Comprehensive Conservation Plan
Long Lake National Wildlife Refuge Complex

September 2006

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Long Lake National Wildlife Refuge Complex

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<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BBS</td>
<td>North American Breeding Bird Survey</td>
</tr>
<tr>
<td>botulism</td>
<td>avian botulism</td>
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<tr>
<td>BRD</td>
<td>Biological Resources Division</td>
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<tr>
<td>CCP</td>
<td>comprehensive conservation plan</td>
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<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>CRP</td>
<td>Conservation Reserve Program</td>
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<tr>
<td>CWD</td>
<td>chronic wasting disease</td>
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<tr>
<td>Delta</td>
<td>Delta Waterfowl Foundation</td>
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<tr>
<td>DNC</td>
<td>dense nesting cover</td>
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<tr>
<td>Duck Stamp Act</td>
<td>Migratory Bird Hunting and Conservation Stamp Act</td>
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<tr>
<td>DWG</td>
<td>Dakota Working Group</td>
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<tr>
<td>EA</td>
<td>environmental assessment</td>
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<td>EO</td>
<td>executive order</td>
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<tr>
<td>GIS</td>
<td>geographic information system</td>
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<tr>
<td>FmHA</td>
<td>Farmers Home Administration</td>
</tr>
<tr>
<td>FONSI</td>
<td>finding of no significant impact</td>
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<tr>
<td>HAPET</td>
<td>Habitat and Population Evaluation Team</td>
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<tr>
<td>HPAI</td>
<td>highly pathogenic avian influenza</td>
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<tr>
<td>Improvement Act</td>
<td>National Wildlife Refuge Improvement Act of 1997</td>
</tr>
<tr>
<td>IPM</td>
<td>integrated pest management</td>
</tr>
<tr>
<td>ISS</td>
<td>International Shorebird Survey</td>
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<tr>
<td>LWCF</td>
<td>Land and Water Conservation Fund</td>
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<tr>
<td>MBCF</td>
<td>Migratory Bird Conservation Fund</td>
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<tr>
<td>MMS</td>
<td>maintenance management system</td>
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<tr>
<td>MSL</td>
<td>mean sea level</td>
</tr>
<tr>
<td>NAWCA</td>
<td>North American Wetland Conservation Act</td>
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<td>NAWMP</td>
<td>North American Waterfowl Management Plan</td>
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<tr>
<td>NDGF</td>
<td>North Dakota Game and Fish Department</td>
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<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<tr>
<td>NGO</td>
<td>nongovernmental organization</td>
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<td>NPWRC</td>
<td>Northern Prairie Wildlife Research Center</td>
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<tr>
<td>NWR or refuge</td>
<td>national wildlife refuge</td>
</tr>
<tr>
<td>PPJV</td>
<td>Prairie Pothole Joint Venture</td>
</tr>
<tr>
<td>PPR</td>
<td>Prairie Pothole Region</td>
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</table>
refuge complex  Long Lake National Wildlife Refuge Complex
Refuge System  National Wildlife Refuge System
RLGIS  refuge lands geographic information system extension
RONS  refuge operations needs system
Service or USFWS  U.S. Fish and Wildlife Service
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 structure
WDA  wildlife development area
WHSRN  Western Hemisphere Shorebird Reserve Network
WMD or district  wetland management district
WPA  waterfowl production area
Long Lake National Wildlife Refuge Complex (refuge complex) oversees management of three national wildlife refuges: Long Lake National Wildlife Refuge (NWR or refuge), Slade NWR, and Florence Lake NWR, and a three-county wetland management district (WMD or district), which consists of 78 waterfowl production areas and one wildlife development area in Burleigh, Emmons, and Kidder counties in south-central North Dakota, as well as conservation easements that protect approximately 147,000 acres. The district continues 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 use 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 lands 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 refuge 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 that were formed by glacial action. Habitat centers around five semipermanent and

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*Western Grebe*
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 Long Lake WMD 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 district contains 1,036 perpetual wetland easement contracts, which protect 102,646 acres; 136 perpetual grassland easement contracts, which protect 8,181 acres; 16 Farmers Home Administration perpetual easements, which protect 669 wetland acres and 2,759 upland acres; one wildlife development area (Garrison Diversion Unit mitigation tract) totaling 794 acres; and 78 waterfowl production areas 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 (Service) for habitat manipulation. The lands remain in private ownership. There continues to be an active acquisition program in the Long Lake WMD, which currently focuses on acquiring grassland and wetland easements.

The Long Lake WMD 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 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.”

**Long Lake National Wildlife Refuge Complex Visions 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 refuge complex staff achieve the vision.
VISIONS

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 and appreciation of the mixed-grass prairie ecosystem and the mission of the National Wildlife Refuge System.

Florence Lake National Wildlife Refuge
A classic prairie pothole landscape, Florence Lake NWR provides a unique perspective of presettlement 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 NWR serves as a reference area for northern prairie ecosystems with ongoing restoration, monitoring, and research.

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.

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 and women, 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 contribute financially and physically to ensure a broad base of support so that quality habitats can be conserved.

Summary

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 refuge complex to connect staff, visitors, and the community to the area’s past.

**Refuge Operations**
Through effective communication and innovative technology, secure and efficiently use 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.

**DECISION MADE**
Based on the analysis document in the environmental assessment, the Service’s regional director for Region 6 (Mountain–Prairie Region) chose the following scheme (alternative D of the draft comprehensive conservation plan and environmental assessment for the refuge complex) to manage the refuge complex for the next 15 years and achieve the above goals.

**Target Species Group-level Modified Management**
The refuge complex staff will engage in intensive upland and wetland management, where warranted in the refuge complex. Management objectives for particular tracts (i.e., NWR, waterfowl production areas) are based on fulfilling the life needs of a group of target (indicator) species, which 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) are based on a compromised universal benefit concerning particular life needs of multiple wildlife groups.

Public use and environmental education and interpretation opportunities (e.g., increased hunting and fishing opportunities, additional environmental learning facilities and programs, increased interpretive signage) will be maximized to the extent compatible with habitat and wildlife objectives. Changes in the refuge complex’s research and monitoring, staffing, operations, and infrastructure will ultimately be required to accomplish these 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, and education and outreach.

*Environmental education at the refuge.*