

# Comprehensive Conservation Plan

## *Medicine Lake National Wildlife Refuge Complex*

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September 2007

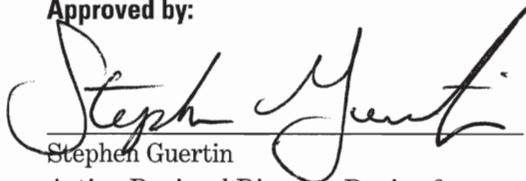
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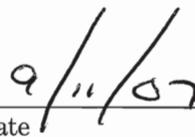
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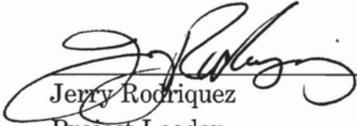


# Comprehensive Conservation Plan Approval

*Medicine Lake National Wildlife Refuge Complex*

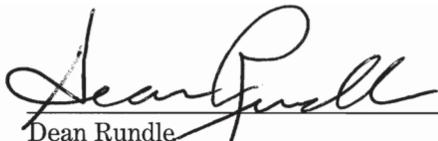
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# Acronyms and Abbreviations

Administration Act	National Wildlife Refuge System Administration Act of 1966
ABC	American Bird Conservancy
BBS	breeding bird survey
BCR	Bird Conservation Regions
CCC	Civilian Conservation Corps
CCP	comprehensive conservation plan
CFR	Code of Federal Regulations
cfs	cubic feet per second
CRP	conservation reserve program
CWCS	comprehensive wildlife conservation strategy
DNC	dense nesting cover
DU	Ducks Unlimited
EA	environmental assessment
EO	executive order
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
FMP	fire management plan
FONSI	finding of no significant impact
FTE	full-time equivalent
GIS	geographic information system
GPS	global positioning system
GS	general schedule (employment)
HAPET	Habitat and Population Evaluation Team
HMP	habitat management plan
IMPROVE	interagency monitoring of protected visual environments
Improvement Act	National Wildlife Refuge System Improvement Act of 1997
LWCF	Land and Water Conservation Fund
LPP	land protection plan
main stem	main stem Missouri River ecosystem
MT	Montana
MFWP	Montana Fish, Wildlife, and Parks
MBCC	Migratory Bird Conservation Commission
MOYOCO Ecosystem	Upper Missouri/Yellowstone/Upper Columbia rivers ecosystem

NABCI	North American Bird Conservation Initiative
NAWCA	North American Wetlands Conservation Act
NEPA	National Environmental Policy Act
NOI	notice of intent
NPPR	Northern Prairie and Parkland Region
NRCS	Natural Resources Conservation Service
NWI	national wetland inventory
NWR	national wildlife refuge
NWRS	National Wildlife Refuge System
PFW	Partners for Fish and Wildlife
PL	public law
PPJV	Prairie Pothole Joint Venture
PPR	Prairie Pothole Region
Refuge System	National Wildlife Refuge System
region 6	Mountain–Prairie Region of the U.S. Fish and Wildlife Service
RONS	Refuge Operating Needs System
SAMMS	Service Asset Maintenance Management System
Service	U.S. Fish and Wildlife Service
SCCD	Sheridan County Conservation District
SUP	special use permit
SWG	State Wildlife Grant
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
UGHEP	upland gamebird habitat enhancement program
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WG	wage grade (employment)
WHIP	wildlife habitat incentive program
WPA	waterfowl production area
WMD	wetland management district
WUI	wildland–urban interface

*Definitions of these and other terms are in the glossary, located after chapter 4.*

# Summary

Every spring and fall, the big sky country of northeast Montana is filled with the clamor of bird calls. Many migrating birds stop along the glaciated rolling plains between the Missouri River and the Canadian border, at the Medicine Lake National Wildlife Refuge (NWR), the Northeast Montana Wetland Management District (WMD), and the Lamesteer National Wildlife Refuge (NWR), which are managed together as 1 refuge complex. With a bird list that includes some 283 species, the refuge complex has been designated as 1 of the top 100 globally important bird areas in the United States by the American Bird Conservancy (Chipley 2001).

The primary role of the Medicine Lake NWR Complex is to conserve its diverse wetlands and grasslands as a “refuge and breeding ground for migratory birds and other wildlife.” The U.S. Fish and Wildlife Service has developed this comprehensive conservation plan (CCP) and environmental assessment (EA) as the foundation for management of the refuge complex for the next 15 years.

## THE REFUGE COMPLEX

The refuge complex is part of the National Wildlife Refuge System (Refuge System) of the U.S. Fish and Wildlife Service (Service). It covers portions of Sheridan, Roosevelt, Daniels, and Wibaux counties in Montana. The 31,660-acre Medicine Lake NWR includes an 11,360-acre federal wilderness area. The Northeast Montana WMD includes 44 waterfowl production areas owned by the Service that protect 11,791 acres. Grassland and wetland easements protect another 19,556 acres. Lamesteer NWR is an 800-acre easement that is managed as a satellite refuge.

Historically, the bird community of northeast Montana was composed of prairie-nesting species, such as the chestnut-collared longspur, Baird’s sparrow, and Sprague’s pipit. The refuge complex protects critical habitat for the threatened piping plover. Its importance for breeding and migrating waterfowl has long been recognized and was the primary reason the refuge was established in 1935.

The density of breeding pairs of ducks is high in the Missouri Couteau, and the density and diversity of nesting waterfowl is outstanding. Common nesting ducks are mallard, gadwall, northern pintail, northern shoveler, blue-winged teal, and lesser scaup. Refuge wetlands provide habitat for many

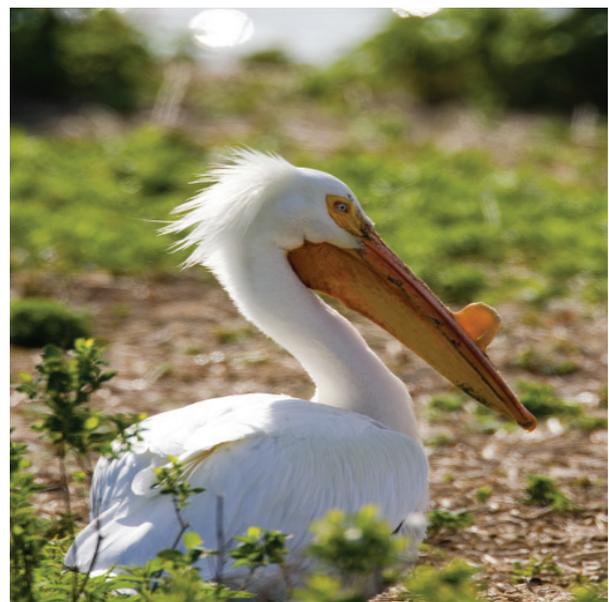
“colonial-nesting” waterbirds (or birds that nest in colonies), including western and eared grebe, California and ring-billed gulls, double-crested cormorant, great blue heron, and American white pelican. The refuge’s large pelican colony has been in existence since at least 1939, and is one of the largest colonies in the United States, with about 3,000 to 5,000 nests each year.

Although nonnative pheasants draw the most hunters, nearly half of the refuge’s visitors (about 45 percent of an estimated 16,000 annual visitor days) come for a variety of hunting opportunities, including other upland birds like the plains sharp-tailed grouse, as well as deer and waterfowl. Many other visitors enjoy wildlife observation, fishing, and the education and interpretation programs the refuge offers.

Medicine Lake NWR provides for most of the visitor services and facilities. Interpretive exhibits at the headquarters office, an auto tour route, an observation tower, and a pelican observation area are just a few of the ways visitors can see and learn about the refuge.

## VISION AND GOALS

The vision statements below describe the desired future conditions for the refuge complex. These are



*American white pelican is one of 283 bird species found within the refuge complex.*

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based on the establishing purposes of the refuge and WMD for which it was established, the conditions of and potential for specific resources, its value as a natural system, and other issues. The goals direct refuge complex staff toward achieving the vision.

## Medicine Lake NWR Vision

*Visitors to Medicine Lake NWR, on the western edge of the Missouri Coteau, experience wide-open grasslands, vast lakes and marshes, and one-of-a-kind sunsets. Diverse habitats for migratory birds and native wildlife are managed to simulate the natural processes that historically shaped the prairie landscape. The spring and fall migrations are awe-inspiring against the big Montana sky. The refuge team works collaboratively with partners and the community to conserve, protect, and restore the wildness of the rolling prairie and its natural solitude.*

## Northeast Montana WMD Vision

*Waterfowl production areas and conservation easements within the Northeast Montana WMD, located in the glaciated Missouri Coteau, provide a network of wetlands and grasslands that preserve historic and vital waterfowl breeding grounds. Other migratory birds, threatened and endangered species, and resident wildlife also benefit from these prairie jewels of the Refuge System.*

*Our community and visitors value grasslands and marshes as a beneficial and important component of a diverse, healthy, and productive prairie landscape. Current and future generations enjoy wildlife-dependent uses of these lands, and partners actively support and encourage our habitat conservation programs.*



*Medicine Lake reflects an approaching storm.*

USFWS

## Goals for the Refuge Complex

The Service developed a set of goals for the refuge based on the National Wildlife Refuge System Improvement Act, the refuge purpose, current conditions, and objectives for the refuge complex that were discussed during the CCP planning process. The goals direct work toward achieving the vision and purpose of the refuge, and outline approaches for managing refuge resources. The Service established 8 goals for refuge management: Habitat and Wildlife Management; Endangered, Threatened, and Rare Species; Wilderness Management; Visitor Services; Refuge Operations; Partnerships; Cultural Resources; and Research. These goals are described fully in chapter 2.

## OUTCOMES OF THE PLAN

Based on the analysis document included in the environmental assessment in the draft CCP, the Service's director for region 6 (Mountain-Prairie Region) chose alternative B for Medicine Lake NWR and the Northeast Montana WMD and alternative B for Lamesteer NWR as the preferred alternatives for implementation.

The key actions for this plan are summarized in the following section. A complete description of all objectives and strategies are found in chapter 2.

## Medicine Lake NWR and Northeast Montana WMD

The Service will conserve natural resources by restoring or protecting native mixed-grass prairie while maintaining high-quality nesting habitats within the refuge complex. This alternative would focus funding for visitor services on developing access for visitors of all abilities and improving opportunities for wildlife-dependent uses (hunting, fishing, wildlife observation, photography, environmental education, and interpretation). It also would encourage a greater understanding and appreciation for migratory birds and other native wildlife, the mixed-grass prairie, the wilderness, and the Refuge System.

### Habitat and Wildlife Management

Prairie and grassland habitat management will focus on protecting, enhancing, and restoring native species. The refuge staff will reduce populations of selected species of nonnative invasive plants and address crested wheatgrass as a management priority. Wildlife management will focus on habitat improvement for healthy populations. Obtaining baseline data or assessing and managing threats to migratory birds, endangered and threatened species, other birds of concern, and other wildlife will continue as necessary.

Wetlands management will emphasize maintaining enough water and creating a variety of wetlands conditions to sustain a maximum range of migratory birds that use the refuge and wetland management district. Wetland management also will provide for diverse wildlife populations, recognizing that many factors influencing bird populations extend beyond refuge boundaries or control.

The protection of native prairie, tame grasslands, and wetlands will be increased through easements and fee-title purchases. The approved refuge administrative boundary (figure 9 and appendix G) will be expanded through willing sellers or buyers, emphasizing 3 priority areas (approximately 1,784 acres total). Also, technical assistance and outreach programs will be expanded to enhance the management of privately owned grasslands (about 5,000 acres annually).

### **Endangered, Threatened, and Rare Species**

The refuge and wetland management district will continue to contribute to preserving and restoring endangered, threatened, rare, and unique flora and fauna on the refuge complex.

### **Wilderness**

Refuge staff will continue to preserve, manage, and protect the 11,360-acre Medicine Lake Wilderness. Management practices will mimic historical natural disturbances, protect native plant communities, use the minimum tool concept, ensure compliance with Class I Air-Quality standards, and protect the vista and aquatic resources of Medicine Lake.

### **Visitor Services**

Management will emphasize improving and maintaining high-quality public opportunities for wildlife-dependent recreation for visitors of all abilities. In general, most visitor facilities and activities will occur north of Medicine Lake except for the existing activities, such as ice fishing and environmental education, which occur next to the bridge on Montana State Highway 16. Through plan implementation, there will be more opportunities for visitors to learn about migratory birds and other wildlife, the mixed-grass prairie, the wilderness, and the Refuge System. Hunting (deer, waterfowl, pheasants and other upland birds, and terrestrial furbearers) will continue, but the current closure area for protection of tundra swans and sandhill cranes will remain. The refuge staff will work collaboratively with Montana Fish, Wildlife, and Parks to maintain a sport fishery on Medicine Lake.

### **Refuge Operations**

The priorities for the refuge staff will be to fulfill the goals of the CCP, with the primary focus being on habitat restoration. Priorities will be established for filling vacant positions identified on the proposed staffing chart found in table 10, chapter 4.

### **Partnerships**

Public outreach will be enhanced by developing a refuge “friends group” and more volunteer opportunities. Existing partnerships will be strengthened, and new partners will be recruited to collaborate on wildlife and habitat conservation projects.



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*The Baird's sparrow is one of many grassland birds found at the refuge.*

**Cultural Resources**

Refuge staff will comply with all pertinent cultural resources in carrying out their duties. Resources that are eligible to be listed on the National Register of Historic Places will be protected.

**Research**

Applied research will be encouraged and supported as feasible. Research and monitoring will focus on measuring the effectiveness of habitat and wildlife management practices. Research on crested wheatgrass and other nonnative infestations will remain a priority.

**Lamesteer NWR**

The Service will take Lamesteer NWR out of the Refuge System and relinquish the easement to the current landowners. The dam structure would be given up to the landowners or destroyed. The Service's easement requirements would no longer exist. The Service would divest its interest in the refuge. This would be carried out within the 15-year life of this comprehensive conservation plan.

**PLANNING PROCESS**

The initial planning effort for this project began in 1998, but it had to be delayed for several years,

and the Service re-initiated the process in October 2006. A planning team, consisting of refuge and other Service staff, gathered and began to analyze resource information, developed a draft vision and set of goals, and initiated the public scoping process in November 2006. After identifying the significant issues for the public and the Service, the team developed management alternatives, objectives, and strategies with the assistance of Montana Fish, Wildlife, and Parks.

During the process, the planning team developed an extensive mailing list of over 120 names that included local residents and businesses, local, regional, and state government representatives, other state and federal agencies, and nonprofit organizations. The team provided information to the public through several planning updates, and posted updates and the draft CCP and EA on the Mountain-Prairie website. The planning team held 2 public meetings in Medicine Lake, 1 in November 2006 for scoping, and another meeting in August 2007 when the draft CCP and EA was published. The public meetings provided the public opportunities to learn about the project, ask questions, and offer comments.

The significant issues addressed in this plan included wildlife and habitat management, visitor services, water management, land acquisition and conservation, communication and partnerships, wilderness management, and refuge operation.

