

# **Draft Comprehensive Conservation Plan and Environmental Assessment**

*Cokeville Meadows National Wildlife Refuge*

**Wyoming**

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# Summary

This section summarizes the draft comprehensive conservation plan and environmental assessment that we, the U.S. Fish and Wildlife Service, prepared for the Cokeville Meadows National Wildlife Refuge (Cokeville Meadows Refuge or refuge). The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) requires that a comprehensive conservation plan be developed for each unit of the National Wildlife Refuge System. The final plan for the refuge is scheduled to be completed in 2013 and will guide management of the refuge over the next 15 years.

## THE REFUGE

Located within Lincoln County and immediately south of the Town of Cokeville, in southwestern Wyoming, Cokeville Meadows Refuge now manages 9,259 acres encompassing narrow forested riparian corridors, robust emergent wetland plants, wet meadow sedge and grass communities, and upland sagebrush or grassland communities. The refuge borders the States of Idaho and Utah and is within the watershed of the Bear River, which bisects the refuge throughout its length. The refuge elevation is around 6,300 feet above mean sea level and is home to a variety of wildlife. Game species include ducks, geese, sandhill cranes, elk, deer, pronghorn, moose, rabbits; furbearers and predators include beaver, muskrat, coyote, red fox, skunks, and raccoons.

## THE NATIONAL WILDLIFE REFUGE SYSTEM

The refuge is part of the National Wildlife Refuge System (Refuge System). This system began when, 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 native nesting birds. This was the first time the Federal Government set aside land for wildlife. This small but significant designation was the beginning of the National Wildlife Refuge System. One hundred years later, the National Wildlife Refuge System has become the largest collection of lands in the world specifically managed for wildlife, encompassing more than 150 million acres within 560 refuges and more than 3,000 waterfowl production areas providing breeding and nesting habitat for migratory birds. Today, there is at least one refuge in every State as well as in Puerto Rico and the U.S. Virgin Islands.

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.*

## PLANNING ISSUES OF THE REFUGE

In November 2009, a notice of intent was published in the Federal Register announcing our intent to prepare a comprehensive conservation plan and environmental assessment for the refuge and to obtain suggestions and information on planning issues to be considered. Throughout the planning process, our planning team distributed information to stakeholders including the State of Wyoming, tribal governments, partners, and neighboring landowners and communities to involve them in this planning process.

Following the analysis of comments from our staff and the public and of a review of applicable laws, our planning team identified several key planning issues. The following issues were considered in the development of alternatives.

## Refuge Habitats

Nonnative grasses dominate many wet meadows and there has been a proportional decline in some native sedge and rush communities. The refuge needs to improve the monitoring and evaluation of the effects of past water management projects on the meadows, including the location of water control structures in relation to historical sloughs and river channels.

There are concerns about subdivision encroachment and the conversion of upland habitats within the acquisition boundary and adjacent lands. Some of the refuge uplands are degraded because of past uses, such as when former croplands were left idle for years, which allowed for the development of a weed seed bank that could exacerbate the difficulty of re-establishing native communities.

The refuge's riparian and river habitats along the Bear River are severely degraded. There is a need to improve fish passage along the river to restore native game and nongame fish populations and to focus on Bonneville cutthroat trout, which is a species of concern on the refuge. There is a need to protect and manage riparian vegetation to provide habitat for passerine and other migratory birds and restore the diversity of native vegetation. The river's streambanks are in a condition that leads to erosion and require stabilization.

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## Haying, Grazing, and Prescribed Fire

Past management techniques 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, the lack of naturally occurring fire may have caused the encroachment of invasive species, a decrease in plant diversity, and a lack of necessary plant succession to support adequate wildlife habitat.

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## Invasive Species

Our refuge staff has kept good working relationships with State and county officials and neighboring landowners to control invasive plant species on the refuge. There is now concern that aquatic invasive species, such as zebra and quagga mussels, may move into, and spread throughout, the Bear River watershed. The refuge needs to work with existing and new partners to address this issue, as well as on carp control, water quality, and sediment and pollutant loads on river water.

Some members of the public also expressed a desire to harvest carp from flooded refuge wet meadow habitats in the spring.

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## Wildlife Disease and Crop Depredation

There is concern that the comingling of domestic cattle and wild ungulates, or hooved mammals, on refuge lands has the potential to spread wildlife diseases to livestock.

Crop depredation, damage to small grain crops by waterfowl and other migratory birds, is also concern.

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## Access to the Refuge and Visitor Safety

Outside of the headquarters area and the kiosk and wildlife viewing area at the Netherly Slough, the refuge is closed to public use. State, county and local officials, as well as refuge neighbors and local residents and groups, have, for many years, requested access to refuge lands to engage in hunting, trapping, fishing, boating, wildlife observation, photography, shed antler hunting, and other outdoor recreational opportunities.

To increase access, our staff would figure out which of these uses are compatible with refuge purposes and can be opened in a safe manner to the public and what our resultant law enforcement need on the refuge would be. To assure safety, staff would develop and support all necessary public access points and infrastructure. For example, access to refuge lands from U. S. Highway 30, as it parallels the east side of the refuge, would require crossing an active railroad track that is not now signaled, thus railroad crossings would need to be improved.

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## Staff, Equipment, and Facilities

We are responsible for managing more than 9,000 acres at the refuge, which is unstaffed. Seedskaadee National Wildlife Refuge Complex staff, more than 80 miles away, conducts operation activities at Cokeville Meadows Refuge as best they can. The refuge has limited equipment to conduct refuge and maintenance operations, and some of the equipment is in poor condition and needs replacement. Water control structures and dikes are in generally good working condition but the 1903 Pixley Dam is near failure and requires replacement and the Beckwith and Quin Dam is in need of upgrades and repairs.

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## Water Rights and Resources

This is a floodplain refuge and all wildlife and habitats of the refuge are dependent on an adequate quantity and quality of fresh water. The refuge has identified its water rights and is working to keep the surface and ground water rights in good standing with the Wyoming State Engineers Office. The refuge needs to develop a water management plan that will quantify refuge water rights in relation to Wyoming water law, the Bear River Compact, and the water rights of neighboring landowners.

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## Land Protection, Energy Transmission, and Mineral Development

Little progress has been made in recent years in acquiring more lands within the refuge acquisition boundary. This is a complex issue involving funding and the availability of willing sellers.

We are concerned about the deleterious effect that mineral development and energy transmission via lines and pipelines could have on habitats and wildlife within the approved acquisition boundary. We would like to withdraw the Federal mineral estate of public lands now administered by the Bureau of Land Management within the acquisition boundary. Refuge laws and regulations do not apply to lands within the acquisition boundary that are not yet acquired.

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## Inventory and Monitoring

Refuge staff lacks the necessary resources to carry out a scientifically sound inventory and monitoring program on the refuge. There is a need to inventory and monitor wildlife populations, habitat conditions, and other baseline parameters, both on and off refuge lands, including water quality and salt loading in wet meadow habitats. These would help staff to make the best management decisions and to carry out best management practices.

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## Nuisance Animal and Predator Control

There is widespread interest on how the refuge intends to deal with predators and furbearers on refuge lands, specifically about the response to coyote or wolf depredation of livestock on private land when these animals use refuge habitats as a sanctuary. There are also concerns about the management of nuisance animals like beavers and muskrats, for example, which affect private or refuge infrastructure and the cooperative efforts that will take place between us, the Wyoming Game and Fish Department, and neighboring landowners. The refuge needs to develop a trapping plan in conjunction with the existing Wyoming Game and Fish Department trapping program along the Bear River.

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## VISION STATEMENT FOR THE REFUGE

Early in the planning process, the planning team developed a vision statement for the refuge. This future-oriented statement will guide the management of the refuge over the life of this comprehensive conservation plan.

*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.*

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## GOALS FOR THE REFUGE

The following goals reflect the vision for the refuge and will help us ensure healthy ecosystems and compatible opportunities for the public to appreciate and enjoy the natural environment.

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## 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 variety 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.*

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## **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.*

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## **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.*

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## **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.*

## MANAGEMENT ALTERNATIVES

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We have prepared this draft comprehensive conservation plan and environmental assessment in cooperation with the Wyoming Game and Fish Department, Lincoln County Planning Department, the Bureau of Land Management, and the Town of Cokeville and with significant involvement from the public. After reviewing a wide range of public comments and management needs, we developed and analyzed the following alternatives for management of Cokeville Meadows Refuge. Alternative D is our proposed action, and it is presented in chapter 6 of the draft comprehensive conservation plan.

### Alternative A—Current Management (No Action)

This alternative serves as a baseline by which other alternatives will be compared.

Under this alternative, the management issues identified in this draft comprehensive conservation plan and environmental assessment would not be fully addressed because current management programs and efforts would not change significantly unless money and staff were increased. Land and easement acquisition would continue to round out and complete the acquisition boundary. Habitat management, in the form of irrigation, haying, and grazing would continue at, or near, current levels to support existing conditions at the refuge. Outreach and priority public uses that are compatible and wildlife-dependent recreation (hunting, fishing, wildlife observation, photography, environmental education, and interpretation) would be limited and partnerships would only be developed if time and money were available.

### Alternative B—Hydrology and Habitat Restoration

Under this alternative, refuge management would seek to restore habitats so that they closely resemble presettlement conditions.

Using recommendations from the recently completed Evaluation of Ecosystem Restoration and Management Options for Cokeville Meadows National Wildlife Refuge, the removal of dikes, water control structures, and irrigation infrastructure would be considered. Land and easement acquisition would continue to round out and complete the acquisition boundary. Wet meadow irrigation would follow historical flood patterns and allow vegetative communities that existed before development to reestablish. Flooding of wet meadows would primarily take place from overbank flooding from the river rather than from irrigation diversions. Management activities like haying and grazing would be used to keep habitats productive, and nonnative agricultural crops would be limited or used as a tool to establish native habitats.

Public uses that are compatible or that support habitat restoration would be emphasized.

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## **Alternative C—Resource Enhancement**

Under this alternative, refuge management would strive to improve resources and refuge development, with the help of partners, to increase wildlife and habitat productivity primarily within the refuge boundary.

Land and easement acquisition would continue to round out and complete the acquisition boundary. Wet meadows and upland habitats would be managed and restored to increase wildlife productivity and diversity. The use of agricultural practices would be specifically geared to enhance refuge habitats for wildlife.

Staff would increase their focus on developing visitor resources, access, and opportunities for wildlife-dependent uses to encourage a greater understanding and appreciation of the Bear River watershed, wet meadow habitats, and wildlife.

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## **Alternative D—Current Management (Proposed Action)**

This alternative best addresses the vision and goals for Cokeville Meadows National Wildlife Refuge, as well as the issues raised during the scoping process.

Under this alternative, refuge management would focus on managing lands within a greater landscape footprint by using partnerships to enhance habitats both on and off the refuge. Land and easement acquisition would continue to round out and complete the acquisition boundary. Wet meadow and upland habitats would be managed and restored to increase wildlife productivity and diversity. The use of agricultural practices would be specifically geared to enhance refuge habitats for wildlife both on and off the refuge lands.

Staff would increase their focus on developing visitor resources, access, and opportunities for wildlife-dependent uses (hunting, fishing, wildlife observation, photography, environmental education, and interpretation) to encourage a greater understanding and appreciation of the Bear River watershed, wet meadow, riparian and stream habitats, and wildlife.

# Abbreviations

|                                 |   |
|---------------------------------|---|
| <b>Administration Act</b>       | National Wildlife Refuge System Administration Act of 1966      |
| <b>BLM</b>                      | Bureau of Land Management                                       |
| <b>BQ Dam</b>                   | Beckwith and Quin Dam   |
| <b>CCP</b>                      | comprehensive conservation plan                                 |
| <b>CFR</b>                      | Code of Federal Regulations                                     |
| <b>cfs</b>                      | cubic feet per second   |
| <b>Cokeville Meadows Refuge</b> | Cokeville Meadows National Wildlife Refuge                      |
| <b>EA</b>                       | environmental assessment  |
| <b>ESA</b>                      | Endangered Species Act  |
| <b>EVS</b>                      | education and visitor services                                  |
| <b>°F</b>                       | degrees Fahrenheit  |
| <b>FMP</b>                      | fire management plan  |
| <b>GIS</b>                      | geographic information system                                   |
| <b>HGM</b>                      | hydrogeomorphic method  |
| <b>Improvement Act</b>          | National Wildlife Refuge System Improvement Act of 1997         |
| <b>IPM</b>                      | integrated pest management                                      |
| <b>NEPA</b>                     | National Environmental Policy Act of 1969                       |
| <b>NWR</b>                      | national wildlife refuge  |
| <b>refuge</b>                   | Cokeville Meadows National Wildlife Refuge                      |
| <b>Refuge System</b>            | National Wildlife Refuge System                                 |
| <b>Region 6</b>                 | Mountain-Prairie Region 6 of the U.S. Fish and Wildlife Service |
| <b>Service</b>                  | U.S. Fish and Wildlife Service                                  |
| <b>U.S.</b>                     | United States   |
| <b>U.S.C.</b>                   | United States Code  |
| <b>USDA</b>                     | U.S. Department of Agriculture                                  |
| <b>USFWS</b>                    | U.S. Fish and Wildlife Service                                  |
| <b>USGS</b>                     | U.S. Geological Survey  |
| <b>WGFD</b>                     | Wyoming Game and Fish Department                                |

*Definitions of these and other terms are in the glossary, located at the end of chapter 6.*

