

Tewaukon National Wildlife Refuge

Draft Comprehensive Conservation Plan and Environmental Assessment

June 2000

Prepared by
U.S. Fish and Wildlife Service
Tewaukon National Wildlife Refuge
9754 143 1/2 Avenue Southeast
Cayuga, ND 58013-9764

Table of Contents

Summary	7
Introduction and Background	
Background	12
Purpose and Need for Comprehensive Conservation Plan	12
Description of Planning Process	
NEPA - National Environmental Policy Act	15
Tewaukon Complex Comprehensive Conservation Plan Process	15
Compatibility Determinations	15
Involving the Public	16
Issues Raised During the Planning Process	16
Putting It All Together	17
U.S. Fish and Wildlife Service Missions and Goals	18
National Wildlife Refuge System Mission and Goals	18
Complex and Resource Descriptions	
Tewaukon Complex History	19
Tewaukon National Wildlife Refuge	20
Tewaukon Wetland Management District	23
Tewaukon Complex Easement Refuges	23
Geographic/Ecosystem Setting	24
Historical Resources, Cultural Values, and Uses	27
Land Use and Wildlife Species Changes	28
Management by Unit	
Special Management Areas	31
Interrelationships of Goals and Objectives	31

Tewaukon National Wildlife Refuge

Purpose	32
Vision 32	
Habitat Management	37
Grasslands	37
Native Prairie	37
Prescribed Burning and Wildfires	40
Native Prairie Management	41
Tallgrass Prairie Management Approach	42
Introduced/Planted Cover	44
Dense Nesting Cover	44
Planted Warm Season Natives and Other Grasslands	47
Wetlands	48
Managed Wetlands	49
Water Rights	50
Water Quality	51
Non-Managed Wetlands	52
Native Woodlands	53
Wildlife	54
Waterfowl (Ducks, Geese, and Swans)	54
Waterfowl Nesting	54
Planted Foods	56
Migratory Birds	61
Shorebirds	61
Wading Birds	61
Raptors	61
Grassland Migratory Birds	61
Woodland Migratory Birds	62
Migratory Bird Disease Outbreaks	62
Native Resident Wildlife	63
Mammals	63
Upland Game Birds	63
Reptiles and Amphibians	64
Nonnative Wildlife	65
Wildlife Disturbance	66
Migrating Wildlife Habitat	67
Nesting Birds and Other Breeding Wildlife	68
Wintering Wildlife Habitat	69
Endangered Species	70
Service Species of Concern	70
Public Use and Recreation	71
Fishing	71
Hunting	81
Wildlife Observation and Photography	81
Interpretation	82
Environmental Education	83
Public Outreach	83
Cultural Resources	84
Partners	85
Volunteer Program	86

Tewaukon Wetland Management District

Purpose	87
Vision	87
Description of the District	88
Waterfowl Production Areas	88
Wetland Easements	88
Grassland Easements	88
ND FmHA Conservation Easements	88
Waterfowl Production Areas (WPAs)	89
Habitat Management	90
Grasslands	90
Native Prairie	90
Enhancing Native Prairie	93
Protecting Native Prairie	94
Introduced/Planted Cover	97
Dense Nesting Cover	97
Planted Cover	97
Wetlands	98
Water Rights	98
Protecting Wetlands	98
Protecting Fens	99
Riparian Zones	99
Wildlife	100
Waterfowl	100
Migratory Birds	101
Migratory Bird Disease Outbreaks	101
Native Resident Wildlife	102
Mammals	102
Reptiles and Amphibians	102
Upland Game Birds	102
Nonnative Wildlife	103
Endangered Species	104
Service Species of Concern	106
Rare and Unique Species (North Dakota State Listed)	108
Public Use and Recreation	110
Hunting and Trapping	110
Interpretation/Environmental Education	110
Cultural Resources	111
Partners	111

Tewaukon Easement Refuges

Purpose	112
Habitat Management	112

Kraft Slough	113
--------------------	-----

Implementation and Monitoring

Personnel	114
Funding Needed to Implement This Plan	115
Step-Down Management Plans	115
Partners	116
Monitoring and Evaluation	117
Plan Amendment and Revision	118
Comprehensive Conservation Plan Preparers	118

Appendices:

Appendix A.	Tewaukon NWR Complex Species Lists	119
Appendix B.	Plant Species Mentioned in CCP and EA	127
Appendix C.	ND State Rare and Unique Plant Species	129
Appendix D.	Tewaukon Complex Water Rights	130
Appendix E.	Key Legislation/Policies	131
Appendix F.	Environmental Assessment	135
Appendix G.	Compatibility Determinations	175
Appendix H.	ND/SD Draft Ecosystem Goals and Objectives	183
Appendix I.	Existing Partnerships	188
Appendix J.	RONs and MMS Project Worksheets	190
Appendix K.	Literature Cited	209
Appendix L.	Waterfowl Production Areas Priority Management Tables	216
Appendix M.	Section 7 Consultation	220
Appendix N.	Mailing List	221
Appendix O.	Glossary	227

Summary

The U.S. Fish and Wildlife Service (Service) is the principal Federal agency with the responsibility for conserving, protecting, and enhancing fish and wildlife and their habitats. The Service manages a diverse network of more than 500 national wildlife refuges. A System which encompasses more than 92 million acres of public land and water, and provides habitat for more than 5,000 species of birds, mammals, fish, and insects.

The Tewaukon National Wildlife Refuge Complex (Complex) includes the Tewaukon Refuge and the Tewaukon Wetland Management District (WMD). The Refuge is composed of the Tewaukon and Sprague Lake Units (8,363 acres) and two easement refuges (Storm Lake and Wild Rice). The WMD includes 14,000 acres of Waterfowl Production Areas (WPAs), 35,000 acres of wetland easements and 10,386 acres of grassland easements in Ransom, Richland, and Sargent Counties, North Dakota. The lands were acquired for the primary purpose of supporting migratory birds and other wildlife. The Complex is located on the gently rolling glacial till plain of the Prairie Pothole Region and the Red River of the North Valley (original bed of glacial Lake Agassiz). Birds from both the Central and Mississippi Flyways use Complex habitat. Over 243 bird species have been recorded in the area. Of these species, 100 are known to nest in the area, and the remainder can be seen during spring and fall migrations. Many other reptile, amphibian, mammal, and invertebrate wildlife species live on Tewaukon Complex lands.

The Complex has four key wildlife and habitat values: 1) wetlands provide important migration and breeding habitat for waterfowl and other waterbirds, and habitat for several species associated with wetlands including leopard frogs, painted turtles, mink, muskrats and invertebrates; 2) tallgrass prairie remnants provide some of the last remaining habitat for nesting and migrating grassland birds, rare prairie butterflies, and other prairie wildlife; 3) other grassland habitat provides winter cover for resident species and breeding habitat for ground nesting birds and other grassland wildlife; 4) riparian habitat that provides breeding and migration areas for many species of birds and mammals. The Tewaukon Complex also provides unique and important values for people. Wildlife, habitat, scenery, recreation, and cultural history all combine to make the Complex a national treasure.

Comprehensive Conservation Plans (CCP) were mandated by the National Wildlife Refuge System Improvement Act of 1997. This Act requires that the CCP must identify and describe 1) purposes of the Complex; 2) fish, wildlife, and plant populations and their habitats; 3) archaeological and cultural values; 3) significant fish, wildlife and plant problems; and 4) the actions necessary to correct them. The CCP should also identify and describe compatible wildlife-dependent recreational opportunities and administrative and visitor facilities.

Benefits of the CCP are several: better long-term continuity in Complex management; better understanding of Complex management actions for Complex staff members and visitors; a clear description of future development and funding needs; and the assurance that Complex management will fulfill the mission of the National Wildlife Refuge System and the specific purposes for which the Complex was established.

The Tewaukon CCP will be used to prepare step-down management plans and revise existing plans. It also will be used to prepare budgets which describe specific actions to be taken by the Complex over the next 15 years. Given that new information, guidance and technology frequently change and become available, the CCP will be updated as necessary throughout the 15-year period.

The Environmental Assessment considered three management alternatives for management of the Tewaukon Complex. Each of the alternatives were evaluated for environmental consequences in accordance with the National Environmental Policy Act (NEPA). For a summary of the alternatives considered during the planning process, see the Tewaukon National Wildlife Complex Environmental Assessment in Appendix F. The CCP is the preferred alternative.

VISION: Tewaukon National Wildlife Refuge Complex will be preserved, managed, and enhanced as a part of the tallgrass prairie wetland ecosystem capable of supporting migratory birds and other native wildlife and plants for the benefit of present and future generations. The Complex will provide an environment where a diversity of native tallgrass prairie, wetlands, plants, wildlife, and their natural processes can be observed and explored. It will provide a place where people can learn about wildlife and their habitats and enjoy wildlife-dependent recreation.

The management focus of the CCP is summarized by four major Complex goals that are supported by a series of objectives and implementation strategies. Those goals include:

Habitat: Preserve, restore, and enhance the ecological diversity of native flora, other grasslands and wetlands within the tallgrass prairie wetland ecosystem.

Wildlife: Preserve, restore, and enhance the ecological diversity and abundance of migratory birds and other native wildlife with emphasis on waterfowl, grassland, and wetland-dependent birds.

Public Use/Recreation and Environmental Education:

Provide recreational and educational opportunities for persons of all abilities to learn about and enjoy the tallgrass prairie wetland ecosystem, the fish and wildlife found there, and the history of the Complex in a safe and compatible manner.

Partnerships:

Promote partnerships to preserve, restore, and enhance a diverse, healthy, and productive prairie/wetland ecosystem in which the Tewaukon Complex plays a key role.

The achievement of these goals will result in the following major accomplishments in the Complex over the next 15 years (includes implementation of Drift Prairie Project, North American Wetlands Conservation Act Grant, and the Dakota Tallgrass Prairie Project):

Habitat:

- P Protection of the remaining tracts of tallgrass prairie in the District with grassland easements, cooperative agreements or fee title acquisition (approximately 60,000 acres).
- P Enhancement of 3,716 acres of existing native prairie areas on Complex lands by reducing nonnative plants and increasing the abundance and the number of native plants species.
- P Management of the vegetative structure and species composition on other grasslands on the Complex to provide for the needs of grassland nesting birds.
- P Restoration of 1,700 acres of old dense nesting cover (DNC), invasive nonnative grasses, and crop fields to a diverse native plant community on Complex lands.
- P Enhancement of 38 managed Refuge wetlands to mimic natural drawdown cycles and reduce nonnative wetland plants. Improve the water quality in Wild Rice River as it enters the Refuge by restoring wetlands and adding vegetative buffer strips.
- P Protection of wetlands on private land through fee title, easements or cooperative agreements.
- P Enhancement of wetlands by implementing low impact (minimum till) agricultural practices on surrounding uplands, grazing systems, repairing water management structures, and placing waterfowl nesting structures on private land.
- P Restoration and creation of wetlands on private land.

Wildlife:

- P Improvement of waterfowl nesting success on the Refuge and six high priority Waterfowl Production Areas.
- P Maintenance of 135 acres of cropland on the Refuge as food for migratory birds and resident wildlife.
- P Reduction of nonnative wildlife on the Complex through habitat management and direct removal.
- P Minimize wildlife disturbance by the public by limiting access at certain times of the year and by activity.

Cultural Resources:

- P Gather more information on the cultural resources on the Complex. Provide additional interpretation and protection of these cultural resources.

Public Use/Recreation and Environmental Education:

- P Maintain a recreational fishing program in Tewaukon and Sprague Lakes by reducing carp and by continuing to manage the two lakes as open water migratory bird rest areas.
- P Continue to provide public opportunity for hunting of white-tailed deer and pheasants on the Refuge and wildlife observation and photography with limited access.
- P Expand the Refuge Visitor Center, including exhibits. Expand the hours the Visitor Center is open to the public.
- P Improvement of the Complex outreach program through new brochures, a website, displays, and signs.
- P Continue to provide environmental education programs and activities.

Partnerships:

- P Continue to work with existing partners on habitat management, enhancement and protection programs; recreational programs; and environmental education activities.
- P Create opportunities for new partnerships to assist in implementing the CCP
- P Foster a volunteer program on the Complex.

Time Frame for the Process

From the time that this Draft is published, the public will have a 30-day comment period. Public comments will be considered, then a Final Plan is expected to be completed by the Fall of 2000.



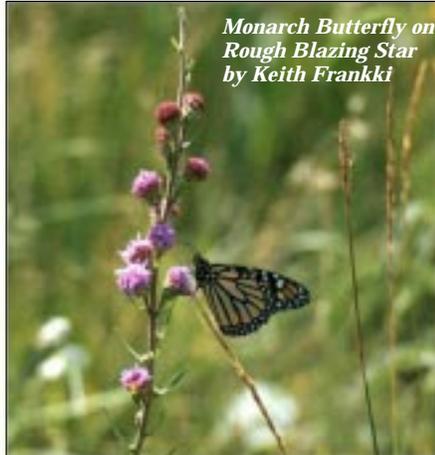
*Western Prairie Fringed Orchid
by Keith Frankki*



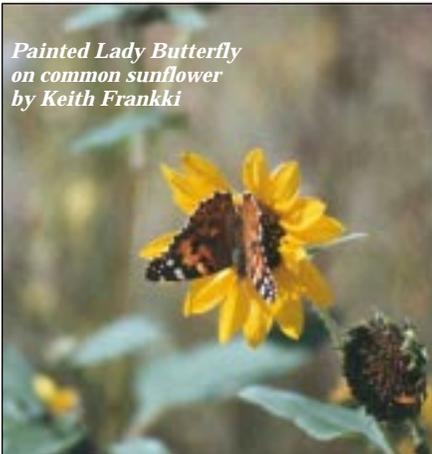
*White Lady's Slipper
by Keith Frankki*



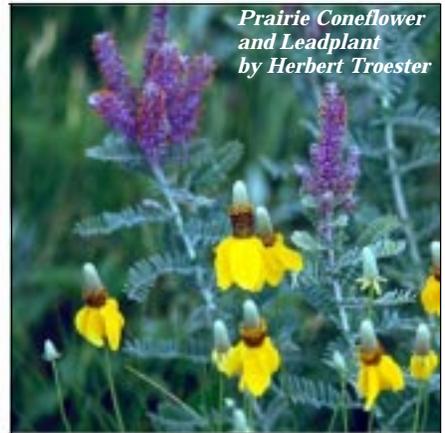
*Ladies Tresses
by Keith Frankki*



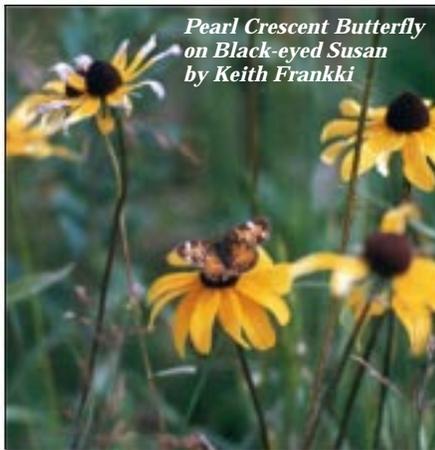
*Monarch Butterfly on
Rough Blazing Star
by Keith Frankki*



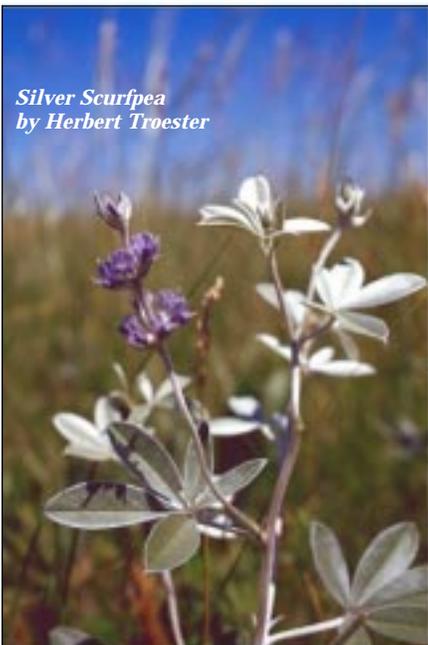
*Painted Lady Butterfly
on common sunflower
by Keith Frankki*



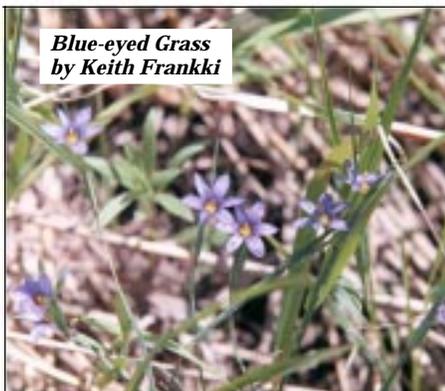
*Prairie Coneflower
and Leadplant
by Herbert Troester*



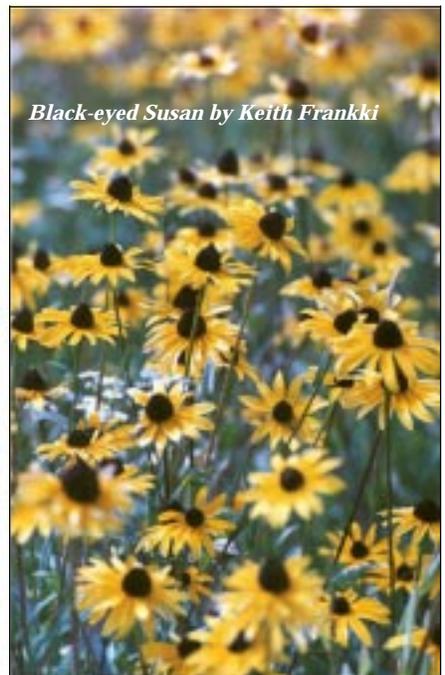
*Pearl Crescent Butterfly
on Black-eyed Susan
by Keith Frankki*



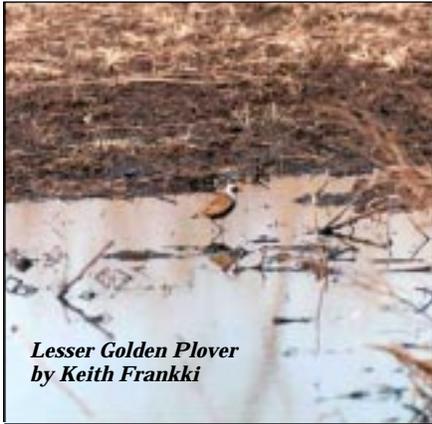
*Silver Scurfpea
by Herbert Troester*



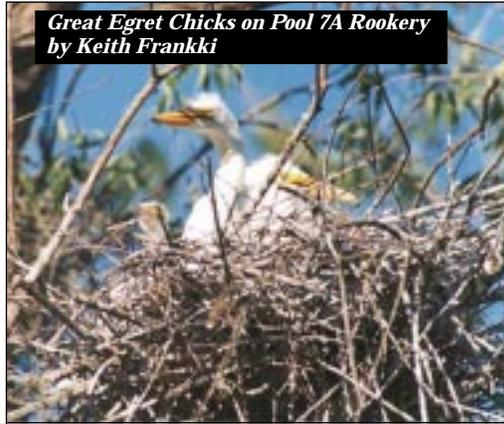
*Blue-eyed Grass
by Keith Frankki*



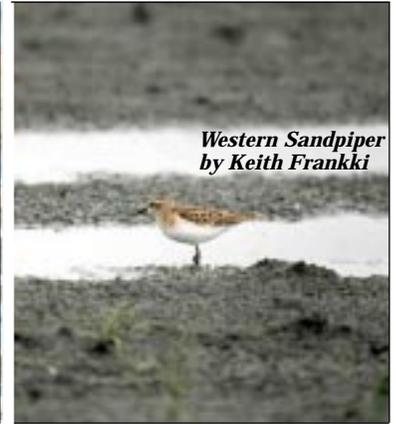
Black-eyed Susan by Keith Frankki



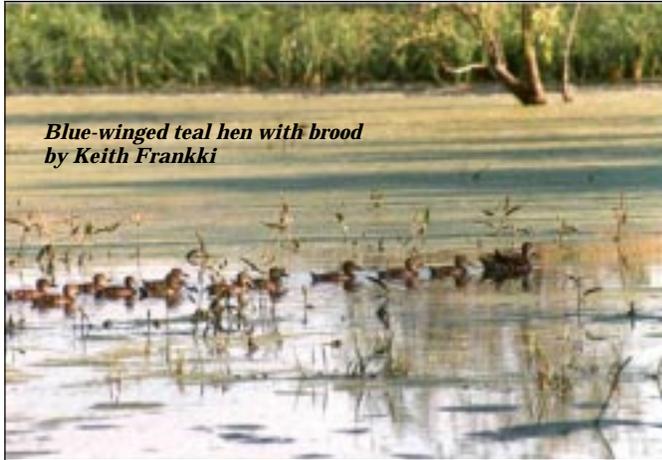
*Lesser Golden Plover
by Keith Frankki*



*Great Egret Chicks on Pool 7A Rookery
by Keith Frankki*



*Western Sandpiper
by Keith Frankki*



*Blue-winged teal hen with brood
by Keith Frankki*



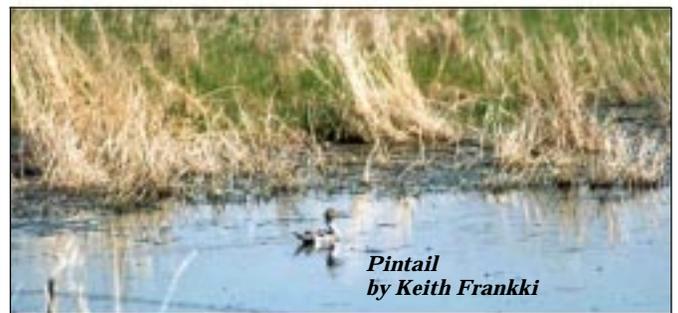
*Mallard hen with brood
by Herbert Troester*



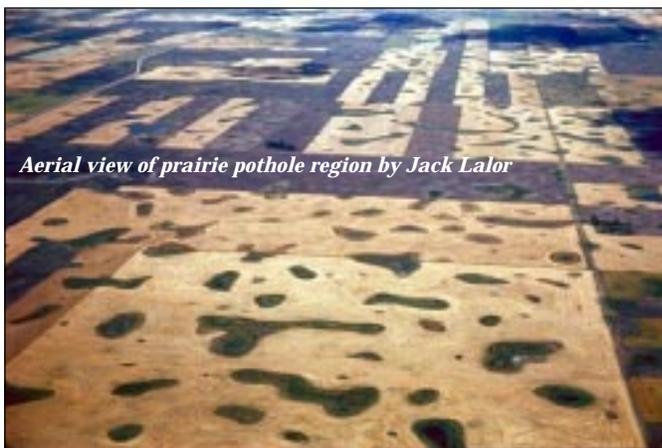
Successful hunters showing off white-tailed buck by Jack Lalor



*Blue-winged teal pair
by Keith Frankki*



*Pintail
by Keith Frankki*



Aerial view of prairie pothole region by Jack Lalor



*Song Sparrow
by Keith Frankki*

Introduction and Background

Background

The Tewaukon National Wildlife Refuge Complex (Complex) is located in the southeast corner of North Dakota (See Map 1). The Complex includes the Tewaukon National Wildlife Refuge (NWR) including the Sprague Lake Unit, the Storm Lake Easement Refuge, the Wild Rice Easement Refuge, and the Tewaukon Wetland Management District (WMD). The Refuge is 8,363 acres in size and is located in Sargent County. On June 26, 1945, Public Land Order 286 established the area known as the Tewaukon NWR as "... a refuge and breeding ground for migratory birds and other wildlife..." The Tewaukon Wetland Management District (WMD) was established in 1960 as a management unit for migratory birds. The Wetland Management District encompasses tracts in Sargent, Ransom, and Richland Counties. The District is comprised of Waterfowl Production Areas (fee title), wetland easements, and grassland easements in Ransom, Richland, and Sargent counties. The Tewaukon Complex staff administers over 14,000 acres of WPAs, over 35,000 acres protected by wetland easements, and 10,386 acres of grassland easements.

The Complex provides important habitat for migrating and breeding waterfowl, other water birds, grassland birds, and other migratory birds. Lands in the Complex also provide critical habitat for a variety of wetland and prairie mammals, reptiles, amphibians, and invertebrates. The Complex is a valuable area for recreation including hunting, fishing, and wildlife observation. The Refuge also has a long and rich cultural history. All of these factors make the Tewaukon Complex a national treasure.

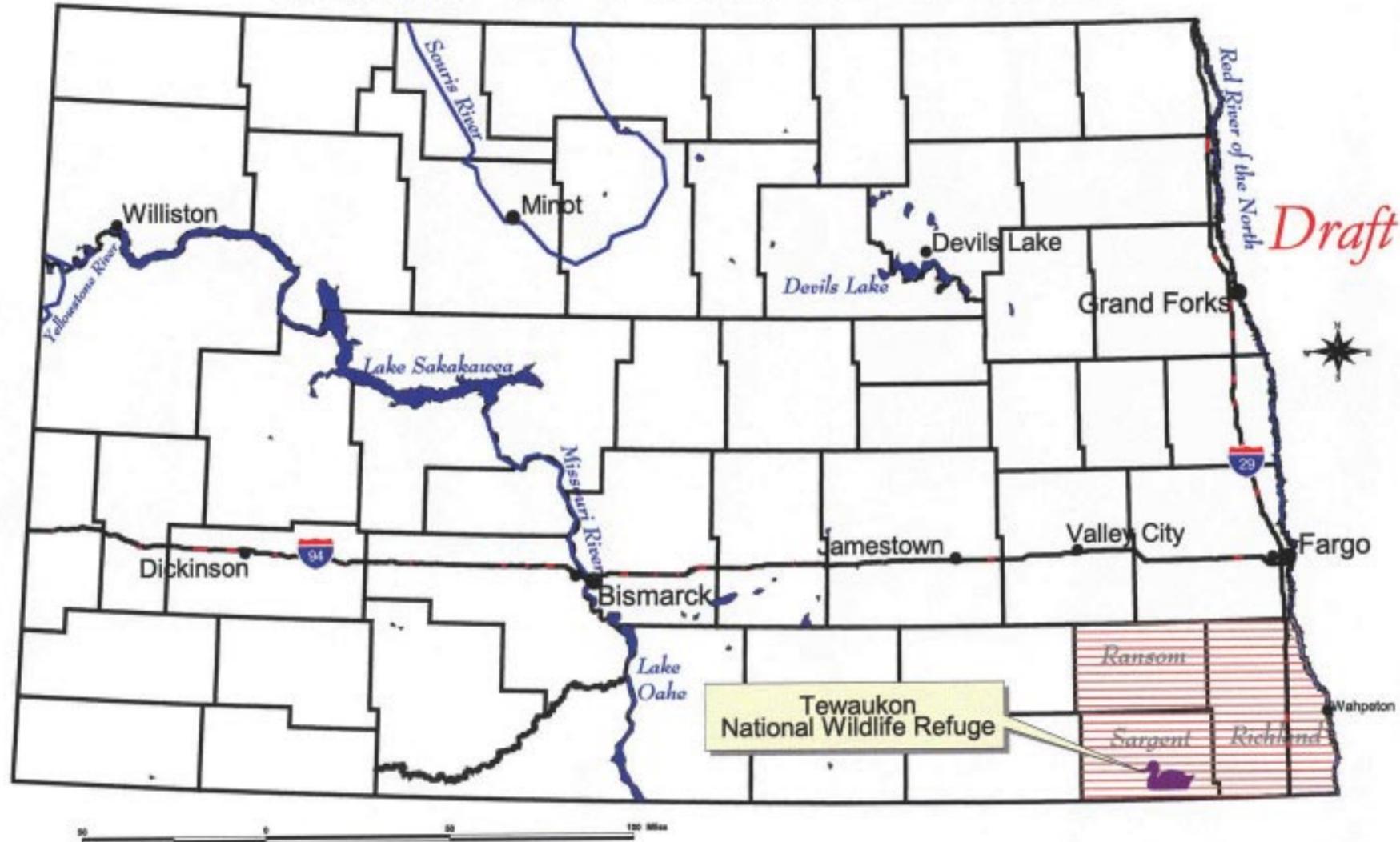
Purpose and Need for Comprehensive Conservation Plan

The U.S. Fish and Wildlife Service (Service) is the principal Federal agency with the responsibility for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages a diverse network of more than 500 National Wildlife Refuges. This National Wildlife Refuge System encompasses more than 92 million acres of public land and water, and provides habitat for more than 5,000 species of birds, mammals, fish, and insects.

Comprehensive Conservation Plans (CCPs) were mandated by the National Wildlife Refuge System Improvement Act of 1997. The Improvement Act requires that all lands and waters of the National Wildlife Refuge System be managed in accordance with an approved Comprehensive Conservation Plan. This Act requires the identification and description of 1) Complex purpose(s); 2) fish, wildlife, and plant populations and their habitats; 3) archaeological and cultural values; 4) significant fish, wildlife, and plant problems; and 5) the actions necessary to correct them. The Plan should also identify and describe opportunities for compatible wildlife-dependent recreational uses and administrative and visitor facilities.

The CCP describes long-term Complex management actions and purposes of the actions for Refuge staff and the public, in order to provide Complex management continuity. As the CCP was developed, public input regarding Complex issues and management was considered. The CCP is a description of the wildlife and habitat protection, management, and development that is needed for Complex purposes to be achieved. Funding and personnel needed to achieve the CCP are also described. Completing the work described in the CCP will accomplish Complex purposes and contribute to the mission of the Refuge System and the U.S. Fish and Wildlife Service.

State of North Dakota



Map #1 Location Within North Dakota

