acquisition boundary for a refuge. The record of decision also authorized us to buy a total of 26,657 acres within the boundary. This led to the creation of Cokeville Meadows Refuge.

Establishment

Cokeville Meadows Refuge was established in 1993 with our first land acquisition.

Creation of the refuge was proposed to preserve and protect wetland-breeding and migration habitat for migratory and resident birds including trumpeter swan, redhead, white-faced ibis, long-billed curlew, sandhill crane, greater sage-grouse, and many other conservation-priority species (USFWS 1990, 1992, 2002; Nicholoff 2003; WGFD 2005).

Acquisition History

The refuge has grown since 1993 (table 3) to consist of 9,259 acres of fee-title and conservation easement lands (6,466 acres in fee title, 1,689 acres in conservation easements, 320 acres of State-leased land, and 784 acres in Farmers Home Administration easements) (figure 7).

Future acquisitions of land for refuge purposes, by easement or fee, will depend on our having the available funds to pay the appraised fair market value and on having willing sellers (figure 8).

Table 3. Land acquisition history of Cokeville Meadows National Wildlife Refuge, Wyoming.

<i>Date of acquisition</i>	<i>Acres acquired</i>	<i>Acquisition authority</i>	<i>Means of acquisition</i>	<i>Percent of acquisition within the refuge boundary</i>
10/12/1993	203	Emergency Wetland Resources Act	Fee title – Land and Water Conservation Fund	0.76%
12/22/1993	625	Emergency Wetland Resources Act	Fee title– Land and Water Conservation Fund	2.34

Table 3. Land acquisition history of Cokeville Meadows National Wildlife Refuge, Wyoming.

<i>Date of acquisition</i>	<i>Acres acquired</i>	<i>Acquisition authority</i>	<i>Means of acquisition</i>	<i>Percent of acquisition within the refuge boundary</i>
03/05/1997	222	Emergency Wetland Resources Act	Fee title– Land and Water Conservation Fund	0.83
08/21/1997	263	Migratory Bird Conservation Act	Fee title–Migratory Bird Conservation Fund	0.99
06/02/1998	2,214	Migratory Bird Conservation Act	Fee title–Migratory Bird Conservation Fund	8.31
06/09/2000	2,264	Migratory Bird Conservation Act	Fee title–Migratory Bird Conservation Fund	8.49
04/15/2003	672	Fish and Wildlife Act	Fee title– Land and Water Conservation Fund	2.52
01/26/1995	1,689	Emergency Wetland Resources Act	Conservation easement– Land and Water Conservation Fund	6.34
Total Percentage within the acquisition boundary acquired to date				30.58

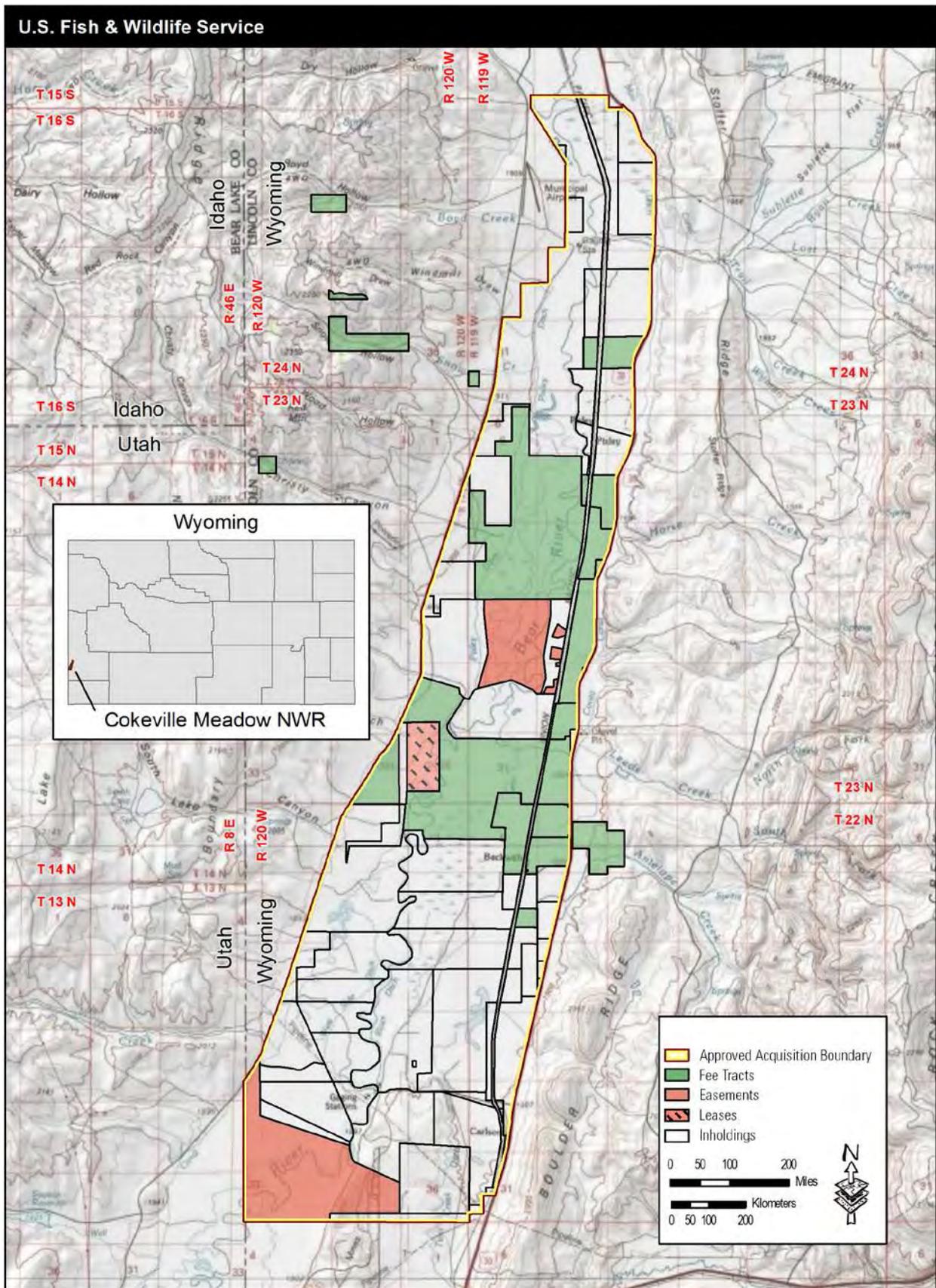


Figure 7. Base map of Cokeville Meadows National Wildlife Refuge (NWR), Wyoming.

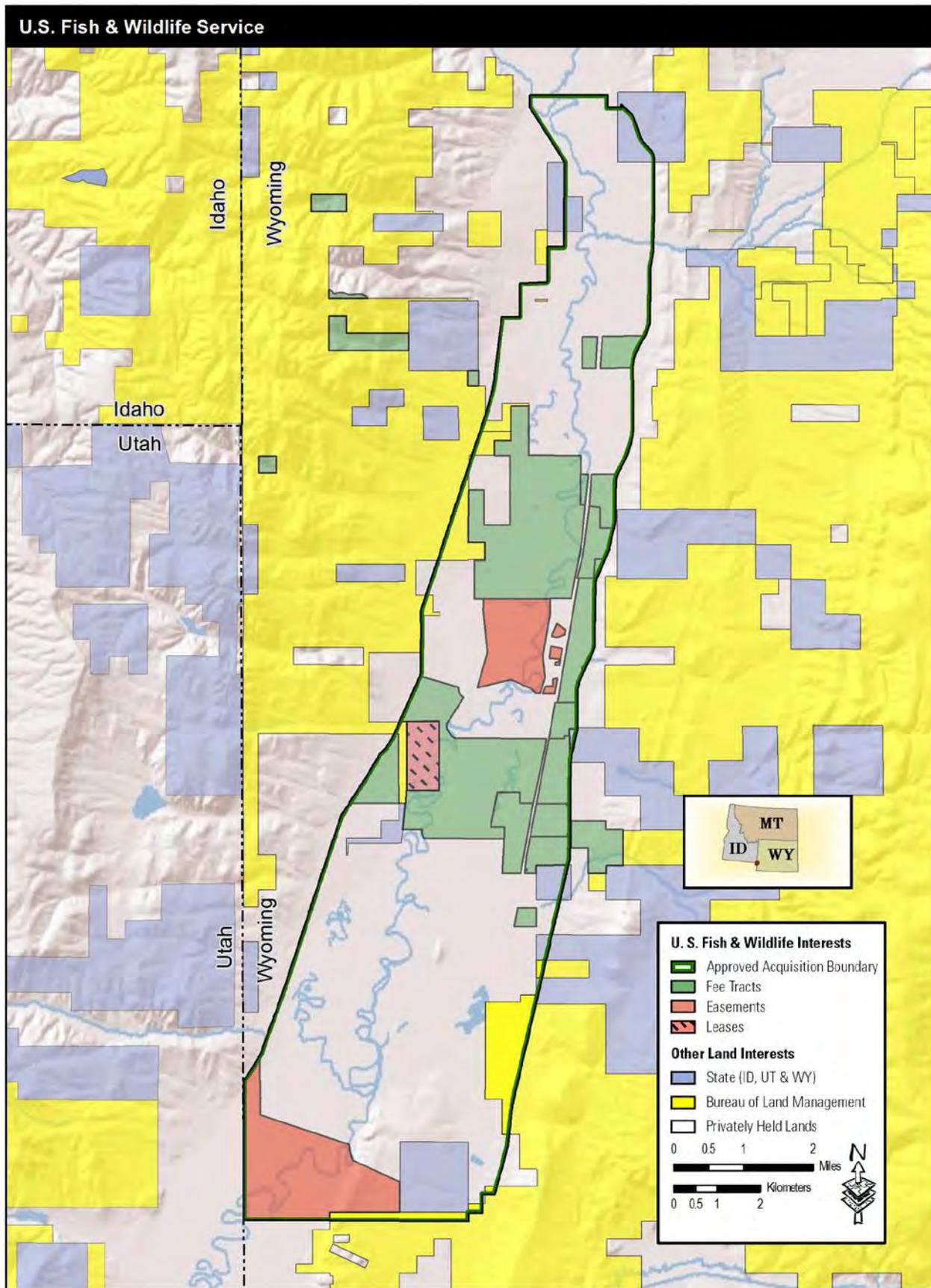


Figure 8. Ownership of Lands near and within Cokeville Meadows National Wildlife Refuge, Wyoming.

Management History

Since 1993, we have managed the refuge primarily for waterfowl nesting and production. By controlling water through using the existing ditches of an irrigation system that was developed by the farmers and ranchers of the valley, our refuge staff improved and enhanced wet meadow habitats along the Bear River. Since 2003, we have improved the irrigation system for wildlife management purposes by adding and replacing pre-existing and deteriorating water control structures.

Grazing and haying are the primary vegetation management tools used to manage wet meadow and upland habitats. Water level manipulation using existing irrigation ditches, irrigation, prescribed fire, mowing, harrowing, and disking are other tools that have been, or might be, used to improve grassland and wetland habitats on the refuge.

Prescribed fire has not been used to manage habitats on the refuge since establishment, primarily because the refuge has not had sufficient staff to prepare the necessary plans and NEPA documentation required for a prescribed fire program.

Except for a visitor contact station consisting of a kiosk and a parking lot, a short walking trail, and the refuge office, the refuge has not been open to public use. Approximately 3,200 visitors a year use these limited facilities for wildlife observation, photography, and interpretation. In December 2012, we issued a draft hunting plan and an associated EA for public comment with the intent to open portions of Cokeville Meadows Refuge to public hunting in 2013.

2.2 PURPOSES

Every refuge has one or more purposes for which it was established. The purpose is the foundation on which to build all refuge programs—from biology and public use to maintenance and facilities. No action that the public or we undertake may conflict with this purpose.

Refuge purposes are found in the statutes, Executive orders, or other documents that authorize the refuge and the acquisition of any parcel of land within the acquisition boundary. An individual refuge may contain lands that have been acquired under a variety of authorities, giving a refuge more than one purpose. The goals, objectives, and strategies identified in the CCP (refer to chapter 6) are intended to support the purposes for which the refuge was established.

The following laws specify the purposes for Cokeville Meadows Refuge:

- “For use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (Migratory Bird Conservation Act, 16 U.S.C. § 715d)
- “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.” (Emergency Wetlands Resources Act of 1986, 16 U.S.C. § 3901(b))
- “For conservation purposes.” (Consolidated Farm and Rural Development Act of 1961, 7 U.S.C. § 2002)

2.3 VISION

A vision is a concept, including desired conditions for the future, that describes the essence of what we are trying to accomplish at a refuge. The following vision for Cokeville Meadows Refuge is future-oriented and designed to be achieved throughout the life of the CCP and beyond:

For thousands of years, the sandhill cranes have returned each spring to dance on the Cokeville Meadows. Their thunderous majestic calls remind us of our obligation to manage wildlife for generations unborn.

Nestled on the upper reaches of the Bear River in southwest Wyoming, the wet meadows, sage steppe, and riparian habitats of Cokeville Meadows National Wildlife Refuge provide outstanding habitat for a myriad of migratory birds and resident wildlife species.

Spectacular views and clean air add to the visitor's enjoyment of compatible wildlife-oriented recreation. Refuge management and habitat restoration activities are complementary with historical land uses, creating opportunities for conservation partnerships with neighbors and friends.

2.4 GOALS

A goal is a descriptive, broad statement of desired future conditions that conveys a purpose but does not define measurable units. The goals direct efforts toward achieving the vision and purposes of the refuge and outline approaches for managing refuge resources. We developed seven goals for the refuge based on the Improvement Act, the purposes of the refuge, and information developed during planning.

Habitat and Wildlife Management Goals

Three goals were developed for habitat and wildlife management at Cokeville Meadows Refuge.

Wet Meadow Habitat and Wildlife Goal

Using the best scientific practices to manage and preserve critical wet meadow habitat, the refuge will provide quality feeding, loafing, and breeding opportunities for a diversity of migratory birds and resident wildlife.

Upland Habitat and Wildlife Goal

Manage and restore the diversity and composition of grassland and shrub-steppe habitats within the range of historical conditions for sagebrush-dependent species, upland nesting migratory birds, and other resident species.

Riparian and River Habitats and Wildlife Goal

Maintain and, where appropriate, restore the processes necessary to sustain the biological diversity and integrity of riparian vegetation and aquatic habitats for breeding birds, native fishes, reptiles and amphibians.

Wildland Fire Management Goal

Manage wildland fires using a full array of strategic options from suppression to manipulating a fire to achieve benefits. Prescribed fire, manual, and mechanical treatments will be used to: (1) reduce the threat to land and property through

hazardous-fuel reduction treatments, and (2) meet the habitat goals and objectives identified in this CCP.

Visitor Services and Cultural Resources Goal

Provide appropriate public access to refuge lands where visitors can safely enjoy compatible, wildlife-dependent recreation, such as hunting, fishing, wildlife observation, photography, environmental education, and interpretation. The refuge will seek partnerships to help protect onsite cultural resources.

Partnerships Goal

Engage in mutually beneficial partnerships to promote wildlife and habitat conservation, and public enjoyment of wildlife resources in the upper Bear River watershed that are consistent with historic land uses, refuge purposes and goals.

Refuge Development and Operations Goal

Effectively utilize all available resources to develop, enhance, and support refuge facilities and operations for wildlife, habitat, and public use programs. We will pursue easements and other land protection opportunities with willing sellers within the approved refuge acquisition boundary.

2.5 SPECIAL VALUES OF THE REFUGE

Early on, our planning team and the public identified the outstanding qualities of Cokeville Meadows Refuge. Refuge qualities are the characteristics and features that make it special, valuable for wildlife, and worthy of refuge status. It was important to name and describe the special values of the refuge to recognize its worth and to make sure that the special values of the refuge are preserved, protected, and enhanced through the planning process.

Refuge qualities can be unique biological values or something as simple as, “a quiet place to see a variety of birds and enjoy nature.” The following summarizes the qualities that make Cokeville Meadows Refuge unique and valued:

- The refuge lies within an important part of the Pacific flyway and plays an important role as a nesting and foraging area for migratory birds.
- These are public lands where people can take part in wildlife-dependent recreational opportunities: hunting, fishing, wildlife observation, photography, environmental education, and interpretation.
- The refuge lies in the Upper Bear River watershed
- The refuge is a greenbelt within southwest Wyoming’s high desert.

- The refuge has potential for a broad range of partnerships that are integral to every aspect of refuge management.
- The refuge can serve as an outdoor classroom to provide environmental education opportunities for local communities.
- Nearby universities are resources for natural resource studies that can add to the body of scientific literature on a variety of environments within the Bear River watershed and the importance of national wildlife refuges in the western United States.

2.6 PLANNING ISSUES

We identified several key issues during the scoping process and based on a review of refuge law and policy. They are derived from an analysis of comments collected from service staff and the public along with a review of the Improvement Act and the NEPA.

Substantive comments (those that can be addressed within our authority and management capabilities) were considered during the formulation of the alternatives for future management of the refuge. These key issues are summarized below.

Habitat and Wildlife Management

Specific issues were identified for the unique habitats found at Cokeville Meadows refuge along with general issues that apply to the refuge as a whole.

Wet Meadow Habitat

The conservation of wet meadow habitat is one of the primary reasons Cokeville Meadows Refuge was established. Fortunately, the prior economic uses of refuge wet meadows—hay production or grazing— also provided good habitat for migratory birds and other wildlife. Though with some significant improvements to water control facilities, we manage water in these habitats much like their former private owners did.

The recent HGM study conducted on Cokeville Meadows Refuge shows that our management continues to provide good habitat, but the natural hydrologic regime has been altered, which has led to a change in the vegetation communities found in wet meadows. Non-native grasses now dominate many meadows and there has been a proportional decline in some native sedge–rush communities.

To achieve and support quality wet meadow habitat, the refuge needs to improve the monitoring and evaluation of past water management effects on the meadows. This includes evaluating the location and placement of water control structures in relation to historical sloughs and river channels. The refuge will use a variety of tools such as active water level management, haying, grazing, and prescribed fire to encourage native plant communities and to discourage nonnative species.

Upland Habitat

Subdivision encroachment and the conversion of upland habitats are issues that occur within the acquisition boundary and adjacent lands of Cokeville Meadows Refuge.

The conversion of native habitat to cropland took place on refuge lands before acquisition. The refuge would work to restore cropland back to native vegetation to improve habitat for a variety of wildlife species. The refuge would also work to restore degraded or marginal upland habitats to improve plant diversity. In conjunction with the re-establishment of native grassland communities, we would develop a grazing management plan to manage upland

habitats to help a variety of plants and wildlife. Grassland restoration should enhance nesting and brood-rearing habitat for upland nesting birds, including dabbling ducks, passerine birds and sage-grouse.

Many of the former croplands have been idle for years and have developed a weed seed bank that could exacerbate the difficulty of re-establishing native communities. To prepare former croplands for restoration to native vegetation, small grains would be grown for 2 or 3 years, most likely through cooperative farming agreements, to achieve weed control before lands are planted to native vegetation.

The rotation of small grains from site to site would also help combat the depredation of private lands by migratory birds. During this rotational phase, we would work cooperatively with the permittee and the Lincoln County Weed and Pest Department to control invasive plants.

Riparian and River Habitats

As valuable as it is to wildlife, the Bear River and its adjacent riparian habitats are severely degraded. We would work toward restoring the natural processes of the Bear River Valley, as identified in the HGM report. The development of partnerships with WFGD, neighboring landowners and other irrigators, nongovernment organizations, and others would be required to restore native game and nongame fish populations—with emphasis on Bonneville cutthroat trout, a species of concern found in the area—and to improve fish passage in the river, for which the Beckwith and Quin (BQ) and Pixley Dams are concerns.

We would work to manage riparian vegetation to optimize habitat for selected passerine and other migratory birds and to restore the diversity of plant species with a focus on native grasses, sedges, rushes, and woody species like willow and cottonwood. Restoring riparian habitats will also require streambank stabilization projects, including potentially mechanized streambank reconstruction, fencing to exclude livestock from the riparian corridor, and the use adaptive management to decide if haying or grazing would be needed to improve migratory bird habitat. The implementation of a big game hunting program may also reduce the effects of wintering native ungulates.

Haying, Grazing, and Prescribed Fire

Haying and rotational grazing of refuge habitats in the summer and fall of each year have helped to support many of the values of wet meadows needed by migratory birds. Past management and, possibly, herbicide spraying have degraded some key areas and habitat types, particularly woody riparian communities. Those areas need a period of rest from grazing and the elimination of haying.

On some sites, prescribed fire can be used to improve the control of invasive species, increase plant diversity, or set back succession to improve wildlife habitat. Prescribed fire would be a new tool in the habitat management toolbox, not a replacement of other treatment options.

Invasive Species

Cokeville Meadows Refuge occupies part of an agricultural landscape, and refuge lands are intermixed with private farm and ranch lands. As such, concerns have been raised about both plant and animal invasive species.

The refuge would develop an Integrated Pest Management (IPM) plan that would define the proper use of chemical, biological, and mechanical treatment methods for the most effective control of invasive plants. The refuge would also collaborate with the State and other cooperating agencies to address invasive species issues.

The refuge would have to engage and work with the State and other cooperative agencies to address issues and concerns dealing with aquatic invasive species, such as zebra and quagga mussels, throughout the Bear River watershed.

Carp control and management activities on the refuge to improve water quality within the wet meadow habitats would be conducted to reduce sediment and other pollutants. Scoping revealed a desire by some to harvest carp from flooded wet meadow habitats in the spring. While removing carp from the meadows could improve water quality, recreational harvest is unlikely to be an effective control technique, and recreational carp hunting in the meadows

would create unacceptable disturbance to nesting migratory birds. Carp control by public harvest could be allowed in designated areas on portions of the Bear River.

Wildlife Disease, Crop Depredation, and Private Property Damage

Neighboring landowners want us to take action in addressing the potential spread of wildlife diseases to their livestock and crop depredation on their lands. These concerns were raised before and during public scoping for the CCP.

The primary wildlife disease concern is brucella transmission when elk commingle with cattle. The refuge is working with WGFD to keep elk and cattle separate. In some extreme cases, elk are hazed from private and refuge lands. An elk hunting program is proposed for implementation in 2013, and one of its goals is to disperse wintering elk from the refuge.

Depredation involves damage to small grain crops by waterfowl and other migratory birds and is a more difficult issue. However, in recent years, refuge permittees have planted a small grain crop on the refuge to help offset depredation on private land. If upland restoration takes place on the refuge and small grain crops are used for 2–3 years per rotation, this will provide migrating flocks with a food source on the refuge, which may reduce their foraging on private fields. As the refuge acquires more in-holdings, we will continue to work with WGFD to address the depredation issue.

Wildland Fire Management

Native plant communities in the Bear River Basin evolved under a disturbance regime that included grazing animals, fire, and weather events. This periodic disturbance kept the ecosystem diverse and healthy while supporting significant biodiversity for thousands of years. Historically, natural fire, including Native American ignitions, played an important role in most ecosystems by removing fuel accumulations, decreasing the effects of insects and diseases, stimulating regeneration, cycling critical nutrients, and providing a variety of habitats for plant and animal species.

After European settlement, wildfires were suppressed. Today, most local fire departments and area farmers and ranchers still aggressively suppress wildfires. It has also been the our policy on Cokeville Meadows Refuge to aggressively suppress wildfires because it is too small and too close to farm and ranchsteads to use wildfire management as a tool. Thus, all unplanned ignitions will continue to be suppressed in accordance with Federal fire policy.

Before refuge establishment, however, local farmers and ranchers periodically burned agricultural lands within the Bear River Basin on what would become Cokeville Meadows Refuge. Since 1993, the refuge has not used prescribed fire for habitat management or fuel reduction purposes. However, alternatives within this CCP do allow for the use of prescribed fire for specific purposes, contingent on the right plans, funding, and having the qualified staff to conduct a prescribed fire program.

Visitor Services and Cultural Resources

Issues involving visitor services and cultural resources have many facets.

Public Access

The lack of opportunities for people to engage in wildlife-dependent recreation was perhaps the most consistent and widely held issue raised during public scoping. By law, national wildlife refuges are “closed until opened,” and we have not been able to provide staff or fiscal resources to the refuge to perform the planning activities needed to open

hunting and fishing programs. Land acquisition activities at the refuge have also been slow; for many years, the refuge did not have a sufficient land base to support some forms of recreation.

In 2006 the refuge constructed a visitor contact station (VCS), information kiosk, and walking trail at the Netherly Slough along U.S. Highway 30. It became the only area of the refuge open to public access. Environmental education, interpretation, wildlife observation, and photography are compatible uses for this area. Elsewhere, vehicular access to the refuge is by special use permit only and public access to the Bear River has not been authorized due primarily to private land access issues and to safety issues raised by railroad crossings.

The Improvement Act identifies six priority public uses: hunting, fishing, wildlife observation, photography, environmental education, and interpretation. Congress deemed these to be appropriate on refuges and to be facilitated whenever they are compatible with refuge purposes and the Refuge System mission. Providing more opportunities for these uses, particularly hunting, was a significant issue raised during public scoping.

In close consultation with WGFD, we prepared a draft hunting plan and associated EA to open Cokeville Meadows Refuge to the hunting of big game, small game, and migratory birds beginning in 2013. That plan was released for public review and comment in December 2012. If the NEPA analysis results in a finding of no significant impact, we will submit a rule for publication in the Federal Register that will open the refuge to hunting in the fall of 2013.

We will work to provide foot and vehicle access points on both the east and west sides of the refuge. Because of limited staff and finances, however, creating and supporting one refuge access point is a more realistic goal. Additional foot or vehicle access points may depend on added volunteers, partners, and money. Because access to the refuge is required for authorized public use, resolving such issues must be considered in the planning process.

Members of the public also wanted to use the refuge for non-wildlife dependent recreation such as all-terrain vehicle, snowmobile, and horseback riding. These requested uses will be evaluated for appropriateness (603 FW 1) as part of this CCP planning process.

Visitor Safety

Ensuring that the public has safe access to the refuge is a top priority for us. Access from U. S. Highway 30, as it parallels the east side of the refuge, will require crossing an active railroad. Existing crossings are not signaled, so signals and cross arms would need to be added. Coordinating this with the railroad company, funding, and the upkeep of safety equipment are major issues to consider.

Hunting

In close consultation with WGFD, we prepared a draft hunting plan and associated EA to open Cokeville Meadows Refuge to the hunting of big game, small game, and migratory birds beginning in 2013. The plan proposes to allow these licensed hunters to take jackrabbits, fox, skunk, and raccoon during open seasons for game species. Some members of the public also requested access to the refuge to hunt a variety of species classified as predators by the State of Wyoming. Under Wyoming law, predators may be taken without a license year-round. The hunting of wolves and coyotes, however, would not be permitted under this plan.

The plan was released for public review and comment in December 2012. If the NEPA analysis results in a finding of no significant impact, we will submit a rule for publication in the Federal Register that will open the refuge to hunting in the fall of 2013. The hunting program will provide opportunities for the public, including families, to engage in wholesome, wildlife-dependent recreation. The big game hunting program would also help us to discourage the commingling of wild ungulates and livestock by disturbing elk on the refuge during the hunting season.

Fishing

We will seek to open portions of the Bear River to fishing on the refuge and will work directly with WGFD to adopt State fishing regulations. It is anticipated that WGFD staff will help with enforcement and public guidance activities on refuge lands. Where the potential exists and there is enough support, the refuge will engage partners to find sites and develop areas with better fishing opportunities.

Wildlife Observation, Photography, Environmental Education, and Interpretation

In response to scoping, we will seek to open portions of the refuge to wildlife observation and photography and work with partners to find ways to enhance visitor facilities for these activities. Our current visitor contact station, information kiosk, and walking trail at Netherly Slough will be supported, and we will continue to provide limited staff-led environmental education and interpretation per request.

Public Information

As wildlife-dependent recreation expands, we will need to provide more information about it, including regulations. The refuge has not yet produced public information materials. Opening of the refuge to hunting would require us to provide brochures, leaflets, media announcements, and maps.

Cultural Resources

While there are no known National Register-eligible historic properties on refuge lands, we need to do more to inventory and manage the refuge's cultural resources. We will seek partners to help develop projects and programs to provide stewardship and interpretation of significant sites like historic trails.

Law Enforcement

As noted in the scoping comments we collected, hunting and other wildlife-dependent recreational uses will require adequate refuge law enforcement to insure public safety and a high level of compliance with regulations designed to protect wildlife and private property. We expect that there will be sufficient Federal wildlife officers assigned to the Seedskafee National Wildlife Refuge Complex to provide a reasonable level of law enforcement coverage at the refuge.

Before 2010, the refuge did not have an assigned commissioned Federal wildlife officer. Now there are two officers assigned in the Seedskafee National Wildlife Refuge Complex, and we will seek to keep that as a minimum level throughout the life of this CCP. We will also continue to cooperate with WGFD, the Lincoln County sheriff, and other law enforcement agencies to provide added law enforcement at Cokeville Meadows Refuge.

Partnerships

"Working with others" is part of our mission statement and is needed to achieve the vision and goals for the refuge. We are unlikely to have the resources necessary to accomplish the actions proposed in this CCP unless we engage partners in our cause. Because of the varied land ownership pattern in the Bear River watershed, we will need to cooperate with several Federal, State and local agencies; nongovernment organizations; and private landowners to address issues on a landscape scale.

Existing partnerships with cooperative farmers and ranchers and with WGFD have been instrumental in our management of the refuge. Throughout the life of this CCP, we will expand cooperative arrangements with WGFD, local governments, nongovernment organizations, and others to fulfill the refuge's purposes and the mission of the Refuge System.

Development of a refuge Friends group is an important strategy. Friends groups are private, independent, and nonprofit organizations that link communities to national wildlife refuges. Friends organizations collaborate with refuges to conduct public events, teach communities about conservation, restore habitat, keep trails, coordinate volunteers, and more.

Refuge Development and Operations

Many issues surround the daily maintenance and long-term development of Cokeville Meadows Refuge.

Staff, Equipment, and Facilities

We are responsible for managing more than 9,000 acres at the refuge, including fee-title lands and conservation easements, yet our staff consists of only one full-time employee, an assistant manager. Additional staff within the Seedskaadee National Wildlife Refuge Complex is available to conduct refuge operation activities at Cokeville Meadows Refuge, but more staff may be needed.

We have limited equipment, and some of it is in poor condition and needs replacement. However, Seedskaadee National Wildlife Refuge has a good fleet of equipment that can be shared among stations. There are no plans to split Cokeville Meadows Refuge off as a “stand-alone” station, so the refuge should be administered as part of the Seedskaadee National Wildlife Refuge Complex throughout the life of the CCP.

We built a new, multi-purpose headquarters building for the refuge in 2009, which has an office, shop, cold storage units, and an apartment. Other facilities, such as signs and fences, are in good-to-moderate condition and are supported or replaced as needed. Water control structures and dikes are in good working condition and receive minor repairs as needed. The most significant facility requiring replacement is the Pixley Dam, which was built in 1903 and is near failure. Operation and maintenance of the Pixley Dam is hazardous. We will work with neighboring landowners, irrigation interests, and others to replace the dam to improve safety, water management, and fish passage.

Junk and Debris Removal

The lands we acquired for the refuge often came with junk, debris, and old infrastructure that we had to remove to restore wildlife habitats. These items, such as rocks, dilapidated fence posts, wire, and culverts, were placed in piles on the refuge for later disposal. They are now a danger to people and have created a safe haven from which some animals depredate migratory bird nests. Our staff has properly disposed of some of the remaining junk and debris, but more needs to be removed.

Water Rights and Resources

Water is the lifeblood of the refuge. This is a floodplain refuge and all wildlife and habitats of the refuge are dependent on adequate quantity and quality fresh water. The refuge will improve and use current facilities and infrastructure to improve habitats and manage its water to support the Federal water rights that have been acquired for the public.

Using the refuge’s HGM report, we will evaluate the placement of facilities and may move, remove, or upgrade them to improve hydrologic processes. We will seek partners to help us develop infrastructure projects. The refuge’s water rights have been identified, and we are working to keep our surface and ground water rights in good standing with the Wyoming State Engineers Office.

With help from our regional division of water resources, we will develop a water management stepdown plan that will quantify the refuge’s water rights in relation to Wyoming water law, the Bear River Compact, and the water rights of neighboring landowners.

Land Protection

Little progress has been made in recent years to acquire more lands within the refuge acquisition boundary. This complex issue depends on finding money and willing sellers. As money becomes available and willing sellers are identified, we will seek to buy more fee-title and conservation easement lands and their associated water rights throughout the life of the CCP.

We will seek to acquire both private and public lands within the refuge acquisition boundary. Prior attempts, beginning in 2004, to withdraw public domain lands have been unsuccessful. We will continue to work with the BLM to achieve the withdrawal of the Federal mineral estate and approximately 500 surface acres of public lands now administered by BLM within the acquisition boundary. We will also work with the State of Wyoming to acquire State lands within the acquisition boundary through land exchanges.

Refuge Mineral Rights and Energy Development

We typically acquire land for the Refuge System subject to any outstanding mineral rights. Most refuges, including Cokeville Meadows Refuge, include lands where we own the surface but the mineral estate is owned by someone else. We also do not want, or have the authority, to prevent a mineral holder from exploiting their property. We may, however, require that the mineral estate owner or lessee comply with NEPA regulations before our issuance of a special use permit for use of the refuge's surface estate for the exploration and extraction of minerals. NEPA protects the public's interest in the refuge and makes sure that mineral exploration and extraction is conducted in a way that reduces effects to the habitat and wildlife values of the refuge.

The geography that lead pioneers and settlers to follow wagon trails through the Bear River Valley during westward expansion of the United States now draws the attention of pipeline and transmission line planners who want to transport the rich energy resources in Wyoming to population centers farther west. The development of energy transmission corridors may significantly affect refuge resources. We will support communications with project proponents and other State and Federal agencies as these projects are being considered, and, for projects affecting neighboring lands, we will work with all parties to reduce or mitigate the negative effects to refuge habitats and wildlife.

Refuge law and regulations do not apply to lands within the acquisition boundary that are not yet acquired. Any new lands acquired will be acquired subject to existing property rights, including rights-of-way (ROW). On lands where we have an existing real property interest, either fee or easement, we would have to issue a right-of-way before any new above- or below-ground transmission infrastructure could be built. The issuance of such rights-of-way would require more NEPA compliance, paid for by the proponent of the project, and would be subject to a compatibility determination, which is a tough requirement of the Improvement Act to meet.

Inventory, Monitoring, and Research

Cokeville Meadows Refuge has never received the staff or money necessary for a scientifically sound inventory and monitoring program. Although more resources may be available during the 15-year life of this CPP, partnerships with others will be necessary to obtain the monitoring data necessary for us to manage refuge habitats adaptively. We would work with WGFD and other partners to inventory and monitor wildlife populations and habitat conditions both on and off refuge lands. This includes monitoring water quality and salt loading in wet meadow habitats.

Monitoring programs to assess water quality, including temperature, dissolved oxygen levels, and sedimentation load, and other baseline information to find issues in the watershed that may affect aquatic species are needed.

Nuisance Animal and Predator Control

The management of nuisance animals like beavers and muskrats that affect private or refuge infrastructure will be handled on a case-by-case basis, in cooperation with WGFD and neighboring landowners. Special use permits may be issued to control nuisance wildlife that damage water control structures, irrigation infrastructure, or other property.

A stepdown trapping plan that includes more NEPA compliance will be developed in cooperation with WGFD to authorize permitted trapping for beaver, mink, muskrat, bobcat, coyote, red fox, badger, weasel, skunk and raccoon on refuge lands in conjunction with an existing WGFD trapping program along the Bear River.

We collected several comments and questions during scoping about how we will manage predators and furbearers on the refuge, such as when coyotes or wolves, for example, depredate livestock on private land from the sanctuary of refuge habitats. In accordance with our regional refuge policy on predator management on Refuge System lands, we will cooperate with, and provide access to, U.S. Department of Agriculture (USDA) Wildlife Services or State of Wyoming Predator Management staff for ground-based (shooting and trapping) predator management actions when

evidence suggests that an individual predator or family group is depredating livestock. We will not, however, authorize prophylactic predator control or aerial gunning on refuge lands.

Volunteers Programs

Volunteers programs are a great way to introduce interested individuals and groups to the Refuge System and to involve them in the management of the refuges. They provide a venue for people who want to help conserve natural resources with hands-on work. These programs are also enormously important to us because they help us to manage refuge resources, especially during times of fiscal uncertainty. Our staff would like to foster and support more volunteer groups at Cokeville Meadows Refuge for help in day-to-day operations.

