Draft Comprehensive Conservation Plan and Environmental Assessment

Medicine Lake National Wildlife Refuge Complex

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Prepared by the U.S. Fish and Wildlife Service

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Contents

Summary 1

1 Introduction 5
1.1 Purpose and Need for Plan 5
1.2 The U.S. Fish and Wildlife Service and the National Wildlife Refuge System 7
1.3 National and Regional Mandates 8
1.4 Refuge Contributions to the National and Regional Plans 9
1.5 Ecosystem Description and Threats 13
1.6 Planning Process 15

2 The Refuge Complex 19
2.1 Establishment and History of Medicine Lake NWR 19
2.2 Establishment and History of Lamesteer NWR 20
2.3 Establishment and History of the Northeast Montana WMD 24
2.4 Visions for the Refuge Complex and WMD 26
2.5 Goals 26
2.6 Planning Issues 26
2.7 Issues Not Addressed or Resolved during the CCP Process 29

3 Alternatives 31
3.1 Alternatives Development 31
3.2 Elements Common to All Alternatives 31
3.3 Uses Not Considered Further 31
3.4 Alternatives for Medicine Lake NWR and the Northeast Montana WMD 32
3.5 Alternatives for Lamesteer NWR 38
3.6 Comparison of Alternatives 38

4 Affected Environment 49
4.1 Geographic and Ecosystem Setting 49
4.2 Climate 49
4.3 Global Warming 50
4.4 Air Quality 50
4.5 Geology and Soils 50
4.6 Refuge Complex Resources 51
4.7 Cultural Resources 65
4.8 Visitor Services 67
4.9 Current Socioeconomic Conditions 71
4.10 Reasonably Foreseeable Activities 74
4.11 Lamesteer NWR 75

5 Environmental Consequences 85
5.1 Methods 85
5.2 Effects Common to all Alternatives 86
5.3 Environmental Consequences for Medicine Lake NWR 87
5.4 Environmental Consequences for Lamesteer NWR 98

6 Implementation of the Proposed Action (Draft CCP) 99
6.1 Medicine Lake NWR and the Northeast Montana WMD 99
6.2 Lamesteer NWR 99
6.3 Medicine Lake NWR and Northeast Montana WMD—Goals, Objectives, Strategies 101
6.4 Personnel 115
6.5 Funding 115
6.6 Partnership Opportunities 115
6.7 Monitoring and Evaluation 115
6.8 Step-Down Management Plans 116
6.9 Plan Amendment and Revision 117

Glossary of Terms 119

Appendix A—Key Legislation and Policies 125
Appendix B—List of Preparers, Consultation, and Coordination 129
Appendix C—Public Involvement 131
Appendix D—Compatability Determinations 133
Appendix E—Divestiture Consideration for Lamesteer National Wildlife Refuge 139
Appendix F—Fire Management Plan 143
Appendix G—Draft Land Protection Plan 147
Appendix H—List of Plant and Wildlife Species 153
Appendix I—Refuge Operating Needs System (RONS) 165
Appendix J—Service Asset Maintenance Management System (SAMMS) 167

Bibliography 171

Figures

1. Vicinity map for Medicine Lake refuges, Montana 6
2. Bird conservation regions of the United States 10
3. Prairie Pothole Region 12
4. Ecosystem map 14
5. Planning process 16
6. Medicine Lake National Wildlife Refuge map 21
7. Lamesteer National Widlife Refuge map 23
8. WMD map 27
9. Land status map 35
10. Habitat disturbance on Medicine Lake National Wildlife Refuge 53
11. Duck pair density map, Medicine Lake National Wildlife Refuge 61
12. General public use 69
13. Medicine Lake National Wildife Refuge and surrounding counties 72
14. Montana and 3-county study area by population age 72
15. 3-county study area age composition 73
16. Area employment distribution, 2004 73
17. Oil and gas development map for Medicine Lake National Wildlife Refuge 77
18a. Oil and gas development map for Northeast Montana Wetland Management District–western half 78
18b. Oil and gas development map for Northeast Montana Wetland Management District–eastern half 79
19. Water within a 50-mile radius of Lamesteer NWR 81
20. Adaptive management process 118

Tables

1. Planning Process Summary for Medicine Lake NWR Complex, 2006–2007 17
2. Timeline and Significant Dates for Medicine Lake NWR 20
3. Timeline and Significant Dates for Lamesteer NWR 20
4. Timeline and Significant Dates for the Northeast Montana WMD 25
5. Comparison of Staffing Levels between Alternatives for Medicine Lake NWR and WMD 40
6. Comparison of Alternatives for Medicine Lake NWR and Northeast Montana WMD 41
7. Comparison of Alternatives for Lamesteer NWR 48
8. Water Appropriations by Stream at Medicine Lake NWR 55
9. Bird Species of Conservation Concern for the Medicine Lake NWR Complex 59
10. Landbirds of Regional Importance to USFWS in the Prairie Pothole Region 63
11. Mines, Oil and Gas Wells within Refuge Complex 74
12. Summary of the Environmental Consequences for Medicine Lake NWR and Northeast Montana WMD 93
13. Description of Consequences by Alternative for Lamesteer NWR 98
14. Land Acquisition by Priority 107
15. Current and Proposed Staffing 116
16. Step-down Management Plans for Medicine Lake NWR Complex, Montana 117

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, Wildife, 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

Abbreviations

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 Operationg 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 6.

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 one refuge complex. With a bird list that includes some 283 species, the refuge complex has been designated as one 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." This draft comprehensive conservation plan (CCP) and environmental assessment (EA) will guide management of these lands 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.

Medicine Lake NWR Complex Visions and Goals

The vision for each refuge is based on the purposes 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.

Judy Wantulok/USFWS

American white pelican.

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.

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 eight 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.

The Draft Plan

The Service has prepared this EA and draft CCP with public participation and in cooperation with the Montana Fish, Wildlife, and Parks Department. After reviewing a wide range of public comments and management issues and concerns, the Service developed three alternatives for managing both the Medicine Lake NWR and the Northeast Montana WMD, and two alternatives for managing the Lamesteer NWR. Alternative B is the proposed action for both sets of alternatives and is presented in chapter 6 as the draft comprehensive conservation plan.

Medicine Lake NWR and Northeast Montana WMD

Alternative A—Maintain Current Management (*No Action)*

Current management programs and efforts would continue. No significant increases in funding or personnel would take place. This alternative serves as the baseline to which other alternatives will be compared.

Alternative B—Increase Native Prairie Conservation and Restoration (*Proposed Action)*

Alternative B for Medicine Lake NWR and the Northeast Montana WMD would conserve natural resources by restoring or protecting native mixed-grass prairie and 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.

Alternative C—Maximize Native Prairie Conservation and Restoration

Alternative C would maximize staff resources for the conservation of natural resources by restoring or protecting native mixed-grass prairie and maintaining high-quality nesting habitats within the refuge complex. Visitor programs would be improved but would focus primarily on encouraging a greater understanding and appreciation for the mixed-grass prairie ecosystem while maintaining existing access and opportunities for wildlife-dependent uses (hunting, fishing, wildlife observation, photography, environmental education, and interpretation).

Lamesteer NWR

Alternative A—Current Management

Under this alternative, Lamesteer NWR would continue to be an easement refuge superimposed on privately owned lands and used primarily as a resting place for migratory birds while on migration. The Service would continue to maintain the dam and spillway, including underwriting all maintenance

costs. The landowner would continue to control access to the site, including all hunting access and other public uses.

Alternative B—Divestiture (*Proposed Action*)
Alternative B would take Lamesteer NWR out of the Refuge System and relinquish the easement to the current landowners. Under this alternative, 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.

The meadowlark is one of many grassland birds found at the refuge.
USFWS

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