

Draft Comprehensive Conservation Plan and Environmental Assessment

North Dakota National Wildlife Refuges

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Prepared by

U.S. Fish and Wildlife Service

Audubon National Wildlife Refuge
Chase Lake National Wildlife Refuge
Kellys Slough National Wildlife Refuge
Lake Alice National Wildlife Refuge
Lake Ilo National Wildlife Refuge
Lake Nettie National Wildlife Refuge
Lake Zahl National Wildlife Refuge
McLean National Wildlife Refuge
Shell Lake National Wildlife Refuge
Stewart Lake National Wildlife Refuge
Stump Lake National Wildlife Refuge
White Lake National Wildlife Refuge

and

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Abbreviations

| | |
|---------------------------|---|
| Administration Act | National Wildlife Refuge System Administration Act of 1966 |
| APHIS | Animal and Plant Health Inspection Service |
| BCR | bird conservation region |
| CCP | comprehensive conservation plan |
| CFR | <i>Code of Federal Regulations</i> |
| cfs | cubic feet per second |
| CWCS | comprehensive wildlife conservation strategy |
| CWD | chronic wasting disease |
| district | wetland management district |
| DNC | dense nesting cover |
| DOI | U.S. Department of the Interior |
| EA | environmental assessment |
| EO | executive order |
| FMP | fire management plan |
| FTE | full-time equivalent |
| GIS | geographic information system |
| gpm | gallons per minute |
| GPS | global positioning system |
| GS | general schedule (employment) |
| HAPET | Habitat and Population Evaluation Team |
| HPAI | highly pathogenic avian influenza |
| Improvement Act | National Wildlife Refuge System Improvement Act of 1997 |
| IPM | integrated pest management |
| ISST | invasive species strike team |
| msl | mean sea level |
| NABCI | North American Bird Conservation Initiative |
| ND | North Dakota |
| NDGF | North Dakota Game and Fish Department |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NRCS | Natural Resources Conservation Service |
| NWR | national wildlife refuge |
| PIF | Partners in Flight program |
| PL | public law |
| PPJV | Prairie Pothole Joint Venture |
| Refuge System | National Wildlife Refuge System |
| region 6 | Mountain-Prairie Region of the U.S. Fish and Wildlife Service |
| RLGIS | refuge lands geographic information system |
| Service | U.S. Fish and Wildlife Service |

| | |
|--------------|--------------------------------|
| SWG | State Wildlife Grant |
| USC | United States Code |
| USDA | U.S. Department of Agriculture |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| VOR | visual obstruction reading |
| WG | wage grade (employment) |
| WMD | wetland management district |
| WUI | wildland–urban interface |

Summary



USFWS

Newly hatched mallard ducklings.

This is a summary of the draft comprehensive conservation plan and environmental assessment for 12 of the U.S. Fish and Wildlife Service's national wildlife refuges in North Dakota: Audubon, Chase Lake, Kellys Slough, Lake Alice, Lake Ilo, Lake Nettie, Lake Zahl, McLean, Shell Lake, Stewart Lake, Stump Lake, and White Lake.

The National Wildlife Refuge System Improvement Act of 1997 requires the U.S. Fish and Wildlife Service to develop a comprehensive conservation plan by 2012 for each national wildlife refuge. Chapter 6 contains the draft plan for the 12 refuges; the final plan is scheduled for completion in 2008 and will guide management of the refuges for the next 15 years.

The Refuges

The 12 national wildlife refuges were established under different authorities:

- Audubon National Wildlife Refuge was established under the authority of the Fish and Wildlife Coordination Act.
- Under executive order, President Theodore Roosevelt established 2 of the 12 refuges as preserves and breeding grounds for native birds: Chase Lake and Stump Lake national wildlife refuges.
- Under executive order, President Franklin D. Roosevelt established 8 of the 12 refuges as breeding grounds for migratory birds and other wildlife: Kellys Slough, Lake Ilo, Lake Nettie, Lake Zahl, McLean, Shell Lake, Stewart Lake, and White Lake.

- Lake Alice National Wildlife Refuge was established under the authority of the Migratory Bird Conservation Act.

To secure lands for migratory birds, the United States Congress established the Migratory Bird Conservation Fund to acquire lands for conservation, to maintain acquired lands for habitat preservation, and to fund expenses necessary for the administration, development, and maintenance of such areas. Associated activities include construction of dams, dikes, ditches, spillways, and flumes for improving habitat and mitigation of pollution threats to waterfowl and migratory birds. The refuges protect habitat with primarily two tools: fee-title ownership and conservation easements.

The prairies of North Dakota have become an ecological treasure of biological importance for waterfowl and other migratory birds. The prairie potholes of North Dakota support a wide diversity of wildlife, but they are most famous for their role in waterfowl production. Although the Prairie Pothole Region occupies only 10% of North America's waterfowl breeding range, it produces approximately 50% of the continent's waterfowl population.

Complexes of wetlands scattered throughout the refuges and surrounding areas attract breeding duck pairs. The refuges provide northern staging areas and habitat for migrating waterfowl. Semipermanent and permanent wetlands provide brood-rearing habitat and migratory stopover habitat, respectively. However, it is the smaller temporary and seasonal wetlands that draw breeding duck pairs to the North Dakota prairies, including the refuges, and other parts of the Prairie Pothole Region.

Planning Process

The planning process for a comprehensive conservation plan consists of a series of steps including environmental analysis. Public and partner involvement are encouraged and valued throughout the process. The U.S. Fish and Wildlife Service's planning team developed management alternatives to meet the purposes, vision, and goals of the refuges.

ISSUES

Public scoping for the 12 national wildlife refuges that the Service started in 2007, along with refuge information, identified five major areas of concern regarding management of the refuges.

Wetland and Upland Habitats

Aggressive management of wetland and upland habitats must be conducted to achieve goals and objectives. Habitat protection needs to be evaluated through a priority system so that different means of protection, through either fee title or conservation easement, can be evaluated.

Invasive Plants

The refuges have previously farmed uplands that have since been restored. Most of these uplands have the native vegetation character but are compromised by invading species such as leafy spurge, Canada thistle, absinth wormwood, Kentucky bluegrass, and smooth brome. These invasive plants substantially diminish the suitability of upland habitat for many native wildlife species. Western snowberry and silverberry are native shrubs that have greatly expanded their coverage in some areas where natural regimes of fire and grazing have been altered.

Wildlife Management

Priority species, predators, and wildlife disease are issues for the refuges.

Priority Species

American white pelican occur in large numbers on Chase Lake within the Chase Lake National Wildlife Refuge. Endangered whooping cranes can be observed in the marshes of several refuges. The primary issues related to priority species are as follows: (1) monitoring populations and habitat use; and (2) providing essential habitat and developing conditions that promote increased recruitment or population protection.

Predator Management

Several species including red fox, striped skunk, and raccoon are found at higher than historical levels due to modifications of habitat. These species can adversely affect migratory bird populations. Woody vegetation provides habitat for predators and attracts forest-edge bird species that may displace grassland species.

Wildlife Disease

National wildlife refuges in North Dakota have a history of botulism outbreaks. There is an ongoing issue of striking a balance between managing botulism, providing optimal habitats, and maintaining other refuge programs.

Visitor Services

There is a growing demand for public recreation in North Dakota. The public would like to see more opportunities to participate in the six wildlife-dependent recreational uses—hunting, fishing, wildlife observation, photography, environmental education, and interpretation. Hunting is permitted only at Audubon, Chase Lake, Lake Alice, Lake Nettie, and Lake Zahl

national wildlife refuges. Fishing is permitted only at Audubon and Lake Ilo national wildlife refuges. Wildlife observation, photography, environmental education, and interpretation are available at 10 of the refuges, with the exception of Stump Lake and White Lake national wildlife refuges, which are closed to all public use.

Operations

Funding and staff are not sufficient to fulfill the purposes and meet the goals of the refuges. The Service's staff needs to identify and describe unfunded needs to be able to compete effectively for additional money from within the Service and from partners and other sources. Refuge facilities need to be evaluated and upgraded.

Monitoring and Research

Basic data about recruitment, mortality, and habitat use for a representative group of species must be collected and analyzed on a regular basis to make appropriate decisions that affect the habitats these species depend on. The use of the refuges as a research field station could make valuable strides in development of new directions in management and expansion of the knowledge of field biologists.

The Future of the Refuges

The issues, along with resource conditions, were important considerations during the development of the vision and goals for the 12 national wildlife refuges.

THE VISION FOR THE REFUGES

This collection of unique and diverse refuges encompasses a broad range of North Dakota habitat types and landscapes.

These refuges provide vital resting and breeding habitat for waterfowl, other migratory birds, and resident fish and wildlife species.

Visitors to these prairie refuges experience wide-open spaces, skies filled with migratory birds, places to learn, and welcome solitude.

The responsible management of these special places requires adequate funding, dedicated personnel, and successful partnerships.

Achievement of this vision ensures that the American people retain a legacy of wildlife and prairie habitats for future generations.

GOALS

The following goals were developed to meet the vision for the refuges.

Habitat and Wildlife Goal

Conserve, restore, and enhance the ecological diversity of grasslands and wetlands of the North Dakota prairie to support healthy populations of ducks and geese, other migratory birds, native species, and other wildlife.

Monitoring and Research Goal

Use science, monitoring, and applied research to advance the understanding of natural resources and management within the North Dakota national wildlife refuges.

Cultural Resources Goal

Identify and evaluate cultural resources that are on Service-owned lands or are affected by Service undertakings. Protect resources determined to be significant and, when appropriate, interpret resources to connect staff, visitors, and communities to the area's past.

Visitor Services Goal

Provide visitors with opportunities to enjoy wildlife-dependent recreation where compatible and expand their knowledge and appreciation of the prairie landscape and the National Wildlife Refuge System.

Partnerships Goal

A diverse network of partners join with the North Dakota national wildlife refuges to support research, accomplish habitat conservation, and foster awareness and appreciation of the prairie landscape.

Operations Goal

Efficiently employ staff, partnerships, and volunteers and secure funding in support of the Refuge System's mission.

Alternatives

The planning team developed the following three alternatives as management options to address the key issues.

ALTERNATIVE A—CURRENT MANAGEMENT (NO ACTION)

Under alternative A, management activities conducted by the Service throughout all 12 refuges would not change:

- The Service sets priorities for refuge habitats and only high-priority habitats are managed. Native species restoration continues at its current level. Invasive species management is limited to legally listed species and those of ecological concern that occur on high-priority tracts.
- Refuge staffs document and protect new cultural resources as they are opportunistically found. Staffs protect known resources from vandalism, theft, and destruction. The Service maintains and preserves historical sites.
- The current level of visitor services includes environmental education, interpretation, and hunting and fishing access for those refuges with permitted use.
- Refuge staffs preserve existing partnerships that address resource information needs, protect and enhance habitat, and promote wildlife-dependent recreational use.
- Refuge staffs use volunteers to help with environmental and education programs. Operations consist of maintaining vehicles and equipment.

ALTERNATIVE B—MODERATELY ENHANCED MANAGEMENT (PROPOSED ACTION)

Under alternative B, wildlife habitat management would enhance wetlands and uplands, where warranted, on refuge lands:

- Management objectives for habitat types would be based on habitat preferences of groups of target species such as waterfowl, migratory shorebirds, grassland birds, and priority species. The Service would set priorities for refuge habitats; high- and medium-priority habitats would be managed. Additional degraded habitat tracts would be identified and restored to native species. Invasive species management would be limited to legally listed species and those of ecological concern that occur on high- and medium-priority tracts. Refuge staffs and partners would expand biological surveys, such as colonial bird counts and biweekly waterfowl counts, and baseline monitoring on high- and medium-priority tracts.
- The Service would document and protect cultural resources. Educational programs and partner research and inventories would be conducted on a limited basis. Refuge staffs would protect known resources from vandalism, theft, and destruction. The Service would maintain and preserve historical sites.
- Refuge staffs would improve and expand programs for youth and conservation groups. These programs and events such as waterfowl identification workshops would be done on a

3-year rotation among refuges. Staffs would develop “friends groups.” The Service would start or expand environmental education programs for Kellys Slough and Lake Alice national wildlife refuges. A new environmental learning center is planned for Audubon National Wildlife Refuge.

- The Service would expand existing partnerships to address migratory bird habitat improvement. Refuge staffs would work with local, state, and federal agencies to promote and protect migratory bird habitat within the refuges.

ALTERNATIVE C—ENHANCED MANAGEMENT

Under alternative C, management by the refuge staffs would be more intensive and widespread, targeting native prairie and wetland complexes:

- The Service would intensively manage refuge habitats, with an emphasis on migratory birds. Refuge staffs would manage all refuge habitats (high-, medium-, and low-priority tracts). Staffs would do restoration that expands and returns native grasslands to quality native prairie. In addition to waterfowl surveys, the Service would do surveys of other migratory birds such as grassland birds. The Service would conduct baseline surveys of all refuge habitats. The Service would seek graduate students to do research and monitoring of refuge projects.
- The Service would document and protect cultural resources. Educational programs and partner research and inventories would be conducted on a limited basis. Refuge staffs would protect known resources from vandalism, theft, and destruction. The Service would maintain and preserve historical sites.
- The Service would develop and expand the level and quality of environmental education and interpretation opportunities to meet a wide range of target audiences. There would be outdoor classroom activities, interpretive exhibits and displays. The focus on waterfowl and other migratory bird species would increase wildlife-viewing opportunities for the public. Refuge staffs would improve and expand programs for youth and conservation groups. These programs and events such as waterfowl identification workshops would be done on a 3-year rotation among refuges. The Service would start or expand environmental education programs for Kellys Slough and Lake Alice national wildlife refuges. A new environmental learning center is planned for Audubon National Wildlife Refuge.
- The Service would seek new partners to develop and accomplish collaborative programs. Refuge staffs would expand partnerships with universities, develop “friends groups,” and develop partnerships with communities and neighbors to enhance appreciation of and interest in the refuges.
- There would be increased staffs, equipment, and funding to accomplish the actions in this alternative.

