

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

*Long Lake National Wildlife Refuge Complex*

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# Acronyms and Abbreviations

BBS	North American Breeding Bird Survey
BLS	Bureau of Labor Statistics
Botulism	avian botulism
CCC	civilian conservation corps
CCP	comprehensive conservation plan
Complex	Long Lake NWR Complex
CRP	Conservation Reserve Program
CWD	chronic wasting disease
Delta	Delta Waterfowl Foundation
DFM	drainage facility maps
DNC	dense nesting cover
Duck Stamp Act	Migratory Bird Hunting and Conservation Stamp Act
DWG	Dakota Working Group
EA	environmental assessment
EVS	Education and Visitor Services
FmHA	Farmers Home Administration
FONSI	finding of no significant impact
GIBA	Globally Important Bird Area
HAPET	Habitat and Population Evaluation Team
HPAI	highly pathogenic avian influenza
Improvement Act	National Wildlife Refuge Improvement Act of 1997
IPM	integrated pest management
ISS	international shorebird survey
JAKES	Juniors Acquiring Knowledge Ethics and Sportsmanship
LWCF	Land and Water Conservation Fund
MBCF	Migratory Bird Conservation Fund
MMS	maintenance management system
MSL	mean sea level
NAWCA	North American Wetland Conservation Act
NAWMP	North American Waterfowl Management Plan
NDGF	North Dakota Game and Fish Department
NEPA	National Environmental Policy Act
NGO	nongovernmental organization
NPWRC	Northern Prairie Wildlife Research Center

NRCS	Natural Resources Conservation Service
NWI	national wetlands inventory
NWR or refuge	national wildlife refuge
Refuge System	national wildlife refuge system
PA	programmatic agreement
PPJV	prairie pothole joint venture
PPR	prairie pothole region
RLGIS	refuge lands geographic information system extension
RONS	refuge operations needs system
Service or USFWS	United States Fish and Wildlife Service
SHIPO	North Dakota state historic preservation office
State	state of North Dakota
SUP	special-use permit
SWAP	Small Wetlands Acquisition Program
TNC	The Nature Conservancy
USC	U.S. code of federal regulations
USGS	United States Geological Survey
VOR	visual obstruction reading
WCS	water control structures
WDA	wildlife development area
WHSRN	Western Hemisphere Shorebird Reserve Network
WMD	wetland management district, or district
WPA	waterfowl production area



# Summary

Long Lake National Wildlife Refuge Complex (the complex) oversees management of three national wildlife refuges: Long Lake National Wildlife Refuge (NWR or refuge), Slade NWR, Florence Lake NWR, and a three-county wetland management district that consists of 79 waterfowl production areas in Burleigh, Emmons, and Kidder counties in south-central North Dakota, as well as conservation easements which protect approximately 147,000 acres. The districts continue to grow with the acquisition of additional easements annually.

## **Long Lake National Wildlife Refuge**

Long Lake NWR was established on February 25, 1932, by President Herbert Hoover through Executive Order No. 5808 "... as a refuge and breeding ground for migratory birds and wild animals," and "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." (Migratory Bird Conservation Act.)

The refuge is located in south-central North Dakota in an area famous for its wealth of waterfowl-producing prairie potholes. Long Lake NWR is 22,310 acres in size and consists of approximately 15,000 acres of brackish to saline marsh and lake, 1,000 acres of other wetlands, and about 6,000 acres of tame- and native grassland, woodland, and cropland. The refuge serves as an important staging area for migrating sandhill cranes, Canada geese and other waterfowl, shorebirds, and other migratory birds. Endangered whooping cranes often utilize refuge marshes during spring and fall migration periods.

## **Slade National Wildlife Refuge**

Slade NWR was established "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds."

Slade NWR was established through a donation by Northern Pacific Railroad executive G.T. Slade, who originally began acquiring the area around Harker Lake in 1924 for the establishment of a private shooting club.

It is located in south-central Kidder County, approximately 20 miles northeast of the complex's headquarters and is adjacent to Lake Isabel Recreational Area. The refuge consists of 3,000 acres of gently rolling prairie dotted by lakes and marshes, which were formed by glacial action. Habitat centers around five semi-permanent and permanent wetlands and numerous other prairie potholes, which altogether total more than 900 wetland acres. Much of the upland acreage had been farmed prior to the donation. Current management targets restoring native grasses and forbs that are characteristic to this area.

## **Florence Lake National Wildlife Refuge**

Florence Lake NWR was established on May 10, 1939, by President Franklin D. Roosevelt through Executive Order No. 8119 "... as a refuge and breeding ground for migratory birds and other wildlife" and "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." (Migratory Bird Conservation Act.)

It is located in northern Burleigh County approximately 45 miles northwest of Long Lake NWR. The refuge consists of 1,468 acres of fee title and 420 acres of easement (132 acres of which is meandered lake). The fee portion of the refuge consists of 977 acres of native grassland, 202 acres of tamegrass, 111 acres of seeded native grass, 163 acres of wetland and 16 acres of woodland. The refuge serves as an important migratory bird production and migration area.

## **Long Lake Wetland Management District**

The district was started as part of the Small Wetlands Acquisition Program in the 1950s to save wetlands from various threats, particularly drainage. The passage of Public Law 85-585 in August 1958 amended the Migratory Bird Hunting and Conservation Stamp Act of 1934, allowing for the acquisition of waterfowl production areas and easements for waterfowl production.

The Long Lake wetland management district contains 1,036 perpetual wetland easement contracts which protect 102,646 acres; 93 perpetual grassland contracts which protect 41,181 acres; 16 Farmers Home Administration perpetual easements which protect 669 wetland acres, and

2,759 acres of upland; one wildlife development area (Garrison diversion unit mitigation tract) totaling 794 acres; and 78 WPAs totaling 21,789 acres. Easement restrictions generally prohibit wetland drainage, grassland conversion and development, and require a special-use permit issued by the U.S. Fish and Wildlife Service for vegetative manipulation. The lands remain in private ownership. There continues to be an active acquisition program in the Long Lake wetland management district, which currently focuses on acquiring grassland and wetland easements.

Long Lake wetland management district was established "...to assure the long-term viability of the breeding waterfowl population and production through the acquisition and management of waterfowl production areas, while considering the needs of other migratory birds, threatened and endangered species, and other wildlife." (This purpose statement was developed for all region 6 wetland management districts in June 2004.)

Migratory Bird Hunting Stamp Act 16 U.S.C. 718(c) "...as waterfowl production areas subject to all provisions of the Migratory Bird Conservation Act ...except the inviolate sanctuary provisions..."

Migratory Bird Conservation Act 16 U.S.C. 715d "...for any other management purposes, for migratory birds."

Consolidated Farm and Rural Development Act 7 U.S.C. 1924 "... for conservation purposes"

Consolidated Farm and Rural Development Act 7 U.S.C. 2002 "...for conservation purposes"

### **Refuge Vision and Goals**

The vision for each refuge is based on the establishing purposes of the refuge, resource conditions and potential, and their respective issues. Goals help the complex staff achieve the vision.

### **Refuge Vision**

*Vision for the Long Lake National Wildlife Refuge*  
The echo of the sandhill cranes through the rolling prairie hills of Long Lake invites today's visitors to follow in the footsteps of the plains Indians. The refuge lies along the west-central boundary of the prairie pothole region where the Missouri Coteau meets the Coteau Slope. Here an abundance of migratory birds and other wildlife flourish in the native mixed-grass prairie and a mosaic of

wetlands. The mixed hues and textures of wildflowers, grasses, mudflats, and water please the eye and soothe the soul. Refuge stewards work collaboratively to understand, restore, and protect biological communities. Expanded wildlife-dependent recreation and environmental education opportunities foster a greater understanding of the refuge's resources and the mission of the Refuge System.

### *Vision of the Florence Lake National Wildlife Refuge*

A classic prairie-pothole landscape, Florence Lake NWR provides a unique perspective of pre-settlement prairie conditions. At this visual oasis of the prairie ecosystem, visitors enjoy solitude and excellent grassland bird viewing opportunities in a peaceful, protected environment that supports a wealth of migratory birds and other wildlife. Florence Lake serves as a reference area for northern prairie ecosystems with ongoing restoration, monitoring, and research.

### *Vision of Slade National Wildlife Refuge*

Located within the central flyway, Slade NWR historically served as a foundation for the restoration of the nearly extirpated giant Canada goose population. Management strives to restore mixed-grass prairie and continues to provide quality migratory stopover and breeding habitat for birds of conservation concern. Enhanced wildlife-dependent recreation opportunities and interpretation foster a greater understanding and appreciation of conservation and restoration within an agricultural landscape.

### *Vision of the Long Lake Wetland Management District*

Long Lake waterfowl production areas and all conservation easements provide a network of wetland and grassland habitats that preserve the integrity of the historic and vital nesting and breeding grounds of North America's migratory waterfowl resource. These conservation and management efforts support populations of nesting ducks and geese at, or above, historic levels. New and expanded habitats are provided for trust species including nongame migratory birds, threatened and endangered species, and resident wildlife. The public recognizes these wetlands and uplands as a beneficial and important component of a diverse, healthy, and productive prairie landscape. There is consumptive and nonconsumptive compatible recreational use of public lands. Landowners, sportsmen/sportswomen,

conservationists, and others actively support and encourage our habitat conservation programs. There are a wide variety of partners assisting the Service's efforts to educate the public on the value of habitat conservation and the benefit to current and future generations. These partnerships join us financially and physically to ensure a broad base of support so that the Service can conserve high-quality habitats.

## **Long Lake National Wildlife Refuge Complex Goals**

### *Wildlife and Habitat Management*

Conserve, restore, and enhance the ecological diversity of the mixed-grass prairie ecosystem (including wetlands, grasslands, and native trees and shrubs) for migratory birds with an emphasis on waterfowl and other grassland and wetland-dependent species.

### *Research, Inventory and Monitoring*

Use sound science, monitoring and applied research to advance the understanding of natural resource functions and management within the mixed-grass prairie pothole ecosystem.

### *Public Use, Education, and Interpretation*

Provide a safe environment for visitors of all abilities to enjoy wildlife-compatible recreation while increasing their knowledge and appreciation of the mixed-grass prairie ecosystem and the mission of the National Wildlife Refuge System.

### *Cultural Resources*

Identify, value, and preserve the cultural resources and history of the complex to connect staff, visitors, and the community to the area's past.

### *Refuge Operations*

Through effective communication and innovative technology, secure and efficiently utilize funding, staffing partnerships, and volunteer programs for the benefit of all natural resources in support of the National Wildlife Refuge System mission.

### *Partnerships*

Engage a wide array of partners to support outreach, research and management, promote awareness, and foster an appreciation of the mixed-grass prairie pothole ecosystem.

## **Decisions to be Made**

Based on the analysis document in the environmental assessment, the Service's regional director for region 6 (Mountain-Prairie Region) will

choose the alternative to manage the complex for the next 15 years. The environmental assessment describes four alternatives for achieving the above goals.

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

This alternative promotes a continuation of all aspects of the complex's current management.

### *Alternative B—Natural Processes Management*

This alternative focuses on a return to more natural wetland and upland habitats and habitat functions (e.g., removal of manmade water control structures) within the complex. Intensive management strategies (i.e., reseeding disturbed upland sites with native plant seed, chemical control of noxious weed species) may be used to achieve objectives and goals, but end results focus on minimal use of manmade infrastructure (e.g., water control structures) and a minimal number of non-natural areas (e.g., tamegrass fields). Additionally, public use and environmental education/interpretation objectives and goals are achieved through the use of minimal non-natural structures (e.g., signs, trails, kiosks, wildlife viewing structures) in order to promote a more natural (primitive) experience for the participating public. Changes in complex research and monitoring, staffing, operations, and infrastructure may be required to ultimately accomplish this alternative's objectives and goals. Furthermore, partnerships will focus on initiatives that help enhance and protect natural areas (e.g., easement acquisition, Partners for Wildlife projects, grassland restoration methods research, system sustainability research on Long Lake).

### *Alternative C—Single Wildlife Group-level Intensive Management*

This alternative promotes intensive upland and wetland management (e.g., development of additional water control capability) throughout the complex. Management objectives for particular tracts (i.e., NWR, WPA) will be based on fulfilling the life needs of either one wildlife taxonomic group (i.e., family) or a small number of closely related wildlife taxonomic groups (e.g., shorebirds). Additionally, public use and environmental education/interpretation opportunities will be maximized to the extent compatible with other objectives (e.g., increased hunting and fishing opportunities, additional environmental learning facilities and programs, increased interpretive signage). Changes in complex research and monitoring, staffing, operations, and infrastructure may be required to ultimately accomplish this

alternative's objectives and goals. Partnerships will focus on projects, habitat acquisition, research, and monitoring related to specific wildlife taxonomic groups and their life requirements.

*Alternative D— Target Species Group-level Modified Management (Proposed Action)*

This alternative allows for intensive upland and wetland management, where warranted in the complex. Management objectives for particular tracts (i.e., NWR, WPA) will be based on fulfilling the life needs of a group of target (indicator) species, which may consist of members of various wildlife taxonomic groups (e.g., shorebirds, raptors, waterfowl, wading birds, native gallinaceous birds). Therefore, management objectives for a particular habitat type (e.g., developed wetlands) will be based on a compromised universal benefit concerning particular life needs of multiple wildlife groups. Additionally, public use and environmental education/interpretation opportunities will be maximized to the extent compatible with other objectives (e.g., increased hunting and fishing opportunities, additional environmental learning facilities and programs, increased interpretive signage). Changes in complex research and monitoring, staffing, operations, and infrastructure may be required to ultimately accomplish this alternative's objectives and goals. Furthermore, partnership opportunities will be maximized and will vary widely, spanning the following subject areas: habitat protection and enhancement, land acquisition, monitoring and research, education and outreach.

