

# Appendix A. Tewaukon NWR Complex Wildlife Species Lists

## Bird List

(Species known to nest on the Complex are marked with an \*)

### Loons

Common Loon *Gavia immer*

### Grebes

Pied-billed Grebe\* *Podilymbus podiceps*  
Horned Grebe *Podiceps auritus*  
Red-necked Grebe\* *Podiceps grisegena*  
Eared Grebe\* *Podiceps nigricollis*  
Western Grebe\* *Aechmophorus occidentalis*

### Pelicans

American White Pelican *Pelecanus erythrorhynchos*

### Cormorants

Double-crested Cormorant\* *Phalacrocorax auritus*

### Bitterns, Herons, and Egrets

American Bittern\* *Botaurus lentiginosus*  
Least Bittern\* *Ixobrychus exilis*  
Great Blue Heron\* *Ardea herodias*  
Great Egret\* *Anlea Alba*  
Snowy Egret *Egretta thula*  
Cattle Egret *Bubulcus ibis*  
Green Heron\* *Butorides virescens*  
Black-crowned Night-Heron\* *Nycticorax nycticorax*

### New World Vultures

Turkey Vulture *Cathartes aura*

### Swans, Geese, and Ducks

Greater White-fronted Goose *Anser albifrons*  
Snow Goose *Chen caerulescens*  
Canada Goose\* *Branta canadensis*  
Tundra Swan *Cygnus columbianus*  
Wood Duck\* *Aix sponsa*  
Gadwall\* *Anas strepera*  
American Wigeon\* *Anas americana*  
American Black Duck *Anas rubripes*  
Mallard\* *Anas platyrhynchos*  
Blue-winged Teal\* *Anas discors*  
Northern Shoveler\* *Anas clypeata*  
Northern Pintail\* *Anas acuta*  
Green-winged Teal\* *Anas crecca*  
Canvasback\* *Aythya valisineria*  
Redhead\* *Aythya americana*  
Ring-necked Duck *Aythya collaris*  
Lesser Scaup\* *Aythya affinis*  
Bufflehead *Bucephala albeola*  
Common Goldeneye *Bucephala clangula*  
Hooded Merganser *Lophodytes curvullatus*  
Common Merganser *Mergus merganser*  
Red-breasted Merganser *Mergus serrator*  
Ruddy Duck\* *Oxyura jamaicensis*

### Osprey, Kites, Hawks, and Eagles

Osprey *Pandion haliaetus*  
Bald Eagle *Haliaeetus leucocephalus*  
Northern Harrier\* *Circus cyaneus*  
Sharp-shinned Hawk *Accipiter striatus*  
Cooper's Hawk *Accipiter cooperii*

Northern Goshawk  
Broad-winged Hawk  
Swainson's Hawk\*  
Red-tailed Hawk\*  
Ferruginous Hawk  
Rough-legged Hawk  
Golden Eagle

*Accipiter gentilis*  
*Buteo platypterus*  
*Buteo swainsoni*  
*Buteo jamaicensis*  
*Buteo regalis*  
*Buteo lagopus*  
*Aquila chrysaetos*

### Falcons and Caracaras

American Kestrel\* *Falco sparverius*  
Merlin *Falco columbarius*  
Peregrine Falcon *Falco peregrinus*  
Prairie Falcon *Falco mexicanus*

### Gallinaceous Birds

Gray Partridge\* Introduced *Perdix perdix*  
Ring-necked Pheasant\* Introduced *Phasianus colchicus*  
Sharp-tailed Grouse *Tympanuchus phasianellus*  
Greater Prairie-Chicken *Tympanuchus cupido*

### Rails

Virginia Rail\* *Rallus limicola*  
Sora\* *Porzana carolina*  
American Coot\* *Fulica americana*

### Cranes

Sandhill Crane *Grus canadensis*

### Plovers

Black-bellied Plover *Pluvialis squatarola*  
American Golden-Plover *Pluvialis dominica*  
Semipalmated Plover *Charadrius semipalmatus*  
Killdeer\* *Charadrius vociferus*

### Stilts and Avocets

American Avocet\* *Recurvirostra americana*

### Sandpipers and Phalaropes

Greater Yellowlegs *Ttinga melanoleuca*  
Lesser Yellowlegs *Tringa flavipes*  
Solitary Sandpiper *Tringa solitaria*  
Willet\* *Catoptrophorus semipalmatus*  
Spotted Sandpiper\* *Actitis macularia*  
Upland Sandpiper\* *Bartramia longicauda*  
Hudsonian Godwit *Limosa haemastica*  
Marbled Godwit *Limosa fedoa*  
Ruddy Turnstone *Arenaria interpres*  
Red Knot *Calidris canutus*  
Sanderling *Calidris alba*  
Semipalmated Sandpiper *Calidris pusilla*  
Least Sandpiper *Calidris minutilla*  
White-rumped Sandpiper *Calidris fuscicollis*  
Baird's Sandpiper *Calidris bairdii*  
Pectoral Sandpiper *Calidris melanotos*  
Dunlin *Calidris alpina*  
Stilt Sandpiper *Calidris himantopus*  
Long-billed Dowitcher *Limnodromus scolopaceus*  
Common Snipe\* *Gallinago gallinago*  
Wilson's Phalarope\* *Phalaropus tricolor*  
Red-necked Phalarope *Phalaropus lobatus*

### Skuas, Jaegers, Gulls, and Terns

Franklin's Gull *Larus pipixcan*  
Bonaparte's Gull *Larus philadelphia*  
Ring-billed Gull *Larus delawarensis*  
California Gull *Larus californicus*  
Herring Gull *Larus argentatus*  
Caspian Tern *Sterna caspia*  
Common Tern *Sterna hirundo*  
Forster's Tern\* *Sterna forsteri*  
Black Tern\* *Chlidonias niger*

**Pigeons and Doves**

Rock Dove Introduced  
Mourning Dove\*

*Columba livia*  
*Zenaidura macroura*

**Cuckoos and Anis**

Black-billed Cuckoo\*  
Yellow-billed Cuckoo

*Coccyzus erythrophthalmus*  
*Coccyzus americanus*

**Typical Owls**

Eastern Screech-Owl  
Great Horned Owl\*  
Snowy Owl  
Long-eared Owl  
Short-eared Owl\*

*Otus asio*  
*Bubo virginianus*  
*Nyctea scandiaca*  
*Asio otus*  
*Asio flammeus*

**Nightjars**

Common Nighthawk  
Whip-poor-will

*Chordeiles minor*  
*Caprimulgus vociferus*

**Swifts**

Chimney Swift

*Chaetura pelagica*

**Hummingbirds**

Ruby-throated Hummingbird\*

*Archilochus colubris*

**Kingfisher**

Belted Kingfisher\*

*Ceryle alcyon*

**Woodpeckers**

Red-headed Woodpecker  
Downy Woodpecker\*  
Hairy Woodpecker\*  
Northern Flicker\*

*Melanerpes erythrocephalus*  
*Picoides pubescens*  
*Picoides villosus*  
*Colaptes auratus*

**Tyrant Flycatchers**

Olive-sided Flycatcher  
Eastern Wood-Pewee\*  
Willow Flycatcher\*  
Least Flycatcher\*  
Eastern Phoebe  
Great Crested Flycatcher  
Western Kingbird\*  
Eastern Kingbird\*

*Contopus cooperi*  
*Contopus virens*  
*Empidonax traillii*  
*Empidonax minimus*  
*Sayornis phoebe*  
*Myiarchus crinitus*  
*Tyrannus verticalis*  
*Tyrannus tyrannus*

**Shrikes**

Loggerhead Shrike  
Northern Shrike

*Lanius ludovicianus*  
*Lanius excubitor*

**Vireos**

Yellow-throated Vireo  
Warbling Vireo  
Philadelphia Vireo  
Red-eyed Vireo\*

*Vireo flavifrons*  
*Vireo gilvus*  
*Vireo philadelphicus*  
*Vireo olivaceus*

**Crows, Jays, and Magpies**

Blue Jay\*  
Black-billed Magpie  
American Crow\*

*Cyanocitta cristata*  
*Pica hudsonia*  
*Corvus brachyrhynchos*

**Larks**

Horned Lark\*

*Eremophila alpestris*

**Swallows**

Purple Martin\*  
Tree Swallow\*  
Northern Rough-winged Swallow\*  
Bank Swallow\*  
Cliff Swallow\*  
Barn Swallow\*

*Progne subis*  
*Tachycineta bicolor*  
*Stelgidopteryx serripennis*  
*Riparia riparia*  
*Petrochelidon pyrrhonota*  
*Hirundo rustica*

**Titmice and Chickadees**

Black-capped Chickadee\*

*Poecile atricapilla*

**Nuthatches**

Red-breasted Nuthatch  
White-breasted Nuthatch\*

*Sitta canadensis*  
*Sitta carolinensis*

**Creepers**

Brown Creeper\*

*Certhia americana*

**Wrens**

House Wren\*  
Winter Wren  
Sedge Wren\*  
Marsh Wren\*

*Troglodytes aedon*  
*Troglodytes troglodytes*  
*Cistothorus platensis*  
*Cistothorus palustris*

**Kinglets**

Golden-crowned Kinglet  
Ruby-crowned Kinglet

*Regulus satrapa*  
*Regulus calendula*

**Thrushes**

Eastern Bluebird  
Veery  
Gray-cheeked Thrush  
Swainson's Thrush  
Hermit Thrush  
American Robin\*

*Sialia sialis*  
*Catharus fuscescens*  
*Catharus minimus*  
*Catharus ustulatus*  
*Catharus guttatus*  
*Turdus migratorius*

**Mimic Thrushes**

Gray Catbird\*  
Brown Thrasher\*

*Dumetella carolinensis*  
*Toxostoma rufum*

**Starlings**

European Starling\* Introduced

*Sturnus vulgaris*

**Wagtails and Pipits**

American (Water) Pipit  
Sprague's Pipit

*Anthus rubescens*  
*Anthus spragueii*

**Waxwings**

Bohemian Waxwing  
Cedar Waxwing\*

*Bombycilla garrulus*  
*Bombycilla cedrorum*

**Wood Warblers**

Tennessee Warbler  
Orange-crowned Warbler  
Nashville Warbler  
Yellow Warbler\*  
Chestnut-sided Warbler  
Magnolia Warbler  
Yellow-rumped Warbler  
Black-throated Green Warbler  
Palm Warbler  
Bay-breasted Warbler  
Blackpoll Warbler  
Black-and-white Warbler  
American Redstart\*  
Ovenbird  
Northern Waterthrush  
Connecticut Warbler  
Mourning Warbler  
Common Yellowthroat\*  
Wilson's Warbler  
Canada Warbler  
Yellow-breasted Chat

*Vermivora peregrina*  
*Vermivora celata*  
*Vermivora ruficapilla*  
*Dendroica petechia*  
*Dendroica pensylvanica*  
*Dendroica magnolia*  
*Dendroica coronata*  
*Dendroica virens*  
*Dendroica palmarum*  
*Dendroica castanea*  
*Dendroica striata*  
*Mniotilta varia*  
*Setophaga ruticilla*  
*Seiurus aurocapillus*  
*Seiurus noveboracensis*  
*Oporornis agilis*  
*Oporornis philadelphia*  
*Geothlypis trichas*  
*Wilsonia pusilla*  
*Wilsonia canadensis*  
*Icteria virens*

**Tanagers**

Scarlet Tanager

*Piranga olivacea*

### **Sparrows and Towhees**

Eastern Towhee	<i>Pipilo erythrophthalmus</i>
American Tree Sparrow	<i>Spizella arborea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Clay-colored Sparrow*	<i>Spizella pallida</i>
Field Sparrow*	<i>Spizella pusilla</i>
Vesper Sparrow*	<i>Poocetes gramineus</i>
Lark Sparrow*	<i>Chondestes grammacus</i>
Lark Bunting*	<i>Calamospiza melanocorys</i>
Savannah Sparrow*	<i>Passerculus sandwichensis</i>
Grasshopper Sparrow*	<i>Ammodramus savannarum</i>
Baird's Sparrow*	<i>Ammodramus bairdii</i>
Le Conte's Sparrow	<i>Ammodramus leconteii</i>
Nelson's Sharp-tailed Sparrow	<i>Ammodramus nelsoni</i>
Fox Sparrow	<i>Passerella iliaca</i>
Song Sparrow*	<i>Melospiza melodia</i>
Lincoln's Sparrow	<i>Melospiza lincolni</i>
Swamp Sparrow	<i>Melospiza georgiana</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Harris' Sparrow	<i>Zonotrichia querula</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
Lapland Longspur*	<i>Calcarius lapponicus</i>
Smith's Longspur	<i>Calcarius pictus</i>
Chestnut-collared Longspur*	<i>Calcarius ornatus</i>

### **Cardinals, Grosbeaks, and Allies**

Snow Bunting	<i>Plectrophenax nivalis</i>
Rose-breasted Grosbeak*	<i>Pheucticus ludovicianus</i>
Indigo Bunting	<i>Passerina cyanea</i>
Dickcissel	<i>Spiza americana</i>

### **Blackbirds and Orioles**

Bobolink*	<i>Dolichonyx oryzivorus</i>
Red-winged Blackbird*	<i>Agelaius phoeniceus</i>
Western Meadowlark*	<i>Sturnella neglecta</i>
Yellow-headed Blackbird*	<i>Xanthocephalus xanthocephalus</i>
Rusty Blackbird	<i>Euphagus carolinus</i>
Brewer's Blackbird*	<i>Euphagus cyanocephalus</i>
Common Grackle*	<i>Quiscalus quiscula</i>
Brown-headed Cowbird*	<i>Molothrus ater</i>
Orchard Oriole*	<i>Icterus spurius</i>
Baltimore Oriole*	<i>Icterus galbula</i>

### **Finches**

Purple Finch	<i>Carpodacus purpureus</i>
House Finch	<i>Carpodacus mexicanus</i>
Red Crossbill	<i>Loxia curvirostra</i>
Common Redpoll	<i>Carduelis flammea</i>
Pine Siskin	<i>Carduelis pinus</i>
American Goldfinch*	<i>Carduelis tristis</i>
Evening Grosbeak	<i>Coccothraustes vespertinus</i>

### **Old World Sparrows**

House Sparrow*	Introduced	<i>Passer domesticus</i>
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## **Mammals with ranges within the area of Tewaukon National Wildlife Refuge Complex:**

\*Documented sightings

Arctic Shrew	<i>Sorex arcticus</i>
Masked Shrew	<i>Sorex cinereus</i>
Northern Water Shrew	<i>Sorex palustris</i>
Pygmy Shrew	<i>Microsorex hoyi</i>
Northern Short-tailed Shrew*	<i>Blarina brevicauda</i>
Least Shrew	<i>Cryptotis parva</i>
Keen's Myotis	<i>Myotis keeni</i>
Little Brown Myotis*	<i>Myotis lucifungus</i>
Eastern Red Bat	<i>Lasiurus borealis</i>
Hoary Bat	<i>Lasiurus cinereus</i>
Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Big Brown Bat	<i>Eptesicus fuscus</i>
Eastern Cottontail*	<i>Sylvilagus floridanus</i>
White-tailed Jackrabbit*	<i>Lepus townsendii</i>
Woodchuck*	<i>Marmota monax</i>
Franklin's Ground Squirrel*	<i>Citellus franklini</i>
Richardson's Ground Squirrel*	<i>Citellus richardsoni</i>
Thirteen-lined Ground Squirrel*	<i>Spermophilus tridecemlineatus</i>

Eastern Fox Squirrel*	<i>Sciurus niger</i>
Red Squirrel	<i>Tamiasciurus hudsonicus</i>
Plains Pocket Gopher*	<i>Geomys bursarius</i>
Plains Pocket Mouse	<i>Perognathus flavescens</i>
Beaver*	<i>Castor canadensis</i>
Western Harvest Mouse	<i>Reithrodontomys megalotis</i>
White-footed Mouse	<i>Peromyscus leucopus</i>
Deer Mouse*	<i>Peromyscus maniculatus</i>
Northern Grasshopper Mouse*	<i>Onychomys leucogaster</i>
Southern Red-backed Vole*	<i>Clethrionomys gapperi</i>
Prairie Vole	<i>Microtus ochrogaster</i>
Meadow Vole	<i>Microtus pennsylvanicus</i>
Common Muskrat*	<i>Ondatra zibethicus</i>
Meadow Jumping Mouse	<i>Zapus hudsonius</i>
Western Jumping Mouse*	<i>Zapus princeps</i>
Coyote*	<i>Canis latrans</i>
Red Fox*	<i>Vulpes vulpes</i>
Common Raccoon*	<i>Procyon lotor</i>
Long-tailed Weasel*	<i>Mustela frenata</i>
Least Weasel	<i>Mustela nivalis</i>
American Mink*	<i>Mustela vison</i>
American Badger*	<i>Taxidea taxus</i>
Striped Skunk*	<i>Mephitis mephitis</i>
White-tailed Deer*	<i>Odocoileus virginianus</i>
Moose*	<i>Alces alces</i>

### **Historical**

American Bison	<i>Bison bison</i>
Bobcat	<i>Lynx rufus</i>
Elk or Wapiti	<i>Cervus canadensis</i>
Gray Wolf	<i>Canis lupus</i>
Grizzly Bear	<i>Ursus horribilis</i>
Mule Deer	<i>Odocoileus hemionus</i>
Pronghorn Antelope	<i>Antilocapra americana</i>
River Otter	<i>Lutra canadensis</i>

## Amphibians and reptiles with ranges within the area of Tewaukon National Wildlife

### Refuge Complex:

\*Documented sightings

Mudpuppy*	<i>Necturus maculosus</i>
Tiger Salamander*	<i>Ambystoma tigrinum</i>
Eastern Tiger Salamander*	<i>Ambystoma tigrinum tigrinum</i>
Blotched Tiger Salamander*	<i>Ambystoma tigrinum melanostictum</i>
Gray Tiger Salamander	<i>Ambystoma tigrinum diaboli</i>
American Toad*	<i>Bufo americanus</i>
Great Plains Toad*	<i>Bufo cognatus</i>
Canadian Toad*	<i>Bufo hemiophrys</i>
Woodhouse's Toad	<i>Bufo woodhousii</i>
Gray Treefrog	<i>Hyla vericolor</i>
Western Chorus Frog*	<i>Pseudacris triseriata</i>
Common Snapping Turtle*	<i>Chelydra serpentina</i>
Painted Turtle*	<i>Chrysemys picta</i>
Prairie Skink*	<i>Eumeces septentrionalis</i>
Smooth Green Snake	<i>Opheodrys vernalis</i>
Red-bellied Snake*	<i>Storeria occipitomaculata</i>
Plains Garter Snake*	<i>Thamnophis radix</i>
Common Garter Snake*	<i>Thamnophis sirtalis</i>

## Native Fish in the Red River Basin (Peterka and Koel 1996)

Chestnut lamprey	<i>Ichthyomyzon castaneus</i>
Silver lamprey	<i>Ichthyomyzon unicuspis</i>
Lake sturgeon	<i>Acipenser fulvescens</i>
Longnose gar	<i>Lepisosteus osseus</i>
Bowfin	<i>Amia calva</i>
Goldeye	<i>Hiodon alosoides</i>
Mooneye	<i>Hiodon tergisus</i>
Ciscoe	<i>Coregonus artedii</i>
Whitefish	<i>Coregonus clupeaformis</i>
Quillback carpsucker	<i>Carpodes cyprinus</i>
White sucker	<i>Catostomus commersoni</i>
Northern hogsucker	<i>Hypentelium nigricans</i>
Bigmouth buffalo	<i>Ictiobus cyprinellus</i>
Silver redhorse	<i>Moxostoma anisurum</i>
Golden redhorse	<i>Moxostoma erythrurum</i>
Shorthead redhorse	<i>Moxostoma macrolepidotum</i>
Greater redhorse	<i>Moxostoma valenciennesi</i>
Central stoneroller	<i>Campostoma anomalum</i>
Largescale stoneroller	<i>Campostoma oligolepis</i>
Spotfin shiner	<i>Cyprinella spiloptera</i>
Brassy minnow	<i>Hybognathus hankinsoni</i>
Common shiner	<i>Luxilus comutus</i>
Silver Chub	<i>Macrhybopsis storeriana</i>
Pearl dace	<i>Margariscus margarita</i>
Hornyhead chub	<i>Nocomis biguttatus</i>
Golden shiner	<i>Notemigonus chrysoleucas</i>
Pugnose shiner	<i>Notropis anogenus</i>
Emerald shiner	<i>Notropis atherinoides</i>
River shiner	<i>Notropis blennioides</i>
Bigmouth shiner	<i>Notropis dorsalis</i>
Blackchin shiner	<i>Notropis heterodon</i>
Blacknose shiner	<i>Notropis heterolepis</i>
Spottail shiner	<i>Notropis hudsonius</i>
Rosyface shiner	<i>Notropis rubellus</i>
Sand shiner	<i>Notropis stramineus</i>
Weed shiner	<i>Notropis texanus</i>
Mimic shiner	<i>Notropis volucellus</i>
Northern redbelly dace	<i>Phoxinus eos</i>
Finescale dace	<i>Phoxinus neogaeus</i>
Bluntnose minnow	<i>Pimephales notatus</i>
Fathead minnow	<i>Platygobio gracilis</i>
Blacknose dace	<i>Rhinichthys atratulus</i>

Longnose dace
Creek chub
Black bullhead
Yellow bullhead
Brown bullhead
Channel catfish
Stonecat
Tadpole madtom
Central mudminnow
Northern pike
Banded killifish
Burbot
Trout-perch
Rock bass
Green sunfish
Pumpkinseed
Orangespotted sunfish
Bluegill
Smallmouth bass
Largemouth bass
White crappie
Black crappie
Rainbow darter
Iowa darter
Least darter
Johnny darter
Yellow perch
Logperch
Blackside darter
River darter
Sauger
Walleye
Freshwater drum
Mottled sculpin
Brook stickleback

<i>Rhinichthys cataractae</i>
<i>Semotilus atromaculatus</i>
<i>Ameiurus melas</i>
<i>Ameiurus natalis</i>
<i>Ameiurus nebulosus</i>
<i>Ictalurus punctatus</i>
<i>Noturus flavus</i>
<i>Noturus gyrinus</i>
<i>Umbra limi</i>
<i>Esox lucius</i>
<i>Fundulus diaphanus</i>
<i>Lota lota</i>
<i>Percopsis omiscomaycus</i>
<i>Ambloplites rupestris</i>
<i>Lepomis cyanellus</i>
<i>Lepomis gibbosus</i>
<i>Lepomis humilis</i>
<i>Lepomis macrochirus</i>
<i>Micropterus dolomieu</i>
<i>Micropterus salmoides</i>
<i>Pomoxis annularis</i>
<i>Pomoxis nigromaculatus</i>
<i>Etheostoma caeruleum</i>
<i>Etheostoma exile</i>
<i>Etheostoma microperca</i>
<i>Etheostoma nigrum</i>
<i>Perca flavescens</i>
<i>Percina caprodes</i>
<i>Percina maculata</i>
<i>Percina shumardi</i>
<i>Stizostedion canadense</i>
<i>Stizostedion vitreum</i>
<i>Aplocheilichthys grunniens</i>
<i>Cottus bairdi</i>
<i>Culaea inconstans</i>

## Introduced (nonnative) Fish

Rainbow trout	<i>Oncorhynchus mykiss</i>
Brown trout	<i>Salmo trutta</i>
Brook trout	<i>Salvelinus fontinalis</i>
Common carp	<i>Cyprinus carpio</i>
Flathead chub	<i>Platygobio gracilis</i>
Muskellunge	<i>Esox masquinongy</i>
Tiger muskie	<i>Esox lucius X E.masquinongy</i>
White bass	<i>Morone chrysops</i>

# Appendix B. Plant Species Mentioned in CCP

References for plant species names: McGregor et al, 1986

Alumroot	<i>Heuchera richardsonii</i>
American elm	<i>Ulmus americana</i>
Baltic rush	<i>Juncus balticus</i>
Bearded wheatgrass	<i>Agropyron subscundum</i>
Big bluestem	<i>Andropogon gerardii</i>
Black-eyed susan	<i>Rudbeckia hirta</i>
Blue grama	<i>Bouteloua gracilis</i>
Box elder	<i>Acer negundo</i>
Buckbrush	<i>Symphoricarpos occidentalis</i>
Broad-leaved cattail	<i>Typha latifolia</i>
Bur oak	<i>Quercus macrocarpa</i>
Canada goldenrod	<i>Solidago canadensis</i>
Chokecherry	<i>Prunus virginiana</i>
Fowl mannagrass	<i>Glyceria striata</i>
Green needlegrass	<i>Stipa viridula</i>
Grey headed coneflower	<i>Ratibidia pinnata</i>
Handsome sedge	<i>Carex formosa</i>
Hardstem bulrush	<i>Scirpus acutus</i>
Hoary puccoon	<i>Lithospermum canescens</i>
Hoary willow	<i>Salix candida</i>
Indian grass	<i>Sorghastrum nutans</i>
Intermediate wheatgrass	<i>Agropyron intermedium</i>
June grass	<i>Koeleria pyramidata</i>
Leadplant	<i>Amorpha canescens</i>
Little bluestem	<i>Andropogon scoparius</i>
Intermediate wheatgrass	<i>Agropyron intermedium</i>
Maximilian sunflower	<i>Helianthus maximiliani</i>
Meadow anemone	<i>Anemone canadensis</i>
Narrow-leaved blazing star	<i>Liatris punctata</i>
Needle-and-thread	<i>Stipa comata</i>
Nodding lady tresses	<i>Spiranthes cernua</i>
Northern reedgrass	<i>Calamagrostis stricta</i>
Pasture sage	<i>Artemisia ludoviciana</i>
Porcupine grass	<i>Stipa spartea</i>
Prairie cordgrass	<i>Spartina pectinata</i>
Prairie dogbane	<i>Apocynum cannabinum</i>
Prairie sandreed	<i>Calamovilfa longifolia</i>
Prairie smoke	<i>Geum triflorum</i>
Prairie wild rose	<i>Rosa arkansana</i>
Purple coneflower	<i>Echinacea angustifolia</i>
Purple prairie clover	<i>Dalea purpurea</i>
Red elm	<i>Ulmus rubra</i>
Sand bluestem	<i>Andropogon hallii</i>
Showy milkweed	<i>Asclepias speciosa</i>
Sideoats grama	<i>Bouteloua curtipendula</i>
Small white lady's slipper	<i>Cypripedium candidum</i>
Sneezeweed	<i>Helenium autumnale</i>
Softstem bulrush	<i>Scirpus tabernaemontani</i>
Stiff goldenrod	<i>Solidago rigida</i>
Stiff sunflower	<i>Helianthus rigidus</i>
Switchgrass	<i>Panicum virgatum</i>
Tall blazing star	<i>Liatris pycnostachya</i>
Thimbleweed	<i>Anemone cylindrica</i>
Western prairie fringed orchid	<i>Platanthera praeclara</i>
Western wheatgrass	<i>Agropyron smithii</i>
White ash	<i>Fraxinus americana</i>
White aster	<i>Aster ericoides</i>
White camass	<i>Zigadenus elegans</i>
White prairie clover	<i>Dalea candida</i>
Wild lily	<i>Lilium philadelphicum</i>
Yellow coneflower	<i>Ratibidia columnifera</i>

## Introduced

Alfalfa	<i>Medicago sativa</i>
Canada thistle	<i>Cirsium arvense</i>
Musk thistle	<i>Carduus nutans</i>
Bull thistle	<i>Cirsium vulgare</i>
Kentucky bluegrass	<i>Poa pratensis</i>
Leafy spurge	<i>Euphorbia esula</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Reed canary grass	<i>Phalaris arundinacea</i>
Russian olive	<i>Eleagnus angustifolia</i>
Smooth brome	<i>Bromus inermis</i>
White sweet clover	<i>Melilotus alba</i>
Yellow sweet clover	<i>Melilotus officinalis</i>

# Appendix C. ND State Rare and Unique Plant Species

These plant species are pulled from the ND Natural Heritage Program data files and only include species that are found in the Tewaukon WMD and are of greatest concern (S1 or S2).

## North Dakota Natural Heritage State Rankings

S1 - Critically imperiled in state

S2 - Imperiled in state

<u>Common Name</u>	<u>Scientific Name</u>	<u>ND Heritage Ranking</u>
Adder's-tongue fern	<i>Ophioglossum pusillum</i>	S2
Bicknells sunrose	<i>Helianthemum bicknellii</i>	S1
Blue Cohosh	<i>Caulophyllum thalictroides</i>	S1
Bog Violet	<i>Viola conspersa</i>	S2
Brook flatsedge	<i>Cyperus bipartitus</i>	S1S2
Delicate sedge	<i>Carex leptalea</i>	S2
Dotted smartweed	<i>Polygonum punctatum</i>	S2
Downy hawthorn	<i>Crataegus mollis</i>	S1
Dutchman's breeches	<i>Dicentra cucullaria</i>	S1
Dwarf spikerush	<i>Eleocharis parvula</i>	S1S2
Early Panic-grass	<i>Panicum praecocius</i>	S2
Foxtail sedge	<i>Carex alopecoidea</i>	S2
Green kneeled cottongrass	<i>Eriophorum viridicarinum</i>	S1
Handsome sedge	<i>Carex formosa</i>	S1
Hooked crowfoot	<i>Ranunculus recurvatus</i>	S1
Large yellow lady's slipper	<i>Cypripedium planiipetalum</i>	S2
Large-leaved pondweed	<i>Potamogeton amplifolius</i>	S2
Loesel's Twayblade	<i>Liparis loeselii</i>	S2
Low flatsedge	<i>Cyperus diandrus</i>	S2
Marsh bellflower	<i>Campanula aparinoides</i>	S2
Marsh horsetail	<i>Equisetum palustre</i>	S2
Meadow horsetail	<i>Equisetum pratense</i>	S2
Meadow onion	<i>Allium canadense</i>	S1
Moonwort	<i>Botrychium minganense</i>	S1
Nodding ladies tresses	<i>Spiranthes cernua</i>	S1
Oakfern	<i>Gymnocarpium dryopteris</i>	S1
Prairie mimosa	<i>Desmanthus illinoensis</i>	S1
Purple sandgrass	<i>Triplasis purpurea</i>	S1
Richardson's sedge	<i>Carex richardsonii</i>	S1
Sensitive fern	<i>Onoclea sensibilis</i>	S2
Showy lady's slipper	<i>Cypripedium reginae</i>	S2
Sicklepod	<i>Arabis canadensis</i>	S1
Slendar cottongrass	<i>Eriophorum gracile</i>	S1
Small yellow lady's slipper	<i>Cypripedium parviflorum</i>	S2
Spiral sedge	<i>Carex convoluta</i>	S1
Spring cress	<i>Cardamine bulbosa</i>	S1
Southern watermeal	<i>Wolffia columbiana</i>	S2
Spiny naiad	<i>Najas marina</i>	S1
Stout wood reed	<i>Cinna arundinacea</i>	S1
Sweetflag	<i>Acorus calamus</i>	S2
Upright pinweed	<i>Lechea stricta</i>	S1
Wahoo	<i>Euonymus atropurpureus</i>	S2
W. Prairie fringed orchid	<i>Patanthera praeclara</i>	S2
White lady's slipper	<i>Cypripedium candidum</i>	S2
Wooly beach-heather	<i>Hudsonia tomentosa</i>	S1
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	S1S2

# ***Appendix D. Tewaukon Complex Water Rights***

## **Tewaukon National Wildlife Refuge Water Rights**

Declaration of Filing dated September 1, 1934, for Lake Tewaukon (Pool 1) and East and West White Lakes (Pools 12 and 11) (including Cutlers Marsh - Pool 2) for 7,198 acre-feet storage and 4,251 acre-feet seasonal use from the Wild Rice River.

Declaration of Filing dated September 1, 1934, for 397 acre-feet storage and 312 acre-feet seasonal use, for Cloud's Lake, now called Hepi Lake (Pool 8), from an unnamed tributary. Water use in Pools 5 through 10 are covered under this Right, with Hepi Lake to be drawn down to fill these pools.

Permit No. 1261, for 7,139 acre-feet from the Wild Rice River (4,852 acre-feet storage and 2,287 acre-feet seasonal use) for additional storage and seasonal use in Lake Tewaukon, Cutlers Marsh, and West White Lake; 409 acre-feet seasonal use to replace water diverted from the watershed by Sargent County Water Conservation District project; and total storage and seasonal use for Pools 3 and 4. The priority date is December 28, 1964.

Permit No. 1262, for 1,130 acre-feet (635 acre-feet storage and 495 acre-feet seasonal use) for Sprague Lake (Pool 14) from an unnamed tributary with a priority date of December 28, 1964.

Permit No. 1263, for 236 acre-feet for Mann Lake (Pool 13) and 450 acre-feet for Horseshoe Slough (Pool 16) for a total of 686 acre-feet from the Wild Rice River with a priority date of December 28, 1964.

Permit No. 3816, for 571 acre-feet (474 acre-feet storage and 97 acre-feet annual use) from the Wild Rice River for the Nickeson Bottoms, a tract owned jointly by ND Game and Fish Department, Bureau of Reclamation, and the Service. The priority date is August 15, 1985.

## **Wild Rice Easement Refuge Water Rights**

Declaration of Filing dated September 1, 1934, for 80 acre-feet storage and 120 acre-feet seasonal use from the Wild Rice River.

## **Storm Lake Easement Refuge Water Rights**

Declaration of Filing dated September 1, 1934, for 729 acre-feet storage and 516 acre-feet seasonal use from an unnamed tributary within the Wild Rice/Red River basin.

# ***Appendix E.***

## ***Key Legislation/Policies***

(in alphabetical order)

**American Indian Religious Freedom Act (1978):** Directs agencies to consult with native traditional religious leaders to determine appropriate policy changes necessary to protect and preserve Native American religious cultural rights and practices.

**Americans With Disabilities Act (1992):** Prohibits discrimination in public accommodations and services.

**Antiquities Act (1906):** Authorizes the scientific investigation of antiquities on Federal land and provides penalties for unauthorized removal of objects taken or collected without a permit.

**Archaeological and Historic Preservation Act (1974):** Directs the preservation of historic and archaeological data in Federal construction projects.

**Archaeological Resources Protection Act (1979) as amended:** Protects materials of archaeological interest from unauthorized removal or destruction and requires Federal managers to develop plans and schedules to locate archaeological resources.

**Architectural Barriers Act (1968):** Requires federally owned, leased, or funded buildings and facilities to be accessible to persons with disabilities.

**Bald and Golden Eagle Protection Act (1940):** The Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. The enacting clause of the original Act stated that the Continental Congress in 1782 adopted the bald eagle as the national symbol; that the bald eagle became the symbolic representation of a new nation and the American ideals of freedom; and that the bald eagle threatened with extinction.

**Clean Water Act (1977):** Requires consultation with the Corps of Engineers (404 permits) for major wetland modifications.

**Emergency Wetlands Resources Act (1986):** The purpose of the Act is “To promote the conservation of migratory waterfowl and to offset or prevent the serious loss of wetlands by the acquisition of wetlands and other essential habitat, and for other purposes.”

**Endangered Species Act (1973):** Requires all Federal agencies to carry out programs for the conservation of endangered and threatened species.

**Executive Order 11987, Exotic Organisms (1977):** This Executive Order requires Federal agencies, to the extent permitted by law, to: restrict the introduction of exotic species into the natural ecosystems on lands and waters owned or leased by the United States; encourage States, local governments, and private citizens to prevent the introduction of exotic species into natural ecosystems of the U.S.; restrict the importation and introduction of exotic species into any natural U.S. ecosystems as a result of activities they undertake, fund, or authorize; and restrict the use of Federal funds, programs, or authorities to export native species for introduction into ecosystems outside the U.S. where they do not occur naturally.

**Executive Order 11988, Floodplain Management (1977):** Each Federal agency shall provide leadership and take action to reduce the risk of flood loss and minimize the impact of floods on human safety, and preserve the natural and beneficial values served by the floodplains.

**Executive Order 11990, Protection of Wetlands (1977):** This order directs all Federal agencies to avoid, if possible, adverse impacts to wetlands and to preserve and enhance the natural and beneficial values of wetlands. Each agency shall avoid undertaking or assisting in wetland construction projects unless the head of the agency determines that there is no practicable alternative to such construction and that the proposed action includes measures to minimize harm. Also, agencies shall provide opportunity for early public review of proposals for construction in wetlands, including those projects not requiring an EIS.

**Executive Order 12898, Environmental Justice (1994):** This order provides minority and low-income populations an opportunity to comment on the development and design of Reclamation activities. Federal agencies shall make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

**Executive Order 12996 Management and General Public Use of the National Wildlife Refuge System (1996):** Defines the mission, purpose, and priority public uses of the National Wildlife Refuge System. It also presents four principles to guide management of the System.

**Executive Order 13007 Indian Sacred Sites (1996):** Directs Federal land management agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, avoid adversely affecting the physical integrity of such sacred sites, and where appropriate, maintain the confidentiality of sacred sites.

**Executive Order 13084, Consultation and Coordination With Indian Tribal Governments (1998):** The United States has a unique legal relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive orders, and court decisions. Since the formation of the Union, the United States has recognized Indian tribes as domestic dependent nations under its protection. In treaties, our Nation has guaranteed the right of Indian tribes to self-government. As domestic dependent nations, Indian tribes exercise inherent sovereign powers over their members and territory. The United States continues to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, trust resources, and Indian tribal treaty and other rights.

**Federal Aid in Fish Restoration Act of August 9, 1950 (16 U.S.C. 777-777k), as amended:** This Act, commonly referred to as the “Dingell-Johnson Act”, provides aid to the States for management and restoration of fish having material value in connection with sport or recreation in marine or fresh waters. Funds from an excise tax on certain items of sport fishing tackle are appropriated to the Secretary of Interior annually and apportioned to States on a formula basis for approved land acquisition, research, development and management projects.

**Federal Aid in Wildlife Restoration Act of September 2, 1937 (16 U.S.C. 669-669i), as amended:** This Act, commonly referred to as the “Pittman-Robertson Act”, provides to States for game and nongame wildlife restoration work. Funds from an excise tax on sporting arms and ammunition are appropriated to the Secretary of the Interior annually and apportioned to States on a formula basis for approved land acquisition, research, development and management projects and hunter safety programs.

**Federal Noxious Weed Act (1990):** Requires the use of integrated management systems to control or contain undesirable plant species; and an interdisciplinary approach with the cooperation of other Federal and State agencies.

**Fish and Wildlife Coordination Act of March 10, 1934 (16 U.S.C. 661-66c), as amended:** This Act authorizes the Secretary of the Interior to assist Federal, State and other agencies in development, protection, rearing and stocking fish and wildlife on Federal lands, and to study effects of pollution on fish and wildlife. The Act also requires consultation with the Fish and Wildlife Service and the wildlife agency of any State wherein the waters of any stream or other water body are proposed to be impounded, diverted, channelized or otherwise controlled or modified by any Federal agency, or any private agency under Federal permit or license, with a view to preventing loss of, or damage to, wildlife resources in connection with such water resource projects. The Act further authorizes Federal water resource agencies to acquire lands or interests in connection with water use projects specifically for mitigation and enhancement of fish and wildlife.

**Fish and Wildlife Act (1956):** Established a comprehensive national fish and wildlife policy and broadened the authority for acquisition and development of refuges.

**Fish and Wildlife Coordination Act (1958):** Allows the Fish and Wildlife Service to enter into agreements with private landowners for wildlife management purposes.

**Food Security Act of 1985 (Title XII, Public Law 99-198, 99 Stat. 1354; December 23, 1985), as amended:** This Act authorizes acquisition of easements in real property for a term of not less than 50 years for conservation, recreation, and wildlife purposes.

**Land and Water Conservation Fund Act (1965):** Uses the receipts from the sale of surplus Federal land, outer continental shelf oil and gas sales, and other sources for land acquisition under several authorities.

**Migratory Bird Conservation Act (1929):** Establishes procedures for acquisition by purchase, rental, or gift of areas approved by the Migratory Bird Conservation Commission.

**Migratory Bird Hunting and Conservation Stamp Act (1934):** Authorized the requirement of an annual stamp for the hunting of waterfowl whose proceeds go towards the purchase of habitat for waterfowl and other wildlife. Duck stamps are also purchased for entry into some refuges, by conservationist and for stamp collections. Authorized the opening of part of a refuge to waterfowl hunting.

**Migratory Bird Treaty Act (1918):** Designates the protection of migratory birds as a Federal responsibility. This Act enables the setting of seasons, and other regulations including the closing of areas, Federal or nonfederal, to the hunting of migratory birds.

**National Environmental Policy Act (1969):** Requires the disclosure of the environmental impacts of any major Federal action significantly affecting the quality of the human environment.

**National Historic Preservation Act (1966) as amended:** Establishes as policy that the Federal Government is to provide leadership in the preservation of the nation's prehistoric and historic resources.

**National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. 668dd-668ee. (Refuge Administration Act):** Defines the National Wildlife Refuge System and authorizes the Secretary to permit any use of a refuge provided such use is compatible with the major purposes for which the refuge was established. The Refuge Improvement Act clearly defines a unifying mission for the Refuge System; establishes the legitimacy and appropriateness of the six priority public uses (hunting, fishing, wildlife observation and photography, or environmental education and interpretation); establishes a formal process for determining compatibility; established the responsibilities of the Secretary of Interior for managing and protecting the System; and requires a Comprehensive Conservation Plan for each refuge by the year 2012. This Act amended portions of the Refuge Recreation Act and National Wildlife Refuge System Administration Act of 1966.

**National Wildlife Refuge System Improvement Act of 1997:** Sets the mission and administrative policy for all refuges in the National Wildlife Refuge System. Clearly defines a unifying mission for the Refuge System; establishes the legitimacy and appropriateness of the six priority public uses (hunting, fishing, wildlife observation and photography, or environmental education and interpretation); establishes a formal process for determining compatibility; establishes the responsibilities of the Secretary of the Interior for managing and protecting the System; and requires a Comprehensive Conservation Plan for each refuge by the year 2012. This Act amended portions of the Refuge Recreation Act and National Wildlife Refuge System Administration Act of 1966.

**Native American Graves Protection and Repatriation Act (1990):** Requires Federal agencies and museums to inventory, determine ownership of, and repatriate cultural items under their control or possession.

**North American Wetlands Conservation Act of December 13, 1989 (16 U.S.C. 4401-4412).** Public Law 101-233 provides funding and administrative direction for implementation of the North American Waterfowl Management Plan and the Tripartite Agreement on wetlands between Canada, U.S. and Mexico.

**Refuge Recreation Act (1962):** Allows the use of refuges for recreation when such uses are compatible with the refuge's primary purposes and when sufficient funds are available to manage the uses.

**Rehabilitation Act (1973):** Requires programmatic accessibility in addition to physical accessibility for all facilities and programs funded by the Federal government to ensure that anybody can participate in any program.

**Water Resources Planning Act (1965):** This Act establishes a cabinet-level Water Resources Council to study, coordinate and review water and related land resources requirements, policies and plans, and authorizes funding for states to plan and implement related programs.

# **Appendix F**

## ***Finding of No Significant Impact and Environmental Action Memorandum***

### **Tewaukon National Wildlife Refuge Complex Final Comprehensive Conservation Plan**

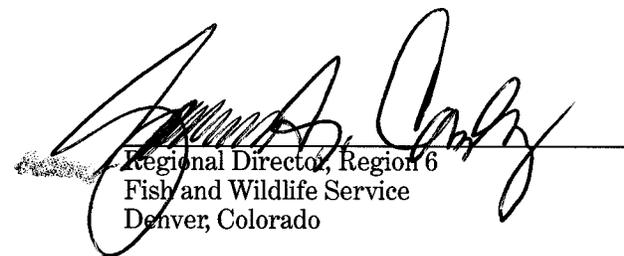
Three management alternatives for Tewaukon National Wildlife Refuge Complex were presented and evaluated as to their effectiveness in achieving Refuge purposes and their impact on the human environment. A "Custodial" alternative (discontinue management actions and close to public use), a "No Action" alternative (maintain the status quo), and an "Implement the CCP" alternative were assessed in the Environmental Assessment. Based on this analysis and comments received, I have selected the preferred alternative (implement the CCP) to be enacted on the Complex.

The preferred alternative was selected because it best meets the purposes of the Complex to manage for migratory birds, assist in the protection and restoration of native prairie habitats, provide public access for wildlife-dependent recreation, and provides environmental education opportunities related to fish and wildlife resources.

I find that the proposed action will not have a significant impact on the human environment in accordance with Section 102 of the National Environmental Policy Act and in accordance with the Service's Administrative Manual {30 Ams.9B(2)(d)} and concluded that an environmental impact statement is not necessary.

My rationale for this finding follows:

- The preferred alternative will not adversely impact endangered or threatened species or their habitats.
- The preferred alternative will not adversely affect or cause the loss or destruction of any archaeological or paleontological resources.
- The preferred alternative will have no adverse impact on wetlands or floodplains.
- The preferred alternative will have a positive effect on habitat and wildlife management, prairie wetland management, public use and recreation, and environmental education through restoration of grassland and wetland habitats, biological data gathering and analysis, facilities improvements, and effective program evaluation.
- The preferred alternative will have no negative impact on wildlife or wildlife habitat.
- No impact will occur on minority and low-income populations of communities.

  
Regional Director, Region 6  
Fish and Wildlife Service  
Denver, Colorado

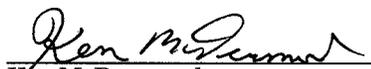
9/27/00  
Date

United States Fish and Wildlife Service  
Region 6  
Environmental Action Memorandum

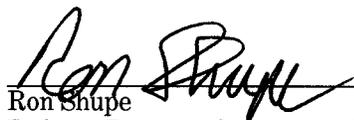
Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that implementing the Tewaukon NWR Complex CCP will not have a significant environmental effect, based on the Tewaukon NWR Complex Environmental Assessment and Finding of No Significant Impact, and is therefore authorized to be implemented.

  
Regional Director, Region 6  
Fish and Wildlife Service  
Denver, Colorado

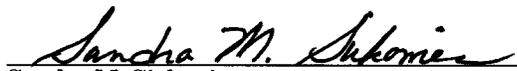
9/27/00  
Date

  
Ken McDermond  
Regional Chief, National Wildlife Refuge System  
Refuges and Wildlife

Sept. 26, 2000  
Date

  
Ron Shupe  
Refuges Program Supervisor (ND/SD)

Sept. 26, 2000  
Date

  
Sandra M. Siekaniec  
Refuge Manager  
Tewaukon NWR Complex

Sept 25, 2000  
Date

# Appendix G. Compatibility Determinations

Station Name: *Tewaukon National Wildlife Refuge Complex*

Date Established:

*Tewaukon National Wildlife Refuge: June 26, 1945*

*Tewaukon Wetland Management District: August 1, 1958*

**Establishing and Acquisition Authorities:** The Tewaukon National Wildlife Refuge, located in Sargent County in southeastern North Dakota, was originally established as an easement refuge by Executive Order No. 6910 on November 26, 1934. Tewaukon was then established as a Refuge under the authority of Public Land Order 286 on June 26, 1945; additional lands were added with the approval of the Migratory Bird Conservation commission, under the authority of the Migratory Bird Conservation Act.

Tewaukon Wetland Management District was authorized by Congress with the passage of Public Law 85-585 on August 1, 1958. The first tract of land acquired in the District was in 1961. Additional lands were added to the District under the authority of the Migratory Bird Hunting and Conservation Stamp Tax. The Tewaukon WMD is comprised of approximately of 105 Waterfowl Production Areas (WPA's) (over 14,000 acres), 35,000 acres of wetland easements, 10,400 acres of grassland easements, and 112 wetland and 45 acres of grassland in FmHA easements located in Richland, Ransom, and Sargent Counties, North Dakota. Enabling legislation includes: the Migratory Bird Hunting and Conservation Stamp Act (16 USC 718-718h, 48 Stat. 452), and the Wetlands Loan Act (16 USC 715k-3 - 715k-5; Stat. 813). Funds appropriated under the Wetlands Loan Act, are merged with duck stamp receipts in the fund and appropriated to the Secretary for the acquisition of migratory bird refuges under provisions of the Migratory Bird Conservation Act (16 USC 715 et seq.; 45 Stat. 1222), as amended, and since August 1, 1958, (PL. 85-585; 72 Stat. 486) for acquisition of "Waterfowl Production Areas."

**Purpose(s) for which Established:** For lands acquired under the Executive Order, dated April 24, 1943, the purpose of the acquisition is to reserve and set apart certain public lands for the use of the Department of the Interior as a refuge and breeding ground for migratory birds and other wildlife.

- For lands acquired under Public Land Order 286, dated June 26, 1945, the purpose of the acquisition is "... as a refuge and breeding ground for migratory birds and other wildlife..."
- For lands acquired under the Migratory Bird Conservation Act, 16 U.S.C. S 715d, as amended, the purpose of acquisition is "... for uses as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. S 715d (Migratory Bird Conservation Act)
- For District lands acquired under the Public Law 85-585, dated August 1, 1958, the purpose of the acquisition is to assure the continued availability of habitat capable of supporting migratory bird populations at desired levels.
- For lands acquired under the Migratory Bird Hunting and Conservation Stamp Tax, 16 U.S.C. S 718, as amended, for the purpose: "... as Waterfowl Production Areas" subject to go ... all of the provisions of such Act [Migratory Bird Conservation Act] ... except the inviolate sanctuary provisions ... 11 16 U.S.C. S 718© (Migratory Bird Hunting and Conservation Stamp Tax).

**National Wildlife Refuge System Mission:** The Mission of the National Wildlife Refuge System is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

## **Description of Proposed Use: Wildlife Observation, Wildlife Photography, Interpretation and Environmental Education**

Provide opportunities that support wildlife-dependent recreation, education, and outreach to the public. From general observations conducted in the Refuge visitor center and along Lake Tewaukon and Sprague Lake, it is estimated that over 20,000 visitors utilize Tewaukon National Wildlife Refuge annually for wildlife/wildland observation, photography, interpretation/education, picnicking, and hiking. The majority of the use is focused on the east side of County Road 12 which includes the visitor center, Lake Tewaukon, the Prairie Lake Auto Tour, several picnic areas, and a scenic overlook. The District has substantially less visitation for the above uses (300 visits). A recent addition of a prairie walking trail at the Hartleben WPA is expected to increase this use.

Interpretation and environmental education services are provided when staff are available and include talks or guided tours for groups such as school groups, scouts, 4-H clubs, and special groups. The public is invited to participate in Refuge open houses and other events throughout the year.

The Comprehensive Conservation Plan proposes to continue with the above uses and add the following to improve interpretation and access for visitors:

- Develop a wildlife observation platform and interpretive hiking trail.
- Improve visitor center availability to visitors with staff and expansion of hours of operation during times of high use.
- Improve and expand the visitor center displays and group presentation area.
- Develop new Refuge brochures and update old brochures to new Service standards.
- Develop a tallgrass prairie interpretive trail near the visitor center.
- Develop and maintain a web site for the Complex.

**Availability of resources:**

Currently, sufficient resources are available to continue the existing wildlife-dependent recreation. The additional items to be added from the Comprehensive Conservation Plan are tied to funding requests in the form of the attached RONS projects (Appendix J).

**Anticipated impacts of the use:**

Some disturbance to wildlife will occur in areas of the Refuge frequented by visitors. However, with limiting of areas open to public use and Refuge road closures at specific times of the year, these impacts can be lessened (See CCP Wildlife Disturbance Section). Monitoring of activities and their impacts and limiting the location and time of year for wildlife-dependent visits will maintain use at an acceptable level.

**Justification:**

Based upon biological impacts described in the CCP and in the Environmental Assessment, it is determined that wildlife observation, wildlife photography, interpretation, and environmental education within the Tewaukon Complex will not materially interfere with or detract from the purposes for which this Complex was established.

One of the secondary goals of the National Wildlife Refuge System is to provide opportunities for the public to develop an understanding and appreciation for wildlife when found compatible. The four uses are identified as priority public uses in the National Wildlife Refuge System Improvement Act of 1997 and will help meet that goal at the Tewaukon NWR Complex with only minimal conflicts with the wildlife conservation mission of the Refuge System.

**Determination:** Wildlife Observation, Wildlife Photography, Interpretation, and Environmental Education are compatible.

**Stipulations necessary to ensure compatibility:**

- During peak concentrations of migratory waterbirds, areas will be closed and access limited to minimize any wildlife disturbance.
- Monitor use, regulate access and maintain necessary facilities to prevent habitat degradation in high public use areas.
- Monitor levels of use and effects on wildlife.
- Implement additional educational and interpretive programs that discuss wildlife disturbance.

## **Description of proposed use: Recreational Fishing**

Lake Tewaukon and Sprague Lake are utilized as open water rest areas for migratory birds. A secondary use is public sport fishing according to State and Federal Regulations. Year-round bank fishing is allowed with seasonally limited access and boat fishing from May 1 through September 30 to avoid conflicts with migratory bird use of the Lakes. Visitors participating in this use at the Refuge are estimated at 9,000 per year. Facilities available include five boat ramps (two are accessible), picnic areas, fishing docks, informational kiosks, parking areas, and rest room facilities. A kids fishing day is held in conjunction with the Tewaukon Field Day sponsored by the ND Extension Service. A fishing tournament is held each year by local sportsmen's groups with proceeds going towards Lake developments. The CCP does not propose any additional improvements beyond maintaining the existing use. The District Waterfowl Production Areas are legally open to fishing as per their establishing legislation and the Federal Code of Regulations.

### **Availability of resources:**

Currently, sufficient resources are available to continue the existing recreational fishing.

### **Anticipated impacts of the use:**

Fishing and other human activities cause disturbance to wildlife (see CCP Section on Wildlife Disturbance). Impacts could occur during waterbird nesting season. However, the physical characteristics of these lakes and their shorelines make them poor areas for breeding waterbird populations.

### **Justification:**

When Refuge and flowage easements were secured in the 1930s, it was with the understanding that recreational fishing use of the lake would be continued and improved. Recreational fishing, on Lake Tewaukon and Sprague Lake, causes minimal disturbances for waterbirds and benefits other wildlife species.

Based upon biological impacts described in the CCP and in the Environmental Assessment, it is determined that recreational fishing within the Tewaukon Complex will not materially interfere with or detract from the purposes for which this Complex was established.

One of the secondary goals of the National Wildlife Refuge System is to provide opportunities for public fishing when compatible, and it is identified as a priority public use in the National Wildlife Refuge System Improvement Act of 1997. Recreational fishing at the Tewaukon NWR Complex will support this goal with only minimal conflicts with the wildlife conservation mission of the Refuge System.

**Determination:** Recreational fishing is compatible.

### **Stipulations necessary to ensure compatibility:**

- Both lakes will be closed to boat fishing and open to limited bank fishing during the spring and fall migrations periods for waterbirds.
- Parking lot, road, trail, and related access facilities will be maintained as necessary to prevent erosion or habitat damage.
- No additional lakes or marshes on the Refuge will be open to fishing.
- Boat use will be limited to recreational fishing (no jet skis, power boating, etc.).
- Limit access for ice fishing to established areas (boat ramps and normal County and township roads).
- Waterfowl production areas will maintain only natural fish populations (no stocking).
- Monitor existing use to ensure that facilities are adequate and disturbance to wildlife continues to be minimal.

## **Description of proposed use: Recreational Hunting**

Tewaukon National Wildlife Refuge is open to pheasant hunting and white-tailed deer hunting in the fall. Visitation for these activities is estimated at 4,000. Parking areas are made available for this use. The District Waterfowl Production Areas are legally open to hunting as per their establishing legislation and the Federal Code of Regulations. The CCP does not propose any additional improvements beyond maintaining the existing use.

### **Availability of resources:**

Currently, sufficient resources are available to continue the existing recreational hunting.

### **Anticipated impacts of the use:**

Recreational hunting will remove individual animals from the wildlife populations ensuring that carrying capacity is not exceeded (possibly impacting other species habitat). Some wildlife disturbance will occur during the hunting season.

### **Justification:**

Hunting is a legitimate wildlife management tool that is used to manage deer populations. This is necessary to ensure that populations above the carrying capacity are controlled to reduce impacts to habitat and other wildlife that also depend upon that habitat. Some wildlife disturbance will occur during the hunting seasons. Proper zoning, regulations, and Refuge seasons will be designated to minimize any negative impact to wildlife populations using the Refuge. Based upon biological impacts presented in the CCP and in the Environmental Assessment, it is determined that recreational hunting within the Tewaukon Complex will not materially interfere with or detract from the purposes for which this Complex was established.

One of the secondary goals of the National Wildlife Refuge System is to provide opportunities for public hunting when it is found to be compatible, and it is identified as a priority public use in the National Wildlife Refuge System Improvement Act of 1997. Recreational pheasant hunting on the Tewaukon NWR Complex will support this goal, with only minimal conflicts with the wildlife conservation mission of the Refuge System and purposes of the Refuge.

**Determination:** Recreational hunting is compatible.

### **Stipulations necessary to ensure compatibility:**

- Use of nontoxic shot is required on the Refuge for pheasant hunting and the District for waterfowl hunting and upland game hunting to minimize exposure to lead by waterfowl.
- Hunting must be in accordance with Federal and State regulations (seasons predominately open after migrating waterbirds have left the Complex).
- Hunting on Tewaukon NWR will take place in a manner that will minimize disturbance to migrating waterbirds.
- Hunting will be evaluated to provide a safe hunt (reduce the conflict of the variety of hunting seasons).
- The Refuge deer hunt will be coordinated with the ND Game and Fish Department to determine number of permits to manage the populations.
- Monitor these uses to assure they do not interfere with and are compatible with other wildlife-dependent recreational activities.

## **Description of proposed use: Trapping**

Provide for trapping on the Tewaukon National Wildlife Refuge and on District lands. Provide for spring predator trapping to improve upland nesting bird success on the Complex. The District Waterfowl Production Areas are legally open to recreational trapping according to State regulations as per their establishing legislation and the Federal Code of Regulations.

### **Availability of resources:**

Currently, insufficient funding and staffing exists to manage the recreational trapping and spring predator trapping on the Complex. Trapping funding requests are described in the Comprehensive Conservation Plan as Refuge Operation Needs System (RONS) projects (Appendix J). Spring predator trapping requires staff, funding of contracted trapper, monitoring of predator populations, and upland bird production.

### **Anticipated impacts of the use:**

Trapping removes individual animals from wildlife populations, and predator populations are temporarily reduced up to and during the nesting season. Spring predator trapping allows for the increased nesting success of upland nesting birds. Direct mortality would occur of target animals, some vegetation trampling by personnel, and some minor increase in general wildlife disturbance in trapping areas due to human and vehicular traffic. The possibility of injury exists to nontarget wildlife that are caught in traps such as badgers, weasels, rabbits, domestic dogs, and feral cats.

### **Justification:**

Recreational trapping removes excessive wildlife populations and provides public recreational opportunity. Spring predator trapping will benefit upland nesting birds, including many species of waterfowl, when predator populations are reduced during the nesting season. Long-term negative effects to these predator populations will not take place as conducted trapping activities cannot feasibly remove enough animals to permanently impact these populations. An environmental assessment of trapping is available at the Refuge office for review (U.S. Fish and Wildlife Service 1994).

**Determination:** Trapping is compatible with additional funding.

### **Stipulations necessary to ensure compatibility:**

- Trapping will be conducted in a manner that will remove only targeted upland nest predators.
- Recreational trapping will occur within regular State seasons and will not conflict with other public uses.
- Trapping for predators outside of the regular season will be coordinated with the ND Game and Fish Department.
- Detailed trapping records will be maintained for Refuge trappers, staff trappers, and contracted trappers.
- No trapping will take place in areas of high public use especially surrounding Lake Tewaukon and Sprague Lake.
- No exposed bait would be placed near traps that might attract eagles or other raptors.
- Traps used will be legal traps as per the State of North Dakota and snares for specialize spring trapping.
- Traps must be checked at least once every 24 hours.
- Monitoring of nest success in areas targeted for predator removal to determine effectiveness and need for next years trapping (only when nest success falls below 30 percent Mayfield will trapping be conducted - see section on Waterfowl in CCP).

## **Description of proposed use: Management Tools with Economic Uses: Farming, Grazing, Haying**

Continue upland management activities that are conducted under permit by private individuals such as haying, grazing, and farming. Currently, these economic uses are used as management tools to manage habitat for wildlife. Up to 500 acres are farmed each year in the Complex including Refuge fields and food plots on WPA's. Cattle grazing is currently used as a management tool on the Gainor WPA (about 800 acres) and sheep grazing is used on the Refuge and District to control leafy spurge (about 200 acres). Haying is used on the Refuge and District to improve grassland conditions with approximately 450 acres hayed per year by cooperators. The CCP proposes to maintain the number of crop acres and may include increasing grazing and haying if these tools are required for improving habitat. Projects in the CCP will improve the administrative and monitoring aspects of these programs.

### **Availability of resources:**

Current resources are stretched thin to maintain existing programs. If additional staff support was available, these programs could be expanded to utilize these tools more effectively and monitoring could be accomplished. RONS Project Number 1, listed in Appendix J, would accomplish the goals of the CCP and improve the existing program.

### **Anticipated impacts of the use:**

Current management affects approximately 10 percent of the upland habitat annually. This would increase to approximately 15 percent under the CCP. This management is not evenly distributed over the entire Complex, and the percentage of upland receiving optimum management is considered to be much less than 10 percent. General habitat conditions on the Complex would gradually deteriorate due to long periods of non-prescribed rest. While some wildlife disturbance does occur with these activities, the benefits to wildlife far outweigh these disturbances. No cultural resources would be impacted. No impact to endangered species should occur; however, habitat suitability for the Dakota skipper, regal fritillary, and white lady's slipper would continue to deteriorate without some form of defoliation treatment.

### **Justification:**

Upland habitat conditions would deteriorate without the use of a full range of upland management tools. Exotic and noxious weed species would increase, and habitat diversity would decrease causing a decline in wildlife diversity. Migratory bird production and diversity would decrease as habitat suitability for these species declined. Consumptive and non-consumptive wildlife oriented recreational opportunities would decline as wildlife diversity and populations decreased. Although the prescribed management techniques listed in the proposed use are not adequate in scope to prevent such declines from taking place in all upland habitat sites, the limited upland management which does take place will diversify and improve treated grasslands. An environmental assessment that evaluates upland habitat management (including these uses) is available at the Refuge office for review (U.S. Fish and Wildlife Service 1994).

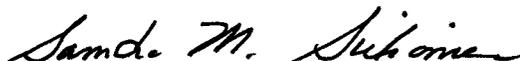
**Determination:** Farming, Grazing, Haying are compatible when used as management tools.

**Stipulations necessary to ensure compatibility:**

- General and special conditions are required for each permit to ensure consistency with management objectives.
- Farming permittees are restricted to a list of approved chemicals which are less detrimental to wildlife, use only necessary amount to control problem spots, and report their use yearly.
- Farming permittees must leave a portion of the crop for wildlife use.
- Farming permittees must not cut or plow under clover until after July 15 and alfalfa after July 1.
- Farming permittees must obtain permission from the Refuge Manager to work in the fields after opening of waterfowl season.
- Grazing permittees will be restricted to after June 1 to avoid some disturbance to nesting birds.
- Cattle grazing permittees are required to follow a short-term rotational grazing system to provide appropriate stimulation of grasses.
- Grazing permittees must comply with State Livestock Health Laws.
- Haying will be restricted to after July 15 to avoid disturbance to nesting birds.
- Haying permittees are required to report and mow noxious weeds in their areas.

**Signatures:**

Project Leader:

  
\_\_\_\_\_  
Sandra M. Siekaniec  
Refuge Manager  
Tewaukon National Wildlife Refuge Complex

Sept 25, 2000  
Date

**Concurrence:**

  
\_\_\_\_\_  
Ron Shupe  
Refuges Program Supervisor (ND/SD)

Sept. 26, 2000  
Date

  
\_\_\_\_\_  
Ken McDermond  
Regional Chief, National Wildlife Refuge System

Sept. 26, 2000  
Date

# ***Appendix H. ND/SD Draft Ecosystem Goals and Objectives***

## **Grassland Habitat Goals and Objectives**

**Mission:** Protect, restore, and maintain North and South Dakota's native prairie and other grasslands to ensure its diversity and abundance of native flora and fauna.

### **Goal A: Prevent degradation and conversion of native prairie grassland to other uses.**

#### **Objectives:**

- Locate, categorize, evaluate, and map existing native grassland within the Dakotas for baseline information within the next five years.
- Protect grasslands by easement on 50,000 acres of grassland per year for the next 10 years.
- By the year 2003, develop and implement public education programs to promote awareness and advocacy for native prairie.
- Maintain and develop partnerships to protect 10,000 acres native prairie over the next 10 years.

### **Goal B: Establish and maintain a network of large prairie grassland including native and planted grasslands on public and private lands.**

#### **Objectives:**

- Promote and implement prescribed burning and rotational grazing on a minimum of 20 percent of private lands to enhance and maintain healthy native prairie.
- By the year 2003, develop a public education program on types of defoliation and importance of proper defoliation of native prairie.
- Over the next 10 years, develop partnerships to enhance and manage native prairie, including invasion by alien species.
- Develop criteria within six months and identify within the next five years the most biologically significant landscape to meet the needs of trust species and species of special concern.
- Develop criteria and treat a minimum of 20 percent of agency-owned grasslands annually.

### **Goal C: Reduce fragmentation effects to flora and fauna in native prairie communities. Maintain and develop corridors between large prairie conservation reserves to facilitate dispersion of native species and enhance gene flow.**

#### **Objectives:**

- Develop an education program by the year 2003 to help the public understand why corridors are important.
- By 2003, develop management plans for these corridors to ensure they are properly managed to maintain the health and vigor of the plants.
- By 2003, develop statewide plans to determine where corridors are needed to connect blocks of native prairie.
- Develop and maintain corridors between large grassland landscape within five years of identification to reduce fragmentation. In addition, create public support for seeding native grasses and forbs along road rights-of-way.
- Use road rights-of-way, where applicable, to develop corridors by planting native grasses and forbs.
- Seek other avenues to develop, retain, and enhance corridors where road rights-of-way will not be sufficient.
- Over the next 10 years, maintain and develop statewide partnership programs to get people involved in identifying methods and locations for corridors, and their management.

**Goal D: Protect, restore, and enhance trust species and species of special concern.**

**Objectives:**

- Identify what species are in trouble and why by the year 2003.
- Develop at least three management approaches within the next 10 years for each species not covered at the landscape level.
- Develop education programs of why these species are important to conserve, what approaches will be taken for their recovery, and what the public can do to help.
- Develop statewide partnership programs to get people involved in species recovery.

**Goal E: Maintain and increase planted grasslands.**

**Objectives:**

- Within the next two years, identify the key areas to maintain and to increase planted grasslands.
- By 2003, develop a plan to connect the different corridors.

**Goal F: Protect native prairie from industrial/chemical contamination.**

**Objectives:**

- Identify what contaminants are entering native prairie and what adverse impact each contaminant may have on native prairie.
- Develop a plan on how to prevent and/or reduce further contaminants from entering native prairie.
- Develop a public education program explaining what contaminants are out there, what impact they are having, how to reduce or eliminate these, and how the public can help.

## **Wetlands and Watershed Goals and Objectives**

**Mission:** Protect, restore, manage, and create wetlands and their watersheds in North Dakota and South Dakota to ensure the abundances of fish and wildlife species for the benefit of the American public.

**Goal A: Increase recognition of wetland values by the various publics (community, conservation, communication, Congressional, and corporate entities) and develop a wetland advocacy.**

**Objective:**

- Over the next three years, implement informational and educational opportunities that develop advocates for wetland conservation.

**Goal B: Prevent or reduce the conversion or degradation of wetland habitats, and restore, replace, and enhance wetland habitats, qualities, and functions for trust species and species of concern.**

**Objectives:**

- Annually protect 10,000 acres of wetlands, and 20,000 acres of uplands through fee, easement, and PFFW agreements for the next 10 years in North Dakota.
- Assist partners and other agencies in protecting, creating, restoring, managing, and enhancing 5,000 acres of wetlands and associated uplands annually in North Dakota.
- Develop partnerships with neighbors and local conservation organizations to annually manage 20 percent of Service uplands for trust species and species of concern.
- On a statewide (ND) basis, assure that easement violations are brought to conclusion within a one year period.
- Over the next 10 years, prepare easement maps for all North Dakota wetland easements.

**Goal C: Maintain and restore the quality and health of existing prairie wetlands in order to preserve their natural productivity, longevity, and function.**

**(Objectives 1 and 2, Goal B, support this)**

**Goal D: Protect the water supply and property interests of wetlands on Service lands or easements.**

**Objective:**

- File for water rights on eligible Service properties or easements over the next 10 years.

## Riparian Goals and Objectives

**Mission:** Maintain, restore, and enhance riparian, floodplain, and watershed functions to river systems for the benefit of trust resources, Fish and Wildlife Service properties, and the American public.

### **Goal 1: Reduce the conversion of riparian habitats.**

#### **Objectives:**

- Inventory and determine the quality of riparian habitats within North and South Dakota which influence National Wildlife Refuges by 2003 to provide baseline information.
- Implement a public education program in North and South Dakota by 2003 to promote a public appreciation and understanding for the benefits of and the threats to riparian habitats.

### **Goal 2: Maintain, restore, or enhance riparian habitats, quality functions, and biotic communities.**

#### **Objectives:**

- Use existing programs and opportunities in North and South Dakota by 2008 to provide river buffer zones on 10 percent of the 2 to 5 year floodplain 50 miles upstream of National Wildlife Refuges.
- Facilitate the location and control of all purple loosestrife populations upstream of national wildlife refuges in North and South Dakota by 2003 to maintain quality habitat.
- Use existing programs and opportunities in North and South Dakota by 2003 to restore or enhance the functions of oxbow wetlands within 50 miles of national wildlife refuges.
- National wildlife refuges with river impoundments in North and South Dakota shall collect water quality and biotic community data from inflows, outflows, and impoundment pools to determine baseline parameters by the year 2003.
- Support State efforts to monitor water quality and biotic communities in impaired waters in North and South Dakota to promote compliance with State water quality standards.
- Conserve, restore, and enhance aquatic systems and fish populations in North and South Dakota to provide increased recreational opportunities by increasing fishing access, education and outreach, and partnership opportunities by 2003.

### **Goal 3: Conserve and recover endangered, threatened, and species of special concern.**

#### **Objectives:**

- Inventory endangered, threatened, and species of special concern along riparian corridors in North and South Dakota by 2001 to provide baseline information.
- Develop strategies for conserving and recovering endangered, threatened, and species of special concern along riparian habitat in North and South Dakota by 2003 to prevent any species from becoming listed.

### **Goal 4: Conserve, restore, enhance and create habitat resources in watersheds that influence the quality and quantity of water flowing into rivers and streams.**

#### **Objectives:**

- Use existing oversight, coordination, and technical assistance to promote sound watershed management on an additional 10,000 acres in North and South Dakota by 2003.
- Use existing programs and opportunities in North and South Dakota by 2003 to conserve, enhance, or restore grasslands and wetlands in the immediate vicinity of national wildlife refuges to provide quality water runoff.

## Missouri River Goals and Objectives

### **Goal 1: Reestablish the natural form and function and prevent degradation for prioritized riverine sections.**

#### **Objectives:**

- Achieve a more ecologically beneficial hydrograph below Ft. Peck, Garrison, Ft. Randall, and Gavins Point Dams by working with COE, States, and other stakeholders by 2000.
- Work with the COE, States, and stakeholders to achieve compatible ecologically beneficial water quality parameters including temperature, sediment transport, and turbidity by 2003.
- Work with local zoning authorities and regulators to develop and implement policies that influence floodplain development and bank stabilization to maintain/restore river functions by 2003.
- Increase functional habitat base in prioritized riverine sections through restorations, creations, and modification/enhancement where opportunities allow. Attempt one major project per year beginning in 1999.
- Continue an environmental contaminants presence on the Missouri River that monitors conditions, identifies issues and problem areas, and develops strategies for rehabilitation.
- Promote restoration of river functions and values through proactive outreach.

### **Goal 2: Conserve and recover endangered, threatened, and species of special concern in riverine and impounded reaches.**

#### **Objectives:**

- Augment current pallid sturgeon populations in: 1) Missouri and Yellowstone Rivers above Lake Sakakawea, and 2) below Ft. Randall through hatchery production to develop a genetically sound natural population structure by 2004.
- Achieve a 5-year average fledged success rate of 0.79 for 325 pairs of least terns, and 1.44 for 350 pairs of piping plovers below Garrison and Gavins Point Dams by 2004.
- Develop recovery actions or conservation plans for the sicklefin chub and the sturgeon chub by 1999, and seek funding and implementation of plans by 2000.
- Establish priority and complete status reviews for species of special concern, such as the blue sucker, flathead chub, western silvery and plains minnows, initiating one species per year beginning in 1999.

### **Goal 3: Fulfill commitments for mitigation of fishery resources brought about by construction of the mainstem dams.**

#### **Objectives:**

- Through hatcheries, management, and conservation, support State fisheries objectives for the Missouri River and its impoundments annually.

# ***Appendix I. Partnerships***

The Tewaukon Complex staff works with a variety of organizations and individuals on natural resource projects such as the following:

## **Drift Prairie Wetland Enhancement North American Wetland Conservation Act Grant cooperators:**

- ✓ North American Wetlands Conservation Council
- ✓ ND Game and Fish Department
- ✓ Ducks Unlimited
- ✓ The Nature Conservancy
- ✓ North Dakota Wetlands Trust
- ✓ Delta Waterfowl Foundation
- ✓ Barnes County Wildlife Federation
- ✓ Cass County Wildlife Club
- ✓ private landowners

## **North Dakota Jr. Duck Stamp Contest contributors:**

- ✓ Cogswell Gun Club
- ✓ Tewaukon Rod and Gun Club
- ✓ Red River Sportsmen's Club
- ✓ Hannaford Conservation and Wildlife
- ✓ Rutland Sportsmens Club
- ✓ Barnes County Wildlife Federation
- ✓ American Foundation for Wildlife
- ✓ ND Chapter of The Wildlife Society
- ✓ Richland County Wildlife
- ✓ Cass County Wildlife Club
- ✓ United Sportsmen of Jamestown
- ✓ Falkirk Mining Company
- ✓ Lake Region Improvement Club
- ✓ Bottineau County Wildlife Federation
- ✓ Dakota Territory Gun Collectors

## **Fishery Habitat Improvement:**

- ✓ ND Game and Fish Department
- ✓ Tewaukon Rod and Gun Club
- ✓ Cogswell Gun Club
- ✓ Rutland Sportsmens Club

## **U.S. Department of Agriculture:**

- ✓ Natural Resources Conservation Service - easements, EQUIP, and CRP programs
- ✓ Farm Service Agency - easement program
- ✓ APHIS-depredation program
- ✓ U.S. Forest Service

## **U.S. Bureau of Reclamation:**

- ✓ Kraft Slough Acquisition and Management

## **ND Game and Fish Department:**

- ✓ wildlife surveys, habitat management, wildlife law enforcement

## **Partners For Fish and Wildlife program:**

- ✓ private landowners

## **Sargent County Extension Service:**

- ✓ youth programs, community projects

**Water Quality Monitoring:**

- ✓ Sisseton-Wahpeton Sioux Tribe
- ✓ North Dakota Department of Health
- ✓ Wild Rice Conservation District

**Adopt-A-WPA:**

- ✓ Sargent County Pheasants Forever
- ✓ Red River Sportsmen's Club

**Annual Tewaukon Fishing Derby and projects:**

- ✓ Cogswell Gun Club
- ✓ Tewaukon Rod and Gun Club

Other cooperators and projects include: local law enforcement agencies; The Wahpeton Zoo, conservation districts (no-till drill, native seed harvest); Ducks Unlimited (water control structures, predator fences); The North Dakota Wetlands Trust (grassland easements, water control structure repair); The Delta Waterfowl Foundation (predator research); Rural Fire Districts (wildfire suppression on- and off-Refuge); various universities (research); and the General Federation of Women's Cultural Club of Hankinson (native prairie restoration, walks, and nature trail).

# Appendix J. RONS and MMS Projects

The two following tables show the top 12 RONS projects and the top 11 MMS projects associated with the CCP. The "Goal or Objective" column on the RONS table links back to the Goals, Objectives, and Strategies section in the CCP. For more information on these projects, please contact the Refuge Manager.

RONS Projects						
RONS No.	Goal or Objective (R=Refuge; D=District; E=Easement)	Project Description	Construction Funding	First Year Need	Recurring Annual Need	FTE*
97020	R1.3, D1.5	Upland restoration for grassland nesting birds.		\$209,000	\$100,000	1.5
97005	R1.1, R1.2, R1.3, R1.4, R1.5, R1.7, R1.10, R1.11, R2.1, R2.3, R2.4, R2.7, R2.8, R3.1, R4.1, D1.1, D1.2, D1.5, D2.5, D3.2, D3.4, D3.6, D3.7	Biological information collecting and monitoring to support management of wildlife and habitat.		\$254,000	\$133,000	2.0
97009	R1.10	Nonnative plant control to improve habitat for wildlife.		\$118,000	\$60,000	1.0
97001	R1.1, R1.2, R1.4, R2.4, R3.1, D1.1, D1.2, D1.6, D2.2, D3.2, D3.4	Tallgrass restoration for declining grassland nesting birds.		\$325,000	\$92,000	.5
97007	R1.6, R2.11, R2.12, R2.13, R4.1, R4.3, R4.8, D1.4, D1.10, D4.1, D4.2, D4.4, E1.1, E1.3	Protection of resources including wetlands, grasslands, and safety of public.		\$270,000	\$88,000	1.0
97032	R5.1, D1.3, D1.11, D3.1, D5.1	Assistance to private landowners to improve wildlife habitat.		\$185,000	\$103,000	1.0
98033	R1, R2, R3, R4, R5, D1, D2, D3, D4, D5, E1	Improvement of staff facilities and support.	\$1,000,000	\$155,000	\$64,000	1.0
97003	R4.2, R4.3, R4.4, R4.5, R4.6, R4.7, R4.8, R4.9, R5.1, R5.2, D4.1, D4.2, D4.3, D4.4, D5.1	Improvement of public education and recreation facilities and staff.	\$1,500,000	\$515,000	\$118,000	1.0
99042	R1.1, R1.2, R1.4, R1.5, R1.10, R1.11, R1.12, D1.1, D1.2, D1.6, D1.7, D3.1, D3.3, D5.1	Fire management program to improve wildlife habitat and protection of wildfires.		\$242,000	\$93,000	1.0
99040	R4.5, R4.6, R4.8, R4.9, R5.1, D4.2, D4.3, D4.4, D5.1	Protection, documentation, and interpretation of existing cultural resources.		\$77,000	\$20,000	-
98029	R1.5, R1.6, D1.8, D1.9, D1.10	Protection and clarifying of water rights on Complex to support water bird needs.		\$467,000	\$30,000	-
98003	R2.1, D2.1	Predator control to improve grassland bird nesting success on the complex.		\$382,000	\$55,000	-
<b>TOTALS</b>			\$2,500,000	\$3,199,000	\$956,000	10.0
*FTE= Full-time Equivalency						

<b>MMS Projects</b>			
<b>MMS No.</b>	<b>Goal or Objective (R=Refuge; D=District; E=Easement)</b>	<b>Description</b>	<b>Cost</b>
89013	R1.1, R1.2, R1.3, R1.4, R1.11, R1.12, D1.1, D1.2, D1.5, D1.6	Replace deteriorated and worn disk needed for preparing seedbed for planting of natives and for creating fire lines.	\$37,000
89008	R1.2, R1.5, R1.11, R1.12	Replace deteriorated heavy equipment (dozer) used to assist in repairs to flood damage and 12-year maintenance backlog.	\$148,000
99043	R1.2, R1.4, R1.10, R4.5, R5.1, D1.2, D1.5, D1.6, D4.2, D5.1	Replace worn 1986 1-ton diesel truck.	\$45,000
00084	R1.2, R1.3, R1.5, R1.10, R4.5, R5.1, D1.2, D1.5, D1.6, D4.2, D5.1	Replace worn 1979, 18,000 lb 5th wheel trailer used to haul fence supplies, culverts, and small equipment.	\$10,000
97003	R4, R5	Replace 12 worn and faded public safety signs. These signs guide our visitors to points of interest and interpret management activities. They also address many important safety concerns on the Refuge.	\$39,000
98031	R2.1	Replace existing predator enclosure fence with a chain link fence.	\$100,000
00087 A	R1.5	Replace water control structure in Pool B and repair existing dike.	\$50,000
00087 B	R1.5	Replace water control structure in Pool C and repair existing dike.	\$50,000
99039	R1, R2, R3, R4, R5, D1, D2, D3, D4, D5	Replace worn maintenance truck (1993 Ford).	\$35,000
96002	R4, R5	Replace Refuge map display located in visitor center. This map is used extensively to orient visitors to the Refuge natural resource features, recreational facilities and opportunities, roads, trails, and boundaries.	\$30,000
99045	R1.10	Replace worn 1991 Dodge utility 1-ton used for spraying noxious weeds on the Refuge and District to comply with State regulations.	\$45,000

# Appendix K. Literature Cited

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# Appendix L. Waterfowl Production Area Priority Tables

WPA Units	County	Acres	Mean Pair Density	Unique Resources	Priority Level
Englevale Complex	Ransom	1,187.75	68 pair		High
Smith/Tanner/Buckmiller	Ransom	646.62	68 pair		High
Strander/Skonseng/Peterson	Ransom	280.30	45-68 pair	Tallgrass prairie	High
McCann/McGill/Isley	Ransom	324.93	45-68 pair	Tallgrass prairie	High
Weaver/Coit/Schiffner	Ransom	403.53	68 pair	Tallgrass prairie	High
Biggs/Berndt	Richland	479.35	27-45 pair	Tallgrass prairie Rare butterflies	High
Biggs/Anderson/Anderson/ Larson/Swanson/Ostby	Richland	609.47	27-45 pair	Tallgrass prairie	High
Krause/Ahrens/Arndt	Richland	117.85	45-68 pair	Tallgrass prairie	High
Bladow	Richland	275.97	45-68 pair		High
Gunness/Boldt/Hentz/Elsen	Richland	657.10	27-45 pair	Tallgrass prairie Rare butterflies White lady's slipper	High
Hartleben/Aaser/Prochnow	Richland	1,627.23	27-45 pair	Tallgrass prairie Rare butterflies White lady's slipper	High
Kuehn	Richland	317.52	68 pair	Tallgrass prairie	High
Willprecht/Nechas/Hegar	Richland	240.96	45 pair		High
Chris Schuler/East Leack	Richland	240.00	45 pair	Tallgrass prairie	High
Wollitz/Paetzke/Stenson	Richland	506.46	45-68 pair		High
Palensky/Widmer	Sargent	449.64	93-113 pair	Tallgrass prairie	High
Evanson	Sargent	169.52	93 pair		High
Evanson/Anderson	Sargent	198.80	93 pair		High
Gainor	Sargent	843.96	45 pair	Tallgrass prairie	High
Krause	Sargent	200.00	68 pair	Tallgrass prairie Rare butterflies	High
Nelson/Klefstad	Sargent	390.16	68 pair		High
Palensky/Wyum/Kaske	Sargent	238.83	68 pair		High

<b>WPA Units</b>	<b>County</b>	<b>Acres</b>	<b>Mean Pair Density</b>	<b>Unique Resources</b>	<b>Priority Level</b>
Blikre/Chose	Ransom	129.09	27-45 pair		Moderate
Compson	Ransom	162.08	27-45 pair		Moderate
Warner	Ransom	160.00	27 pair		Moderate
Wiltse/Kaspari	Ransom	239.16	27-45 pair		Moderate
Ford	Richland	128.94	68 pair	Tallgrass prairie small tract	Moderate
Gaukler	Richland	162.71	45 pair		Moderate
Smith	Richland	159.81	68 pair		Moderate
Vogeler/Haaland	Richland	162.41	27 pair		Moderate
Asche	Sargent	159.44	68 pair		Moderate
Bauer	Sargent	322.52	45 pair		Moderate
Even	Sargent	84.86	68 pair		Moderate
Litchfield	Sargent	156.68	45 pair		Moderate
Mahrer	Sargent	119.20	68 pair		Moderate
Olson/BN	Sargent	157.37	68 pair		Moderate
Olson, H.	Sargent	159.24	68 pair		Moderate
Saunders	Sargent	143.29	68 pair		Moderate

<b>WPA Units</b>	<b>County</b>	<b>Acres</b>	<b>Mean Pair Density</b>	<b>Unique Resources</b>	<b>Priority Level</b>
Arneson	Ransom	40.00	27 pair		Low
Bachmans	Ransom	100.19	68 pair		Low
Boeder	Ransom	99.78	45 pair		Low
Bueling, A.	Ransom	55.08	27-45 pair		Low
Bueling, L.	Ransom	56.28	27-45 pair		Low
Carlson	Ransom	43.62	93 pair		Low
Dick, L.	Ransom	32.11	45 pair		Low
Kaspari, L.	Ransom	55.00	27 pair		Low
Metzen	Ransom	52.50	27-45 pair		Low
Reinke/Anderson	Ransom	84.36	45 pair		Low
Shelver	Ransom	85.32	27 pair		Low
Boehning	Richland	97.06	45 pair		Low
Korth	Richland	47.46	27-45 pair	Tallgrass prairie small tract	Low
West Leack	Richland	80.00	45 pair		Low
Novetzke	Richland	60.08	45 pair		Low
Lunstad	Sargent	52.93	68-93 pair		Low

# Appendix M: Section 7 Consultation

## INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Allison Banks, Refuge Planner  
Telephone Number: 303-236-8145, ext. 626  
Date: 8/18/00

I. Region: 6

II. Service Activity (Program):

Division of Realty, Branch of Land Acquisition and Refuge Planning

III. Pertinent Species and Habitat:

A. Listed species and/or critical habitat within the action area:

Bald eagle, gray wolf, whooping crane, and western prairie fringed orchid. For a list of other species of management concern please see Draft CCP attachment, Endangered Species sections, pages 64 and 98-103.

B. Proposed species and/or critical habitat within the action area:

None

C. Candidate species within the action area:

None

D. Include species/habitat occurrence on a map:

None of these species occur regularly on Service lands. The bald eagle is seen passing through during spring and fall migration. Gray wolves occasionally disperse from Minnesota and have been recorded for counties within the Wetland Management District. For a map of the Complex please see Map #15 in the Draft CCP.

IV. Geographic area or station name and action:

Tewaukon National Wildlife Refuge Complex Comprehensive Conservation Plan

V. Location: (please see map attachments)

A. Ecoregion Name:

Prairie Pothole Ecoregion, Hudson's Bay Ecosystem and Mainstem Missouri Ecosystem

B. County and State:

Ransom, Richland, and Sargent Counties, North Dakota

C. Section, township, range or latitude/longitude:

The Complex consists of 22,362 acres of fee title tracts scattered throughout 3 counties and 45,386 acres of easement interests on many smaller tracts. Please see Map #2 and #15 in the Draft CCP for locations.

D. Distance (miles) and direction to nearest town:

Refuge headquarters is 5 miles south of Cayuga, North Dakota. Waterfowl Production Areas (fee title ownership), wetland and grassland easement interests and the Refuge itself are located throughout 3 counties. Please see page 15 of the Draft CCP for locations.

E. Species/habitat occurrence:

The bald eagle is regularly sighted during fall and spring migrations, though no nesting occurs on the Complex. Nesting attempts have been verified on private lands within the District.

The western prairie fringed orchid is found in native, calcareous prairies and sedge meadows. Currently, the largest population exists on the Sheyenne National Grasslands in Ransom and Richland Counties north of the Refuge. The remaining plants are found on adjacent private land, some of which is protected under Service grassland easement. No known populations have been

recorded on Waterfowl Production Areas or on the Refuge. The whooping crane and the gray wolf likely used the Complex historically. There are only occasional sightings of migrating or dispersing individuals today. Whooping cranes have been observed once in spring on private land in the District (1998, Sargent County, by Refuge staff).

#### VI. Description of proposed action:

The action is to implement the Tewaukon National Wildlife Refuge Complex Comprehensive Conservation Plan over the next 15 years. Briefly, the CCP will emphasize native prairie, other grasslands, and wetland ecosystem protection, management, and reestablishment. Management that favors native fauna and flora of the tallgrass prairie ecosystem will be selected. For detailed descriptions of proposed actions, please refer to the Management by Unit sections (pages 26-106) of the Draft CCP.

#### VII. Determination of effects:

##### A. Explanation of effects of the action on species and critical habitats in items 111. A, B, C:

###### 1. Preservation and enhancement of tallgrass prairie and other grasslands.

No long-term detrimental effects from preserving and enhancing prairie habitats are anticipated. Currently there are no known populations of fringed orchids on Service property. Protection of grasslands will preserve existing populations by preventing loss of habitat.

The Western Prairie Fringed Orchid Recovery Plan identifies protection and appropriate management of known populations as the first priority. The CCP objectives for the District include: 1) preserving remaining native prairie tracts through a combination of voluntary partnerships, easements, and fee title acquisition; and 2) working cooperatively with landowners and providing technical assistance to develop grassland management plans and guidelines to maintain western prairie fringed orchid populations and promote healthier grasslands. Both objectives contribute to recovery of the species.

###### 2. Restoration and maintenance of prairie wetlands.

No long-term detrimental effects from wetland restoration and maintenance are anticipated, as actions would mimic natural cycles. These activities would not affect bald eagles as they are opportunistic and other pools including Lake Tewaukon and Sprague Lakes are better suited for feeding areas.

Wetland restoration and maintenance benefit the bald eagle and whooping crane by increasing the amount of habitat available for use during migration periods. Lake Tewaukon and Sprague Lakes are managed as large, open water areas which support fish populations; both sites have been used by migration eagles.

###### 3. Increasing biological data gathering and monitoring of habitat conditions.

Increasing biological surveys and sampling can identify important habitat areas for threatened and endangered species.

###### 4. Providing access for public recreation on Lake Tewaukon and Sprague Lake.

Eagle use on the Refuge is generally associated with migrating flocks of waterfowl. Eagles roost in trees around lakes and are often seen on the ice. Most of this use is associated with Lake Tewaukon and Sprague Lakes, but eagles also use other Refuge sites. During primary eagle use periods (October and early November, late March and April) perimeter roads and trails around these lakes are closed. Tewaukon and Sprague Lakes are closed to boats during these primary eagle use periods. Very rarely mild weather in November during the early deer hunting season may result in hunters using the Refuge when eagles are present. A buffer zone may be utilized of nesting is initiated on the Refuge.

##### B. Explanation of actions to be implemented to reduce adverse effects:

None anticipated.

VIII. Effect determination and response requested:

A. Listed species/designated critical habitat:

Determination

Response Requested

no effect/no adverse modification  
whooping crane  
gray wolf

X Concurrence  
X Concurrence

may affect, but is not likely to adversely  
affect species/adversely modify  
critical habitat

bald eagle  
western prairie fringed orchid

X Concurrence  
X Concurrence

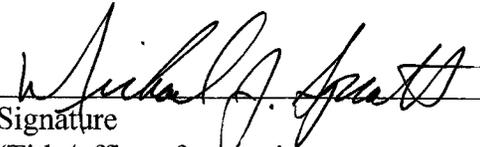
may affect, and is likely to adversely  
affect species/adversely modify  
critical habitat

None

\_\_\_ Formal Consultation

C. Candidate species:

None

  
Signature \_\_\_\_\_ Date 8/18/00  
(Title/office of supervisor at  
Originating station)

IX. Reviewing ESO Evaluation:

A. Concurrence X Nonconcurrency \_\_\_\_\_

B. Formal consultation required \_\_\_\_\_

C. Conference required \_\_\_\_\_

D. Informal conference required \_\_\_\_\_

E. Remarks:

  
Signature \_\_\_\_\_ Date 8/28/00  
(Title/office of reviewing  
Official)

for Allyn J. Sapa, Field Supervisor  
North Dakota Field Office  
Ecological Services

# Appendix N: Mailing List

## Federal Officials

- Congressman Earl Pomeroy, Fargo, ND and Washington, D.C.
- Senator Kent Conrad, Fargo, ND and Washington, D.C.
- Senator Byron Dorgan, Fargo, ND and Washington, D.C.

## Federal Agencies

- BIA - Aberdeen Area Office
- Bureau of Land Management
- Bureau of Reclamation
- Corps of Engineers, Bismarck ND and St. Paul MN
- EPA, Region 8 - Denver CO
- FSA - Ransom, Richland, and Sargent Counties
- NRCS - Ransom, Richland, and Sargent Counties
- Sisseton-Wahpeton Sioux Tribe, Planning Commission and Land Mgr.
- Theodore Roosevelt Nat'l Park
- USDA-Aphis - Bismarck & McLeod
- US Forest Service, Bismarck ND (Larry Dawson, Darla Lenz) and Lisbon ND
- USFWS Albuquerque, NM; Anchorage, AK; Arapaho NWR, CO; Arlington, VA; Arrowwood NWR, ND; Atlanta, GA; Bismarck, ND; Crescent Lake/N. Platte, NE; Denver, CO; Des Lacs NWR, ND; Devils Lake WMD, ND; Fort Snelling, MN; Hadley, MA; Juneau, AK; Lake Andes NWR, SD; Air Quality Branch, Lakewood, CO; Manhattan, KS; Medicine Lake NWR, MT; Portland, OR; Sacramento, CA; Sand Lake NWR, SD; Sherwood, OR; Shepherdstown, WV; Waubay NWR, SD
- USGS - BRD, Fort Collins, CO and Jamestown, ND

## State Officials

- Governor Ed Schafer
- Rep. Wesley Belter
- Rep. Rick Berg
- Rep. Leroy Bernstein
- Rep. Al Carlson
- Rep. Byron Clark
- Rep. Rachael Disrud
- Rep. John Dorso
- Rep. Bruce Eckre
- Rep. Mary Ekstrom
- Rep. Bette Grande
- Rep. Howard Grumbo
- Rep. Pamela and Bill Gulleason
- Rep. Kathy Hawken
- Rep. Robert Huether
- Rep. Scott Kelsch
- Rep. Myron Koppang
- Rep. Kim Koppelman
- Rep. Chet Pollert
- Rep. Sally Sandvig
- Rep. Laurel Thoreson
- Sen. Tom Fischer
- Sen. Tony Grindberg
- Sen. Joel Heitkamp
- Sen. Judy Lee
- Sen. Deb Mathern
- Sen. Tim Mathern
- Sen. Carolyn Nelson
- Sen. Russel Thane

## State Agencies

- Minneopa State Park
- MN DNR, Baudette, Fergus Falls, and St. Paul, MN
- MN Pollution Control Ag
- ND Dept of Health
- ND Forest Service
- ND Game and Fish Dept., Bismarck, Jamestown, and Wyndmere ND
- ND State Historic Preserv. Officer
- ND State Water Commission
- NDSU Extension Service, Forman, Wahpeton, and Fargo, ND
- North Dakota Ag Department

## City/County/Local Governments

- Cass County Commissioners
- Mayor Dean Ankerfelt
- Mayor Robert Billing
- Mayor Marty Bjugstad
- Mayor Chuck Campbell
- Mayor Bob Cookson
- Mayor Roger Dienert
- Mayor Steven Domm
- Mayor Marc Enderson
- Mayor Leanne Even
- Mayor Dale Fuhrman
- Mayor Bruce Furness
- Mayor Robert Fust
- Mayor Marilyn Gunderson
- Mayor Brad Hejtmanek
- Mayor Dennis Klosterman
- Mayor Loren Larsen
- Mayor Ed Morrow
- Mayor Ronald Narum
- Mayor Grover Riebe
- Mayor John Richards
- Mayor Morris Saxerud
- Mayor Bud Schmitz
- Mayor Carl Taubert
- Ransom Co Commissioners; Sheriff's Office; Water Resource District; Weed Board
- Richland Co Commissioners; Historical Society; Sheriff's Office; Water Resource District; Weed Board
- Sargent Co Commissioners; Sheriff's Office; Water Resource District; Weed Board
- Twnshp Clerk Elwood Anderson
- Twnshp Clerk Luann Anderson
- Twnshp Clerk Perry Anderson
- Twnshp Clerk Marcia Asche
- Twnshp Clerk Duane Baldwin
- Twnshp Clerk Ray Bartholomay
- Twnshp Clerk Mark Bartle
- Twnshp Clerk Leroy Berg, Jr
- Twnshp Clerk Richard Birklid
- Twnshp Clerk Ralph Bladow
- Twnshp Clerk Jim Bosse
- Twnshp Clerk Emily Braaten
- Twnshp Clerk Leslie Brandvold
- Twnshp Clerk Renae Branson
- Twnshp Clerk Janice Breker
- Twnshp Clerk Beverly Brezicka
- Twnshp Clerk Marie Brown
- Twnshp Clerk Noreen Bubbers
- Twnshp Clerk Glora Claeys
- Twnshp Clerk Sheila Coleman
- Twnshp Clerk Lynnae Decker
- Twnshp Clerk Russell Falk
- Twnshp Clerk Kim Froemke
- Twnshp Clerk Jodi Fugl
- Twnshp Clerk Mark Gauslow
- Twnshp Clerk Tom Geffre
- Twnshp Clerk Audrey Gilles

- Twnshp Clerk Sonja and Grant Gulleason
- Twnshp Clerk Wanda Haase
- Twnshp Clerk Evelyn Hagen
- Twnshp Clerk Harry Hakanson
- Twnshp Clerk Lynn Hansen
- Twnshp Clerk Sandra Hanson
- Twnshp Clerk Don Heitkamp
- Twnshp Clerk Susan Heitkamp
- Twnshp Clerk Vernon Heitkamp
- Twnshp Clerk Ken Heley
- Twnshp Clerk Norma Jensen
- Twnshp Clerk Dale Johnson
- Twnshp Clerk Kenneth Johnson
- Twnshp Clerk Thomas Kaczynski
- Twnshp Clerk Myron Keller
- Twnshp Clerk Doran Kersting
- Twnshp Clerk Rick Kielb
- Twnshp Clerk David Larson
- Twnshp Clerk Deb Larson
- Twnshp Clerk John Larson
- Twnshp Clerk Ted Lee
- Twnshp Clerk Hermann Lentz
- Twnshp Clerk Ronald Lenzen
- Twnshp Clerk James Lingen
- Twnshp Clerk Marlene Luick
- Twnshp Clerk Russell Martinson
- Twnshp Clerk Robert McDaniel
- Twnshp Clerk Wayne Meslow
- Twnshp Clerk Mike Moellenkamp
- Twnshp Clerk James Moffet
- Twnshp Clerk Bonita Nelson
- Twnshp Clerk Randy Pearson
- Twnshp Clerk Bruce Peterson
- Twnshp Clerk Jeff Peterson
- Twnshp Clerk Leslie Rieger
- Twnshp Clerk Joan Schlecht
- Twnshp Clerk Michael Schutt
- Twnshp Clerk Steven Smith
- Twnshp Clerk Joann Solberg
- Twnshp Clerk Bruce Stein
- Twnshp Clerk Janice Swanson
- Twnshp Clerk Denise Tangen
- Twnshp Clerk Sandy Tiede
- Twnshp Clerk Donald Vosburg
- Twnshp Clerk Josephine Voss
- Twnshp Clerk Beverly Walstead
- Twnshp Clerk Connie White
- Twnshp Clerk Korrine Wiesbrod
- Twnshp Clerk Leslie Witt
- Twnshp Clerk Anita Woodbury
- Western Governors Association
- Wild Rice SCD
- Dickey Co Wildlife Federation
- Ducks Unlimited, Bismarck and Scott McLeod
- Earth Island Institute
- Environmental Defense Fund
- Fargo Area Sportsmen
- Farm Bureau - Fargo and Forman, ND
- Friends of Animals
- Ft. Ransom Sportsmen Club
- General Federation of Women's Cultura Club
- Grand Forks County Wildlife Federation
- In Defense of Animals
- International Coalition
- Izaak Walton League, New London and St. Paul, MN
- Kaste, Inc
- Keep ND Clean, Inc
- Kindred Wildlife Club
- KRA CORP/F&W Reference Service
- L.A.N.D.
- Lac Qui Parle Prairie Preserve
- Lake Region Wildlife Club
- Lewis and Clark Wildlife Club
- Ludden Sportsmen Club
- Minn-kota Sportsmen Club
- MN Bow Hunters, Inc
- MN Conservation Federation
- MN Deer Hunters Assoc, Duluth, Fergus Falls and Mankato, MN
- MN State Archery Association
- MN Waterfowl Assoc, Minneapolis and Willmar
- MN Wildlife Federation
- North American Prairies Co.
- National Audubon Society, Fargo, ND, Minneapolis, MN and Washington, D.C.
- National Wildlife Refuge Assoc., Burnsville, MN and Colorado Springs, CO
- Native American Fish and Wildlife Society
- Nature Conservancy, Glyndon, MN, Minneapolis, MN, Helena, MT, Arlington, VA
- ND Birding Association
- ND Chapter of The Wildlife Society
- ND Natural Science Society
- ND Soil and Water Conserv. Society
- ND Stocksmen's Association
- ND Water Education Foundation
- ND Wetlands Trust
- ND Wildlife Federation
- Nobles Co Envirn. Service
- Pheasants Forever, Lisbon, Milnor, and West Fargo, ND, St. Paul, MN
- Phillips Petroleum Company
- Prairie Restorations
- Prairie Visions
- Prairie Woods Elc
- Red River Area Sportsmen
- Red River Valley Potato
- Richland Wildlife Club, Paul Berg, Coletta German
- Rutland Sportsmen Club
- Safari Club International
- Sierra Club, Fargo, ND and Minneapolis, MN
- Sisters St Francis
- Tewaukon Rod and Gun Club
- The Fund for Animals
- The Prairie is My Garden
- Trumpeter Swan Society
- Trust For Public Land
- TWS - Cent. Mtn. And Plains
- Wilderness Society
- Wildlife Forever
- Wildlife Management Institute
- Wildlife of America

### **Organizations**

- 4 Corners Wildlife Club
- Agassiz Env. Ed Committee
- Alice Wildlife Inc
- American Birding Association
- Animal Protection Institute
- Barnes Co. Wildlife Federation
- Bluestem Co.
- Board Grazing Committee
- CARE - Washington, D.C.
- Cass County Wildlife Club
- Cogswell Gun Club
- Conservation Fund
- Crookston Gun Club
- Cure
- Dakota Resource Council
- Dakota Wildlife Trust
- Defenders of Wildlife, Noah Matson and Tom Uniack
- Delta Waterfowl

### ***Newspapers, Radio, TV***

- Bird Dog News
- Daily News
- Detroit Lakes Tribune
- Enderlin Independent
- Fargo Forum
- Fergus Falls Daily Journal
- Fertile Journal
- Flickertails
- Gun Dog News
- Hawley Herald
- KBMW Radio
- KCCM MN Public Radio
- KDDR Radio
- KDSU Radio
- KFGO Radio
- KFNW Radio
- KOVC Radio
- KQDJ Radio
- KQLX Radio
- KSJB Radio
- KTHI-TV
- KXJB-TV
- Lake Park Journal
- MN Ornithologist's Newsletter
- Morris Sun and Tribune
- Northland Outdoors
- Oakes Times
- Outdoor News
- Ransom County Gazette
- Richland County News
- St Paul Pioneer Press
- Star Tribune
- The Teller
- Tony Dean Outdoors
- WDAY Radio
- WDAY-TV

### ***Schools/ Universities***

- Central Elementary
- Enderlin Public School
- Fairmount Public School
- Hankinson Public School
- Kindred Public School
- Lidgerwood Public School
- Lisbon Public School
- Milnor Public School
- Minot State University
- North Sargent Public School
- North Dakota State University
- Northwestern University
- Sargent Central School
- Sheldon Public School
- South Dakota State University
- Southwest State University
- St John's School
- University of Minnesota
- University of North Dakota
- Wahpeton High School
- Wahpeton Middle School
- West Fargo High School
- Wyndmere Public School
- Zimmerman Grade School

### ***Libraries***

- Fargo Public Library
- Forman Public Library
- Hankinson Public Library
- Lidgerwood Public Library
- Lisbon Public Library
- ND State College of Science Library
- NDSU Library
- Oakes Public Library

### ***Individuals***

- Karolyn Ahrens
- Larry and Barb Albertson
- Virgil Alfson
- Duane Aman
- Bill Amerman
- Bill Anderson
- Charles Anderson
- Gary Anderson
- Edwin Anderson
- Harris Anderson, Cogswell
- Harris Anderson, Havana
- Helen Anderson
- Larry Anderson
- Lyle Anderson
- Richard Anderson
- Arndt Brothers Partnership
- Harlow and Jeanette Arneson
- Harold Asche
- Robert Asche
- Douglas Askerooth
- Elvoy and Grace Askerooth
- Mark Askerooth
- Bruce Atterberg
- Jim Azure
- Dennis Babcock
- Ed Backer
- Vernon Bakken
- Arnold Banish
- James Banish
- Tom Banish
- Dana and Sandy Banish
- Jack Barber
- Larry Bartholomay
- Roland Barvels
- Bob Beeson
- Rus Bellin
- Ronald Bellin
- Bill Berg
- Jerry Berg
- Roman Berg
- Brian Bergh
- Duane Bergh
- Jon Bergh
- Paul Bergh
- Ronald Bergh
- Todd and Monica Bergh
- Ross Bergland
- Eugene Bergman
- Harvey Bergstrom
- Wayne Beyer
- Richard Biewer
- Leonard Birnbaum
- John Birnbaum
- George Bishoff
- Dale Bladow
- David Bladow
- Lowell Bladow
- Lyle Bladow
- Kevin Bleecker
- Karen Blilie
- Alfred Boehning
- Duane Boeder
- James Bommersbach
- Robert Boughton
- Larry Brash
- Clarence Breker
- David Breker
- Delores Breker
- Esmeralda Breker
- Jeff and Jodi Breker
- Jim and Mary Breker
- Joe and Patty Breker
- Kurt Breker
- Mark and Debbie Breker
- MJ Breker
- Shane Breker
- Ray Brickzen
- Lawrence Brown
- John Brummond
- Larry Brunkhorst
- Elmer Buckhaus
- Donald Buckhaus
- Lyle Buckhouse
- Karin Bueling
- Lance Bueling
- Bob Bulik
- Anna Busta
- Stephen Campbell
- Terry Carlen
- Arthur Carlson
- Kurt Carlson
- Kent Carpenter
- Karlton Chapin
- Fred Christensen
- Guy and Marilyn Christiansen
- Jerry Christianson
- Brendan Ciesynski
- Lysle Coleman
- Jeff Colemer
- Mike Cooper
- Raymond Cossette
- Butch Craig
- Arnarn Crandall
- DarWayne Crandall
- DeVaar Crandall
- Kevin Crandall
- Lawrence and Neola Cross
- Royce Dahl
- Don Dathe
- Marvin David
- Loren and Dawn David
- John Davis
- Harvey Dawson
- Jeff Dick
- James Diekman
- Greg Donaldson
- Wayne Doty
- Jim Duerr
- Steven Dunn
- Lee Dusek
- Terry Dusek
- Michael Dwyer
- Steve Ehli
- Randy Ehni
- David Eklund
- Todd and Jackie Ekstrom
- Loren Ellefson
- Steve Ellefson
- Dwain Ellenberger
- John Emme
- Kenneth Emmel
- Richard Engst
- Greg Ennis
- Edwin Erickson
- Larry Erickson
- Lyle Erickson
- Raymond Erickson
- Roger Erickson
- Patricia Farrar
- Charles Foster
- Patrick Freeberg
- Phillip Freeman

- Allan Fugl
- William Fugl
- Earl and Susan Fust
- Robert Fust
- R.E. Gabel
- Walter Gardner Jr.
- Andy Gaukler
- Clint Gaukler
- Jim and Dawn Gaukler
- Jim and Kathryn Gaukler
- Louie Gaukler
- Richard Gerriets
- Roger Gibbon
- Audrey Gilles
- Tawny Gilles
- LeRoy Gisi
- Hilda Giske
- Randy Gjestuang
- Doug and Nancy Glarum
- Charles Goltz
- Dennis Goltz
- Janet Green
- Randall and Collin Greenley
- Todd Greenmeyer
- Joe Gregor
- Howard Grumbo
- Gary Gulsvig
- Murdean Gulsvig
- Rex Guthrie
- Jerry Haahr
- Dan and Matthew Handt
- Allan Hankel
- Hanson Farms JV
- Mark Hardina
- Dan Hare
- Steve Haring
- Ted Harles
- Brittany Hasbargen
- Julie Hassebroek
- Charles Haus
- Barbara Hayen
- John Heley
- Warren Henderson
- Dale Henry
- Robert Herding
- Arthur Herman
- Herman Brothers
- Alver Hermsen
- Dave Hestdaler
- Betty Hewitt
- Leonard Heyen
- Geddy Hicks
- Wayne Hinrichs
- Maynard Hitchcock
- Weldon Hoesel
- Andy Hoflen
- Darren Hoistad
- Rick Hoistad
- Quentin and Doris Hoistad
- Ray Holcomb
- Ruth Holm
- Alexis Holtz
- Roger Hom
- Russel Hosford
- Lynn Hoverman
- Charles Hrdlicka
- Jim and Darlene Huckell
- LuVern Illies
- Blake Ista
- Calvin Jacobson
- Dan Jacobson

Mark Jensen	Melvin Manock	Dennis and Ione Pherson	Dan Svingen
Bob Johnson	Kenneth Marohl	Lenny Pherson	John Szatkowski
Dewey Johnson	Donald Marquette	Richard Pickell	Jens Tennesos
Charles Jorgenson	Jim Marquette	Debbie Podliska	Nevin Tergensen
Steve Jorgenson	Jim and Mavis Marquette	Bernard Polansky	Aaron Teschner
Loy Justesen	Kyle Marquette	John Popp	Ron Teschner
Paul Kadoun	Ed Marrow	Randy Ptacek	Stanley Theisen
Joe and Jaci Kaler	LeRoy Martin	Dennis Quam	Kristie Thohe
Dean Kaseman	Rodney Mathais	Adam Quintanilla	Harlo Thol
Dale Keller	Wayne Mattson	Ronald Raatz	Gene Thompson
Jerome Kelsh	Ronald McBeth	Kim Rasmussen	Gary Thornberg
Terry Kempel	Alvin McLaen	John Remson	Doug Thorstad
Don Kiefer	Clayton McLaen	Gerald Riba	David Tiegs
George Kiefer	Dennis and Lori McLaen	John Richards	Debbie Tiegs
Joe Kiefer	Milton McLaen	Gerald Ringdahl	Paul Tiegs
Paul Kiefer	Steve and Janell McLaen	Wesley Robertsdahl	David Titus
Pete Kiefer	Tammy Metzen	Thomas Robey	Dale Torreson
Thomas Kiefer	Tom Meyer	Wayne Robey	Einar Tosse
Elroy Kiefert	Keith Mikesh	Doyle and Linda Roeder	John Totenhagen
Harvey Kleingarn	Bruce and Denise Milbrandt	Roland Roeder	Herb Troester
David Klaven	Eugene Miller	Gene Rossow	Russ Turchin
David Kluge	Bill Mitchell	John Rotenberger	Trevor Vanberkom
Kevin and Barb Kohoutek	John Mlnarik	Al Rusch	Gene Van Eeckhout
Ray Kotchin	Larry Moxness	Sean Russell	Brian Vculek
Ken and Kermit Koube	Curt Mund	Lynn Sabbe	Roy Vig
Rich Kostecke	Alan and Pam Murack	Lee Sagvold	Chad Wagner
Dareld Koziol	Don Murack	Paul Sandman	Larry Walden
Roger Kratcha	Nick Nankivel	Keith Saunders	G. Douglas Walker
Dennis Krause	Alfred and Sheila Neiber	Jack Saunders	Tom Walock
John Krentz	Gerald Neiber	Mark and Mary Saunders	Gary Walstead
Duane Krivarchka	Joe and Elizabeth Neiber	Charles Schiele	Mike Walstead
Elaine Kroeger	Joseph and Judy Neiber	Gary Schiltz	Roger Walstead
Arlene Krump	Gary Nelson	Roger Schiltz	Robert Washnieski
Arnold Kruse	Hal Nelson	Allan Schram	Joe Wateland
Bob Kuchera	Jerry Nelson	Lois Schuler	Allen Weber
Mike Kulzer	Orville Nelson	Robert Schuler	Earl Weber
Norbert Kulzer	Ray Nelson	Steve Schumacher	Mark and Vickie Weber
James Kutter	Richard and Janet Nelson	Allyn Schwab	Donald Wehlander
Neal Kutter	Roger Nelson	Mark Schwan	Kenny Weiderholt
Greg Lague	Trent and Eva Nelson	Mitchell Sebens	Curt Wells
Greg Laine	Wyatt Nelson	Joseph Siekaniec	Joe and Betty Wettstein
Dean Langenwalter	Nickeson Farms	LeRoy Siemieniewski	Dennis Wheeler
David Lauer	George Novotny	Louis Siemieniewski	Roger and Connie White
Allen and Jennifer Lawrence	Chris Nundahl	Peter Siemieniewski	Terry Wieser
Catherine Lawrence	Dean Nundahl	Ray Siemieniewski	Arlen Willprecht
Harold Lawrence	LeRoy Odenbrett	Tom Siemieniewski	Bud Wisnewski
Earl Lehmann	Curt Ohm	Curtis Silseth	Jerome Wisnewski
Howard Lere	David Ohm	Orvis Silseth	Alan Wittich
James Levery	David Olson	Ronald Sitts	Allen Wittich
Annette Lewis	Harold Olson	Mike Skroch	Clayton Wohlwend
Paula Lewis	Neil Olson	Bill Smith	Louis Wohlwend
Ellery Liebelt	Alan Olstad	Lowell Smith	Larry Woodbury
Randy Lien	Danny O'Meara	Jim Smykowski	Bill Woytassek
Michael Lindsey	Joe O'Meara	Ken Smykowski	John Woytassek
Thomas Lindsey	Brian Orn	James Sorby	Jerry and Patty Woytassek
Duane Lock	Robert Orn	Al Soukup	Virgil and Ivadelle Woytassek
Mike and Penny Lock	Mike Paczkowski	Don Stallman	Brad and Tracy Wyum
Loff Farms	Matt Parrow	Jeff Steffens	Mark and Kathy Wyum
Jim Lyon	David Paulson	Todd and Diane Stein	Mike and Phyllis Wyum
Lester Lyons	Douglas Payne	Mark Stenson	Robert Wyum
Richard and Delores Lysne	Daniel Pearson	Kari Sterna	Steve Wyum
Mitch Mahrer	Gordon Pearson	Mark Stortroen	Thomas Wyum
Rick Mairs	Marvin Pearson	Harris Strege	Paul Zavada
Arden Malheim	Roger Pearson	Steve Strege	Dave Zentner
Joe Malheim	Alberta Pederson	Farren Stroehl	Dave Zetocha
Pam Maloney	Jeffery Pederson	Ken Stroh	Garth Zimbelman
Joe Malstrom	Harvey Peterson	Lawrence Strouse	Terry Zimbelman
John Manikowski	Richard Peterson	Earl Sulerud	Don Zirnhelt
Stan Manikowski	Peterson Brothers	Colin Sundquist	Mike Zirnhelt
William Manikowski	Tom Pettersen	Robert Sundquist	
Kevin Manock	Dennis Pherson	David Susag	

# Appendix O: Glossary

**Academia:** pertaining to colleges or universities.

**Accessible:** areas and activities allowing the physical access of areas to people of different abilities especially those with physical impairments.

**Adaptive Resource Management (ARM):** refers to a process in which decisions are implemented within a framework of scientifically driven experiments to test predictions and assumptions inherent in the management plan. Analysis of results help managers determine whether current management should continue as is or whether it should be modified to achieve desired conditions.

**Advocacy:** the act or process of supporting a cause or proposal; to actively support.

**Amphibians:** a class of cold-blooded vertebrates including frogs, toads or salamanders.

**Anadromous:** fish which swim up rivers from the sea at certain seasons for breeding (i.e., salmon).

**Avian Cholera:** is a contagious disease resulting from infection by the bacterium *Pasteurella multocida* that affects migratory birds. High concentration of the bacteria can be found for several weeks in waters where birds die from the disease. The bacteria can be transmitted through ingestion by birds and other animals scavenging off of diseased carcasses, direct contact between birds, and by air borne particulate. (Field Manual of Wildlife Diseases, 1999-001).

**Baseline:** a set of critical observations or data used for comparison or a control.

**Big Game:** large animals sought for hunting or fishing for sport including species such as white-tailed deer, antelope, mule deer, and elk.

**Biological Control:** reduction in numbers or elimination of unwanted species by the introduction of natural predators, parasites or diseases.

**Biomass:** the total amount of living material, plants and/or animals, above and below the ground in a particular habitat or area.

**Biotic:** pertaining to life or living organisms; caused or produced by or comprising living organisms.

**Botulism:** (Avian botulism) is a often fatal disease of birds that results when they ingest toxin produced by the bacterium, *Clostridium botulinum*. The bacteria persists in spores in wetland soil and are resistant to heating and drying and can remain viable for many years. Botulism outbreaks occur during the summer and fall when air temperatures are high and decaying vegetation is present. These conditions enable the spores to germinate. The cycle for botulism starts with birds dying, maggots begin feeding on carcass, maggots with the toxic bacteria are eaten by other birds, those birds die and the cycle continues. (Field Manual of Wildlife Diseases, 1999-001).

**Breeding Bird Survey (BBS):** a cooperative program of the U.S. Fish and Wildlife Service and the Canadian Wildlife Service for monitoring population changes in North American breeding birds by using point counts along roads (Koford et al. 1994).

**Bureau of Reclamation:** a Federal government water management agency whose mission is to assist in meeting the increasing water demands of the west while protecting the environment and the public's investment in these structures. Responsible in the District for carrying out the Garrison Diversion Unit Reformulation Act of 1986 and implementing the wetland wildlife mitigation in the Kraft Slough area.

**Calcareous:** refers to soils with moderate to large amounts of calcium, usually calcium carbonate.

**Categorical Exclusion (CE, CX, CATEX, CATX):** a category of actions that do not individually or cumulatively have a significant effect of the human environment and have been found to have no such effect in procedures adopted by a Federal agency pursuant to the National Environmental Policy Act (40 CFR 1508.4)

**Central Migratory Bird Flyway:** migrating birds follow specific pathways in their travel from their wintering grounds to their nesting grounds. Several major pathways are evidenced by their travels. The Central flyway occurs along the great plains states.

**Climax:** a community that has reached a steady state under a particular set of environmental conditions; a relatively stable plant community; the final stage in ecological succession.

**Colony:** the nests or breeding place of a group of birds (such as herons) occupying a limited area.

**Compatibility:** a wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgement of the Refuge Manager, will not materially interfere with or detract from the fulfillment of the Mission of the System or the purposes of the refuge (Draft Service Manual 603 FW 3.6). A compatibility determination supports the selection of compatible uses and identified stipulations of limits necessary to ensure compatibility.

**Comprehensive Conservation Plan (CCP):** A document that describes the desired future conditions of the refuge; and provides long-range (15-year) guidance and management direction for the refuge manager to accomplish the purposes of the refuge, contribute to the mission of the System, and to meet other relevant mandates (Draft Service Manual 602 FW 1.5)

**Cool Season Grasses:** begin growth earlier in the season and often become dormant in the summer. These grasses will germinate at lower temperatures (65 to 75<sup>0</sup> F). Examples of cool season grasses at Refuge are green needlegrass, porcupine grass, intermediate wheatgrass and tall wheatgrass, smooth brome, quackgrass, and Kentucky bluegrass.

**Cultural Resources:** the remains of sites, structures, or objects used by people in the past.

**Cultural Resource Inventory:** A professionally conducted study designed to locate and evaluate evidence of cultural resources present within a defined area. Inventories may involve various levels, including background literature search (Class I), sample inventory of project site distribution and density over a larger area (Class II), or comprehensive field examination to identify all exposed physical manifestation of cultural resources (Class III).

**Dakota Tallgrass Prairie Project:** a project within the eastern portion of North and South Dakota that includes parts of 32 counties (North Dakota: Dickey, Ransom, Richland, Sargent; South Dakota: Beadle, Bon Homme, Brookings, Brown, Clark, Clay, Codington, Davison, Day, Deuel, Grant, Hamlin, Hanson, Hutchinson, Kingsbury, Lake, Lincoln, Marshall, McCook, Miner, Minnehaha, Moody, Roberts, Sanborn, Spink, Turner, Union, Yankton). The U.S. Fish and Wildlife Service is working to protect, enhance, and restore uplands. A project proposal to the Land and Water Conservation Fund.

**Data Loggers:** equipment that when installed in water impoundments will be able to read the water level remotely at anytime of the year and save the data for managers to assist in carrying out the goals of the water management plan.

**Defoliation:** the removing of vegetative parts, to strip of leaves from animals and fire.

**Dense nesting cover (DNC):** a composition of grasses and forbs that allow for a dense stand of vegetation which protects nesting birds from the view of predators. Usually consists of one to two species of wheatgrass, alfalfa, and sweet clover.

**Depredation:** Damage inflicted upon agricultural crops or ornamental plants by wildlife.

**Drawdown:** the act of manipulating water levels in an impoundment to allow for the natural drying out cycle of a wetland.

**Drift Prairie:** an area of small, gently rolling hills, dotted with thousands of small wetlands with densities of up to 100 wetlands per square mile. It was formed by the melting and retreat of the Wisconsin glacier about 10,000 years ago.

**Drift Prairie Wetland Enhancement Project:** a project within the Prairie Pothole Joint Venture that includes 14 Counties in southeastern North Dakota (Barnes, Cass, Eddy, Griggs, Ransom, Richland, Sargent, Steele, Trail, and portions of Dickey, Foster, LaMoure, Stutsman, and Wells counties). Various governmental and nongovernmental agencies are working together to protect, enhance, and restore wetlands and uplands. Funded by the North American Wetlands Conservation Act.

**Easement Refuges:** areas where easements for flowage and refuge purposes and filing of water rights were purchased. A perpetual agreement with the landowner and any successive landowners that provided the exclusive and perpetual right and easement to flood with water, and to maintain and operate an artificial lake, and/or to raise the water level of a natural lake or stream, by means of dams, dikes, fills ditches, spillways and other structures for water conservation, drought relief, and for migratory bird and wildlife conservation purposes, and/or upon said land and waters to operate and maintain a wildlife conservation demonstration unit and a closed refuge and reservation for migratory birds and other wildlife.

**Ecological Diversity:** The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur (USFWS Manual 052 FW 1.12B).

**Ecosystem:** a dynamic and interrelating complex of plant and animal communities and their associated non-living environment; the totality of components of all kinds that make up a particular environment (Koford et al. 1994).

**Emergent:** a plant rooted in shallow water and having most of the vegetative growth above water. Examples are cattail and hardstem bulrush.

**Endangered Species (Federal):** A plant or animal species listed under the Endangered Species Act that is in danger of extinction throughout all or a significant portion of its range.

**Endangered Species (State):** A plant or animal species in danger of becoming extinct or extirpated in North Dakota within the near future if factors contributing to its decline continue. Populations of these species are at critically low levels or their habitats have been degraded or depleted to a significant degree.

**Environmental Assessment (EA):** a concise public document, prepared in compliance with the National Environmental Policy Act, that briefly discusses the purpose and need for an action, alternative to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact (40 CFR 1508.9).

**Extinction:** the complete disappearance of a species from the earth; no longer existing. (Koford et al. 1994).

**Extirpated:** the elimination of a species from an island, local area or region (Koford et al. 1994); to destroy completely; wipe out.

**Fauna:** all the vertebrate and invertebrate animals of an area; the animals characteristic of a region, period or special environment.

**Fen:** A fen, also called an alkaline bog, is a wetland primarily composed of organic soil material (peat or muck) that take thousands of years to develop.

**Feral:** having escaped from domestication and become wild.

**Finding of No Significant Impact (FONSI):** A document prepared in compliance with the National Environmental Policy Act, supported by an environmental assessment, that briefly presents why a Federal Action will have no significant effects on the human environment and for which an Environmental Impact Statement will not be prepared (40 CFR 1508.13).

**Flora:** all the plant species of an area; plant or bacterial life characteristic of a region, period or special environment.

**Floristic:** referring to studies of the species composition of plant associations (Koford, et al. 1994); of or relating to flowers.

**Forb:** a broad-leaved, herbaceous plant; a seed producing annual, biennial or perennial plant that does not develop persistent woody tissue but dies down at the end of a growing season.

**Fulfilling the Promises:** a document that has the visions and recommendations on leadership in serving wildlife, habitat and people to fulfill the promise of America's National Wildlife Refuge System first made by President Theodore Roosevelt in 1903 to preserve wildlife and habitat for its own sake and the benefit of the American People (Fulfilling the Promise: The National Wildlife Refuge System, July 1999).

**Geographic Information System (GIS):** a computer system capable of storing and manipulating spatial data; a set of computer hardware and software for analyzing and displaying spatially referenced features (i.e., points, lines and polygons) with nongeographic attributes such as species and age (Koford et al. 1994).

**Goal:** descriptive, open-ended and often broad statements of desired future conditions that convey a purpose but do not define measurable units (Draft Service Manual 620 FW 1.5).

**Global Positioning System (GPS):** a system which by using satellite telemetry can pinpoint exact locations of places on the ground.

**Grassland Easements:** a legal perpetual agreement between willing landowners and the Service to permanently keep land in grass for wildlife. Land covered by a grassland easement may not be cultivated. Mowing, haying and grass seed harvesting must be delayed until after July 15 of each year. Grazing is not restricted.

**Habitat:** the place or environment where a plant or animal naturally or normally lives and grows.

**Habitat fragmentation:** the alteration of a large habitat to create isolated patches of the original habitat that are interspersed with a variety of other habitat types (Koford, et al. 1994); the process of reducing the size and connectivity of habitat patches, making movement of individuals or genetic information between parcels difficult or impossible.

**Habitat and Population Evaluation Team (HAPET):** a team of Service scientists who with GIS and research data devised the Thunderstorm Map which indicates the areas preferred by mating and nesting ducks in the Prairie Pothole Region. This map is used to focus management efforts, restoration efforts and protection efforts in the area.

**Herbivory:** an animal feeding on plants

**Holistically:** ecology views humans and the environment as a single system; relating to or concerned with wholes or with complete systems rather than with the analysis of, treatment of, or dissection into parts.

**Impoundment:** A body of water created by collection and confinement within a series of levees or dikes thus creating separate management units although not always independent of one another.

**Incompatible:** any use (recreational or nonrecreational) of a refuge that, in the sound professional judgement of the Director of the Service, **will** materially interfere with or detract from the fulfillment of the Mission of the System or the purposes of the refuge. Incompatible uses are not allowed to occur on Service areas.

**Indicator species:** A species of plant or animal that is assumed to be sensitive to habitat changes and represents the needs of a larger group of species.

**Integrated Pest Management (IPM):** The control of pest species (plant or animal) using a practical, economical, and scientifically based combination of biological, mechanical, cultural, or chemical control methods. A balanced approach to controlling pest species populations.

**Interseeding:** a technique of planting in which seed is sowed directly into an existing turf. It protects the valuable soil resource and also promotes less competition from weed species that would invade in a plow seeding operation.

**Introduced species:** a species present in an area due to deliberate release by humans (including re-introductions, transplants, and restocked species) or due to accidental release through escape or indirect assistance (Koford et al. 1994).

**Inviolate Sanctuary:** A place of refuge or protection where animals and birds may not be hunted.

**Lacustrine:** relating to, formed in, living in, or growing in lakes.

**Lek:** an assembly area where animals (such as the sharp-tailed grouse) carry on breeding and courtship behavior.

**Mayfield method:** a method used to calculate the rate of nesting success based on the number of days that a nest was under observation (i.e., nest days of “exposure”); developed by Mayfield in 1975 (Koford et al. 1994).

**Maintenance Management System (MMS):** a national database which contains the unfunded maintenance needs of each refuge. Projects included are those required to maintain existing equipment, buildings and to correct safety deficiencies for the implementation of approved plans, and meet goals, objectives, and legal mandates.

**Mechanical Control:** reduction in numbers or elimination of unwanted species through the use of mechanical equipment such as mowers, clippers etc.

**Mesic:** characterized by, relating to or requiring a moderate amount of moisture; having a moderate rainfall.

**Migration:** regular, extensive, seasonal movements of birds between their breeding regions and their “wintering” regions (Koford et al. 1994); to pass usually periodically from one region or climate to another for feeding or breeding.

**Migratory birds:** birds which follow a seasonal movement from their breeding grounds to their “wintering” grounds. Waterfowl, shorebirds, raptors, and song birds are all migratory birds.

**Migratory Bird Hunting and Conservation Stamp Act:** Authorized the requirement of an annual stamp for the hunting of waterfowl whose proceeds go towards the purchase of habitat for waterfowl and other wildlife. Duck stamps are also purchased for entry into some refuges, by conservationist and for stamp collections.

**Migratory Bird Treaty Act:** Designates the protection of migratory birds as a Federal responsibility. This Act enables the setting of seasons, and other regulations including the closing of areas, Federal or nonfederal, to the hunting of migratory birds.

**Mississippi Migratory Bird Flyway:** migrating birds follow specific pathways in their travel from their wintering grounds to their nesting grounds. The Mississippi flyway where birds follow the general path of the Mississippi River.

**Mitigation:** measures designed to counteract environmental impacts or to make impacts less severe.

**Mixed-grass Prairie:** a transition zone between the tallgrass prairie and the shortgrass prairie dominated by grasses of medium height that are approximately two to four feet tall. Soils are not as rich as the tallgrass prairie and moisture levels are less. This causes changes in the vegetative composition and plants characteristic of this area include little bluestem, Junegrass and needle grasses.

**Monitoring:** the process of collection information to track changes of selected parameters over time.

**National Environmental Policy Act of 1969 (NEPA):** Requires all agencies, including the Service, to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in the planning and implementation of all actions, Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents to facilitate better environmental decision making (from 40 CFR 1500).

**National Wildlife Refuge (NWR):** a designated area of land, water, or an interest in land or water within the National Wildlife Refuge System.

**National Wildlife Refuge System (System):** Various categories of areas administered by the Secretary of the Interior for the conservation of fish and wildlife, including species threatened with extinction, all lands, waters and interests therein administered by the Secretary as wildlife refuges, areas for the protections and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, or waterfowl production areas.

**National Wildlife Refuge System Improvement Act of 1997:** Sets the mission and administrative policy for all refuges in the National Wildlife Refuge System. Clearly defines a unifying mission for the Refuge System; establishes the legitimacy and appropriateness of the six priority public uses (hunting, fishing, wildlife observation and photography, and environmental education and interpretation); establishes a formal process for determining compatibility; establishes the responsibilities of the Secretary of the Interior for managing and protecting the System; and requires a Comprehensive Conservation Plan for each refuge by the year 2012. This Act amended portions of the Refuge Recreation Act and National Wildlife Refuge System Administration Act of 1966.

**Native Species:** species which are part of the original plant and animals of an area. In general, meaning from the same continent (Johnson and Larson, 1999).

**Necrotic Enteritis:** Necrotic enteritis has occurred on highly alkaline lakes and wetlands where sodium, magnesium, and sulfate levels have been relatively high. The bacteria that causes necrotic enteritis is normally found in nonlethal amounts in intestines of healthy animals. It is believed that abrupt dietary changes, stress, infections from other diseases, and bacterial imbalances could be the reason this bacteria is suddenly produced at higher rate causing death. In southern Canada, geese can die soon after their arrival following their diet change from grass in northern regions to grain. These birds are also using alkaline bodies of water which seems to upset the normal bacterial balance.

**Neotropical Migrant:** a bird species that breeds north of the United States and Mexican border and winters primarily south of this border.

**Nest Success:** The percentage of nests that hatch (one or more eggs hatch) successfully of the total number of nests initiated in an area.

**ND Natural Heritage Program:** A State program administered by the ND Parks and Recreation Department. The Natural Heritage Program will protect and preserve elements of North Dakota's natural heritage on private and public lands, for the benefit of present and future generations before such areas are destroyed.

**North American Waterfowl Management Plan (NAWMP):** the North American Waterfowl Management Plan, signed in 1986, recognizes that the recovery and perpetuation of waterfowl populations depends on restoring wetlands and associated ecosystems throughout the United States and Canada. It established cooperative international efforts and Joint Ventures composed of individuals; corporations; conservation organizations; and local State, provincial, and Federal agencies drawn together by common conservation objectives. Tewaukon Complex falls into the Prairie Pothole Joint Venture.

**North American Wetland Conservation Act (NAWCA):** an act to conserve North American wetland ecosystems and waterfowl and the other migratory birds and fish and wildlife that depend upon such habitats. The act established a council to review project proposals and provided funding for the projects. This act was passed to further implement the North American Waterfowl Management Plan and included Canada, Mexico, and the United States.

**Objective:** An objective is a concise target statement of what will be achieved, how much will be achieved, when and where it will be achieved, and who is responsible for the work. Objectives are derived from goals and provide the basis for determining management strategies. (Draft Service Manual 602 FW 1.5).

**Parasitism:** an intimate association between species of two or more kinds, one in which a parasite obtains benefits from a host which it usually injures.

**Partners in Flight:** a Western Hemisphere program designed to conserve neotropical migratory birds and officially endorsed by numerous Federal and State agencies and nongovernment organizations; also known as the Neotropical Migratory Bird Conservation Program (Koford et al. 1994).

**Patch:** a part or area distinct from that around it; area distinguished from their surroundings by environmental conditions.

**Perennial:** plants which live for three years or more (Johnson and Larson 1999).

**Prairie Pothole Region:** an area rich in natural depressions that capture precious water in a relatively dry prairie landscape which provides the most productive breeding habitat in North America for waterfowl and many other birds. Covers portions of Iowa, Minnesota, Montana, North Dakota, South Dakota, Alberta, Saskatchewan, and Manitoba.

**Predation:** a mode of life in which food is primarily obtained by the killing or consuming of animals.

**Preferred Alternative:** this is the alternative determined to best achieve the Refuge purpose, vision, and goals; contributes to the Refuge System mission, addresses the significant issues; and is consistent with principles of sound fish and wildlife management.

**Prescribed Burning:** Controlled application of fire to the landscape that allows the fire to be confined to a predetermined area while producing the intensity of heat and rate of spread required to achieve planned management objectives.

**Priority Public Uses:** six uses authorized by the Refuge Improvement Act to have priority and are found to be compatible with the refuge purposes. This includes hunting, fishing, wildlife observation and photography, environmental education, and interpretation

**Raptor:** a carnivorous bird (as a hawk, falcon, or vulture) that feeds wholly or chiefly on meat taken by hunting or on carrion (dead carcasses).

**Refuge Operating Needs System (RONS):** a national database which contains the unfunded operational needs of each refuge. Projects included are those required to implement approved plans, and meet goals, objectives, and legal mandates.

**Resident species:** a species inhabiting a given locality throughout the year; nonmigratory species. Examples include white-tailed deer, sharp-tailed grouse, muskrat, raccoon, mink, and fox.

**Riffle:** a shallow, extending across the bed of a river; also a rapid; to form, flow over, or move in riffles.

**Riparian:** refers to areas adjacent to water; influenced by water associated with streams or rivers.

**Rough Fish:** a fish that is neither a sport fish nor an important food for sport fishes (i.e., carp).

**Scoping:** the process of obtaining information from the public for input into the planning process.

**Sediments:** material deposited by water, wind, or glaciers.

**Shelterbelts:** single to multiple rows of trees and/or shrubs planted around cropland or buildings to block or slow down the wind.

**Shorebird:** any of a suborder (Charadrii) of birds (as a plover or snipe) that frequent the seashore or mud flat areas.

**Spatial:** relating to, occupying, or having the character of space.

**Special Use Permit:** a permit for special authorization from the refuge manager required for any refuge service, facility, privilege, or product of the soil provided at refuge expense and not usually available to the general public through authorizations in Title 50 CFR or other public regulations (Refuge Manual 5 RM 17.6)

**Species of Concern (Federal):** species which are (1) documented or apparent population declines, (2) small or restricted populations, or (3) dependence on restricted or vulnerable habitats.

**Species Richness:** the absolute number of species in an assemblage or community; the number of species in a given area (Koford et al. 1994).

**Stakeholder:** a person who has an interest in activities of the Complex.

**Strategy:** a specific action, tool or technique or combination of actions, tools and techniques used to meet unit objectives (Draft Service Manual 602 FW 1.5).

**Tallgrass Prairie:** a habitat zone dominated by grasses of tall height that are approximately four to eight feet tall. Soils are rich and precipitation is the more than in any other prairie area. The vegetative composition and plants characteristic of this area include big bluestem, Indian grass, prairie cordgrass, switchgrass, and needle grasses.

**Tewaukon National Wildlife Refuge Complex (Complex):** a management unit of the Service that is located in the Southeast corner of North Dakota (see Map 1). The Complex encompasses the Refuge including the Sprague Lake Unit, the Storm Lake Easement Refuge, the Wild Rice Easement Refuge and the Tewaukon Wetland Management District (WMD).

**Threatened Species (Federal):** Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

**Threatened Species (State):** a plant or animal species likely to become endangered in North Dakota within the near future if factors contributing to population decline or habitat degradation or loss continue.

**Thunderstorm Map:** a map which depicts areas (wetland complexes) that are preferred by mating and nesting ducks in the Prairie Pothole Region. This map is used to focus management efforts, restoration efforts, and protection efforts in the area.

**Till:** unstratified glacial drift consisting of clay, sand, gravel, and boulders intermingled.

**Turbidity:** the cloudy condition of a water body caused by suspended silt, mud, pollutants, or algae.

**U.S. Fish and Wildlife Service (Service, FWS):** the principal Federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages the 93-million-acre National Wildlife Refuge System comprised of more than 500 national wildlife refuges and thousands of waterfowl production areas. It also operates 65 national fish hatcheries and 78 ecological service field station, the agency enforces Federal wildlife laws, manages migratory bird populations restores national significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid program which distributes of millions of dollars in excise taxes on fishing and hunting equipment to State wildlife agencies.

**U.S. Geological Survey:** a Federal government agency whose mission is to provide reliable scientific information to describe and understand the earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

**Visual Obscurity:** a measurement of the density of a plant community; the height of vegetation that blocks the view of predators to a nest.

**Wading Birds:** birds that have long legs that enable them to wade in shallow water. Includes egrets, great blue herons, black crowned night heron, and bitterns.

**Warm Season Grasses:** begin growth later in the season (early June). These grasses require warmer soil temperatures to germinate and actively grow when temperatures range from approximately 85 to 95°F. Examples of warm season grasses are switchgrass, big bluestem, Indian grass, little bluestem, and tall wheatgrass.

**Waterfowl Production Areas (WPA):** prairie wetlands with associated uplands managed to provide nesting areas for waterfowl and owned in fee title by the Service. These lands are purchased from willing sellers with funds from Duck Stamp sales. They are open to public hunting, fishing, and trapping according to State and Federal regulations.

**Waterfowl:** Includes ducks, geese, and swans.

**Watershed:** the region or area draining into a river, river system, or body of water.

**Western Hemisphere Shorebird Reserve Network (WHSRN):** consists of wildlife agencies, scientists, private conservation groups, and governments who endeavor to preserve and manage wetland habitat on a hemispheric scale to aid shorebird survival.

**Wetland Easements:** a perpetual agreement entered into by a landowner and the Service. The easement covers only the wetlands specified in the agreement. In return for a single lump sum payment the landowner agrees not to drain, burn, level, or fill wetlands covered by the easement.

**Wetland Management District (WMD):** an area covering several Counties that acquires (with Federal Duck Stamp funds), restores, and manages prairie wetland habitat critical to waterfowl and other wetland birds. The Tewaukon Management District covers the Counties of Ransom, Richland, and Sargent.

# Appendix P. Summary of Public Involvement

In compliance with the National Environmental Policy Act and the Service's comprehensive conservation planning process, the planning team initiated a public scoping process to determine what issues the public would like to see addressed in the CCP and environmental assessment. Issues, concerns, and opportunities were identified at five open houses in the Tewaukon Complex. Prior to the public meetings, the Complex staff discussed the planning process with local county commissioners, sportsmen's groups, other interested groups, and advertised in the local media. Information on the planning process was also available in cafes frequented by community members throughout the Complex. Worksheets on Refuge issues were provided to the public to stimulate additional public input for the planning process. From this initial scoping period, we received 50 worksheets and 11 individual letters. The CCP only addresses some of the issues and is not written at a level of detail that addresses all the input that was received. If further discussion on an issue is included in the CCP, a reference section is noted. Some input was similar and was grouped together. Comments that were received from the scoping process and responses to the input from the planning team follow.

## Scoping Input and Responses

### 1. Fishing

**Input:** Improve and increase opportunities for fishing on the Refuge. Close fishing access seasonally including boat closure and 10 pm hour limit. Appreciate the fisheries management that has been done on Refuge. Continue to support fishing tournament. Allow quiet boating (canoes)- but no motors or jet skis. Keep area pristine. Extend fishing from 10:00 pm to 12:00 am for additional night time fishing (specifically around the Lake Tewaukon culvert area). Allow fall fishing by boat restricted to the morning hours only, after September 30. New boat ramp on the western side of Lake Tewaukon near the culverts. **Response:** The Refuge staff will continue to follow recommendations made by the Service Missouri River Fish and Wildlife Assistance Office in Bismarck who consult with the ND Game and Fish Department regarding fishery management on Lake Tewaukon and Sprague Lake. Each year the fishery is evaluated for size class and stocking numbers are adjusted to maintain the fishery. The current Tewaukon Fishery Management Plan does not recommend developing fisheries in any other Refuge wetlands. Water management for migratory birds (Refuge primary purpose) does not provide water depths to support an overwinter fishery on other water bodies. Plans are to continue the current Refuge regulations which permit seasonal boat use (including motor boats), and fishing from one-half hour before sunrise to 10 pm. Current staffing is not adequate to support increased angling hours. Waterfowl Production Areas are open to fishing according to ND State regulations. Refuge will continue to sponsor the Tewaukon Fishing Tournament as long as cooperation continues with the local sportsmen's clubs. Proceeds of the fishing tournament are used to improve facilities on Refuge lakes. Boat ramps were evaluated, added, and upgraded in 1997 and no plans exist at this time to add additional ramps. See Refuge Public Use Fishing Section for further information on fisheries.

**Input:** Raise or remove horsepower limit on lakes. No jet skis or waterskiing. **Response:** In May 1998 the horsepower limit was removed from Tewaukon and Sprague Lakes. However power boating, skiing, and jet skis are still not allowed on the lakes. Boating for fishing purposes supports one of the six priority public uses on refuges.

**Input:** All night fishing or longer hours. **Response:** Current Refuge hours of one-half hour before sunrise until 10:00 pm will remain in place. Expanding fishing hours on the Refuge may be compatible with Refuge purposes, but it has been determined that funding and personnel needed to support additional hours are not available. Waterfowl Production Areas are open to fishing by State regulations and may be fished all night.

**Input:** Open Mann Lake to ice fishing. **Response:** Mann Lake is managed for waterfowl and, at certain times, may not have sufficient water for a sustained fishery. We have opened areas where it is cost effective to stock and maintain a fishery that can overwinter with little die-off to protect the investment (i.e., Lake Tewaukon and Sprague Lake). No plans exist to open additional Refuge wetlands to ice fishing or any fishing if they are not going to be managed at depths that support fish. See Refuge Public Use Section for further information on fisheries.

**Input:** Continue size limits on fish. **Response:** Refuge will continue size limits until other recommendations are made by the Service Missouri River Fish and Wildlife Assistance Office. So far test netting has shown a definite size increase of sport fish since the limits were put in place and angler success appears to have improved. See Refuge Public Use Fishing Section for further information on fisheries.

**Input:** Concerned about priority of pelicans over fish. **Response:** Management of the Refuge does focus on migratory birds because the Refuge was established for migratory birds. Pelicans frequent other areas besides Lake Tewaukon and Sprague Lake. Lake Tewaukon and Sprague Lake will be managed for migratory birds at levels that support sport fish populations. Management actions that would discourage migratory bird use on the Refuge in favor of fisheries management are incompatible with Refuge purposes and will not be pursued.

**Input:** More control of carp, either commercial or chemical. **Response:** Chemical control of carp over the whole system has been determined to be cost prohibitive and harmful to other species. The Refuge staff will continue to utilize water management to freeze out carp upstream and, when conditions are right, may do limited chemical control. Commercial harvest has been used in the past, but markets and water conditions do not always favor this method. The objective of introducing size limits on walleye and pike was to increase predation on carp.

**Input:** Stock more pan fish (perch). Suggest stocking perch, sunfish, crappie in lakes for kids. **Response:** The Service has stocked yellow perch and black crappie in Lake Tewaukon and Sprague Lake. Most recent releases in 1998 included 63,000 perch fry and 23,400 black crappie fry in Lake Tewaukon and 15,000 perch fry in Sprague Lake. In 1999, 50,000 perch fry were stocked in Lake Tewaukon. Panfish will continue to be stocked in Lake Tewaukon and Sprague Lake and are likely to do better in Sprague Lake due to the vegetative growth in the lake.

**Input:** Stock fish in Kennedy Slough and Park Lake. **Response:** Kennedy Slough is part of a Waterfowl Production Area whose main purpose is breeding, nesting, and migratory waterfowl habitat. Since recent research indicates fish and ducklings compete for the same food sources, the Service will not actively support stocking of these waters. High water conditions may introduce fish from other areas. The majority of Park Lake is privately owned.

**Input:** Remove snow from roads and ramps for winter fishing. Improve access for vehicles on east boat ramp (more hard surface area for parking, turn-arounds, and roads). **Response:** Mild winters do not require snow removal for winter fishing access. In some years snowfall makes these areas inaccessible. Snow removal by Refuge staff has been done in the past and will continue to be dependent upon equipment condition, staff availability, and funding. The limited use of snowmobiles has been approved for access to fish houses during severe winters. No plans exist to improve surfaces on the east side of Lake Tewaukon. A period will occur during spring thaw when access to these facilities will be difficult.

## 2. Hunting/Trapping

**Input:** Continue pheasant and deer hunting. **Response:** Pheasant and deer hunting will continue on the Refuge since harvestable populations are available and this use is compatible with the Refuge purpose (See Compatibility Determination Appendix G). Pheasant and deer hunting are also available on Waterfowl Production Areas according to ND State regulations. Non-toxic shot will continue to be a required on all Complex properties for all upland game hunting. See Refuge Public Use Hunting Section.

**Input:** Englevale Rest Area, there is confusion about waterfowl/deer/pheasant seasons with rest areas. Like this site as a rest area. **Response:** The WPAs in this area were set aside as a waterfowl rest area which also restricted small game hunting and fishing from September 25 through November 30. Due to high waterfowl numbers and landowner response, this rest area was dropped in 1998 and is now open to waterfowl hunting and other wildlife hunting according to ND State Regulations. The use of non-toxic shot for waterfowl and upland game hunting is required.

**Input:** Close pheasant hunting on Refuge after December 15. **Response:** The Refuge will continue a pheasant season on the day after deer gun season to the end of the ND general pheasant season. The Refuge currently has a limited pheasant season (approximately 42 days compared to the 96 days by ND State regulation) to reduce conflicts with other hunting opportunities and migratory bird use. Research has shown that the removal of 90 percent or more of the pheasant roosters will have no effect on pheasant populations. Most of the roosters not managed by hunting would die from natural causes, predation, starvation, disease, exposure or other threats. Weather dictates population trends in northern pheasant habitat. No sound biological reason exists to shorten the pheasant season (See Refuge Public Use Hunting Section).

**Input:** Want a youth waterfowl season on or near the Refuge. **Response:** The Tewaukon National Wildlife Refuge's purpose is for migratory birds. This use conflicts with a Refuge primary purpose, serving as a waterfowl rest area during migration. Opportunities for youth waterfowl hunting exist on the adjacent ND Game and Fish property and on all Waterfowl Production Areas in Ransom, Richland, and Sargent Counties.

**Input:** Have recreational muskrat trapping on Refuge. **Response:** The Refuge had recreational trapping prior to 1998; however, the interest in trapping decreased due to the fur prices which made it difficult to justify the staff time for only one interested trapper. If fur price and interest increases, this use will be reevaluated. Recreational trapping is available on all Waterfowl Production Areas in Ransom, Richland, and Sargent Counties.

**Input:** Continue Youth Deer hunt. **Response:** Refuge will continue the youth deer hunt on the Refuge to encourage youth hunters. This use is compatible with the purposes of the Refuge and provides valuable experience for the youth hunters. See Refuge Public Use Hunting Section.

**Input:** Open Refuge to predator hunting. Encourage shooting of fox, raccoon, and skunk. **Response:** At this time, the Refuge will not be opened to predator hunting. A long process must be completed to open any new hunting programs on a National Wildlife Refuge including public input, which takes up to two years to complete. Since an opportunity for this type of hunting exists on the neighboring State land and on all Waterfowl Production Areas, it is viewed as a non-priority issue for the Refuge. Expanding hunting opportunities may be compatible with Refuge purposes, but it has been determined that funding and personnel needed to support additional hunting are not available. Research indicates that fall and winter predator hunting do not affect ground nesting bird success that following spring.

**Input:** Snow goose hunting on Refuge (both open a season and keep the Refuge closed). **Response:** The Refuge will not be opened for any waterfowl hunting as it conflicts with Refuge purposes. Snow geese typically use adjacent private land to feed during migration, providing opportunities for hunters. Providing a closed rest area also gives waterfowl a place where they are not disturbed which generally allows birds to remain in the area for a longer period of time. Birds tend to leave an area sooner if they are continually disturbed.

**Input:** Establish waterfowl retrieval zone. **Response:** Currently, no plans exist to provide for a waterfowl retrieval zone on the Refuge. Retrieval zones can be exceptionally difficult to enforce and can increase waterfowl disturbance. The majority of the waterfowl shooting in the area occurs on open crop fields and marshes located on the adjacent ND Game and Fish Wildlife Management Area.

**Input:** Take care of wildlife for hunters. **Response:** The Tewaukon National Wildlife Refuge was established as a Refuge and breeding ground for migratory birds and other wildlife. Management will benefit many species of wildlife and hunting will continue where compatible with the Refuge purpose (i.e., deer and pheasant). District lands were acquired to assure the continued availability of habitat capable of supporting migratory bird populations at desired levels. Waterfowl Production Areas are open to hunting of all species according to ND State regulations and Service special regulations.

**Input:** Make sure hunting access continues, as it may not be available elsewhere. **Response:** Public hunting access will continue on Waterfowl Production Areas and for deer and pheasant on the Refuge. See Refuge and District Public Use Hunting Section.

**Input:** Do not change deer hunting program; it is a safe place to hunt. **Response:** The Refuge provides a deer hunt that restricts the number of deer gun permits and schedules other season dates of hunting seasons to limit conflict and provide safe hunting experiences. Unless problems occur, this program will be conducted as it has been in the past. See Refuge Public Use Hunting Section.

**Input:** Refuge staff hunt on other Refuges as self evaluation. **Response:** Currently, no formal arrangement exists, however, many of the Refuge staff do hunt at other Refuges in this State as well as other states.

**Input:** Have hunters provide feedback on hunting experiences. **Response:** The Complex does receive some informal feedback from hunters who hunt on the Refuge or on the District. Many of the comments are positive and support the current Refuge programs. Periodically Refuge deer hunters are surveyed to determine how they rate their experience.

**Input:** Refuge is a Refuge for wildlife foremost. Use hunting to control excess populations. Concerned about the attack on hunting by groups such as PETA. No one should have a say about the use of hunting (or not) except Service and the State F&G involved. **Response:** The Refuge currently uses the deer hunting for population management. We also have concerns that anti-hunting sentiments may restrict our ability to use a very useful management tool for the purpose of controlling wildlife populations. Congress, in recent legislation (1997 Improvement Act), has identified hunting as one of the six priority wildlife-dependent public uses on Refuges. We actively discuss our hunting seasons and regulations with the ND Game and Fish Department.

### 3. Habitat

**Input:** More emphasis on tallgrass prairie and grasslands for migratory birds. More grassland easements with perennial cover to improve wetland and water quality. Put emphasis on grasslands on the District. Decline in grassland birds: Accept what we cannot change. If weather keeps potholes wet, we will have a lot of birds, when dry, we won't. **Response:** The Tewaukon Complex staff intends to increase its efforts in the protection (easement and fee), restoration, and reestablishment of tallgrass prairie especially for grassland nesting birds as well as improving the wetland and water quality of the area. See Refuge Habitat Section.

**Input:** Use seed source from adjacent private landowners (pay them). **Response:** The Complex is dependent upon budgets from year-to-year that determine the amount of seed we can buy. We have relied on past seed sources in North Dakota and Minnesota from reputable companies that have seed with a genetic makeup that is similar to those from this area. If a good seed source was available from private landowners, we would be interested in knowing about it.

**Input:** Less grassland. **Response:** Grassland habitat is needed in the area to provide sufficient nesting cover for many species of migratory birds and resident wildlife including pheasants. Managing grassland habitat will still be a primary focus of Refuge management efforts as this is the limiting factor affecting ground nesting birds in the Complex. See Refuge Habitat Grassland Section.

**Input:** Refuge needs to be a reservoir of all types of wildlife for whole area around, as there is no habitat in surrounding lands. More efficient cropping has meant less grassland habitat. **Response:** Managing Refuge habitats will still be a primary focus of Refuge management efforts. These habitats will support a variety of wildlife populations that are found in this area. See Refuge Habitat Section.

**Input:** More weed management, especially for thistles. More control with chemicals and mowing. Give Refuge staff more leeway to use chemical controls, and more discretion at local level to use available chemicals that minimally affect wildlife. Wants to continue working with the Service on bio controls and bug releases. The Refuge doesn't manage its weeds, so why is private landowner penalized for not controlling weeds? Weed control and options at local level. Spray weeds if can't use insects. **Response:** Current management for weeds include spurge beetles (over a million and a half beetles released to date on the Complex), mowing of thistle, and chemical control of thistle and spurge. Expenditures in 1999 included \$13,464 in chemical cost and \$6,551.05 in labor. Control of weeds included 511 acres of spurge chemically treated, 115 acres of thistle chemically treated, 154 acres of spurge grazed by sheep, 297 acres of thistle mowed, 40 acres of spurge beetles, and 12 acres of thistle insect control. Current limitations on spraying include staff size and high water areas making it impossible to access some locations. Because of the size of the District, the staff asks that the public provide information on problem areas. The Complex is limited to certain chemicals that have prior approval through the Regional Office and are low in toxicity to wildlife. The Complex makes every effort to control weeds on fee title properties and will continue to do so. We will continue working with local groups to establish spurge beetles in other areas as our released beetle populations increase. See Refuge Habitat Grassland Section.

**Input:** More trees on WPA's for food and cover for deer. Shelterbelts, if planned right, winter deer and other wildlife and melt down snowbanks to fill wetlands. **Response:** Research indicates that some grassland nesting migratory birds avoid nesting adjacent to trees or other tall (over 3½ feet) woody vegetation. Grassland nesting bird populations are in sharp decline due in part to loss of grassland habitat lacking in trees. Deer populations in the area are currently on the rise and reaching a maximum that the local habitat can support. The historical natural vegetation of the area was primarily grass. Only a few trees were located in riparian areas. White-tailed deer populations historically were limited to these riparian areas. The Service will continue to emphasize managing grassland habitat for migratory birds which does not include planting of additional trees. This management will still support white-tailed deer populations.

**Input:** Suggest grazing as the only grassland tool used. Use grazing and fire as management tools as we get more grassland. Grasslands: Hay with sickle mower set low only-objective is to renovate grassland. Use livestock for improving streambank vegetation. Done correctly it can be effective. High impact/low duration approach. **Response:** Managers prefer to have several tools to utilize for the management of grasslands and other vegetation. This allows for the most efficient and beneficial management for each area. Some of the tools currently being used for grassland management include haying, grazing, and fire. In degraded areas, some additional tools include: interseeding for additional vegetative diversity, farming or chemicals to control undesirable vegetation. Many of the District properties are too small to sufficiently rotate cattle through or no cattle are available in the area. Difficulties also exist in funding the cross fencing of areas and providing sufficient staff time to manage and monitor areas See Refuge Habitat Grassland Section.

**Input:** Need more emphasis on District linking habitat blocks to offset habitat fragmentation. Will increase nest success. **Response:** This is a concern of the Complex staff and the Service. The Service will continue to look for ways to connect habitat blocks not only for nest success but to facilitate dispersion of native species and enhance gene flow. See District Habitat Grassland Section.

#### 4. Management

**Input:** Common sense management. Management decisions at local level. Local input to management decisions. **Response:** The management of the Tewaikon National Wildlife Refuge Complex is based on scientific research, years of experience, and is guided by legislation and Service policies. Local management decisions often take into account the local concerns and history of the area.

**Input:** Focus on pro-active approach to issues. Improve Service credibility. **Response:** The Complex staff has and will continue to focus efforts on keeping the public informed, provide education and assistance when required. We are also concerned about credibility and will continue to make efforts to communicate Complex directions, strategies, and policies. See Refuge Public Use Environmental Education and Outreach Section.

**Input:** Wants Refuge to pay same property taxes as a private owner would for same piece. **Response:** Federal agencies are exempt from paying real estate taxes. However, Congress realized the hardship placed on local government and implemented payments in-lieu-of-taxes. In the case of the Fish and Wildlife Service, these payments are called Refuge Revenue Sharing payments. Each year the Refuge pays their Refuge Revenue Sharing from funds generated by the National Wildlife Refuge System from commercial activities on Refuges such as oil, grazing, haying, etc. The Refuge Revenue Sharing Act stipulates that 3/4 of 1 percent of the appraised value of Service lands would be paid to counties (not based on the counties evaluation for taxes, sometimes results in higher or lower payments). From 1965 to 1975, 100 percent of this entitlement was paid to the counties. Since then, Refuge revenues have not been sufficient to pay 100 percent. Congress has passed some supplemental appropriations but never enough for full entitlement. For newly acquired properties in North Dakota, a one-time lump sum is paid (at the current Treasury Bill rate) to make up the difference between the current County taxation rate and the last Refuge Revenue Sharing payment to the County. Currently, several ND Congressional offices are working on legislation to ensure that 100 percent of the Refuge Revenue Sharing Payment is available in the future. Passage of the current CARA bill would provide additional funding to increase Refuge Revenue Sharing. Voicing your concern to the congressional offices is one way to encourage full payment to counties. This issue is of concern to Fish and Wildlife Service staff throughout ND who wish to continue a good working relationship with the counties. The Refuge also pays property tax on the house located near the headquarters, this is a Regional Service decision and is not done in other parts of the country.

**Input:** Requests to gas pocket gophers along fence lines or ditches. Requests to control muskrats on road right-of-Way through Refuge. **Response:** The management of rights-of-way through Complex lands are a joint responsibility between the lead road management agency (Township, County, or State) and the Complex staff. The staff has worked with, and will continue working with these agencies to address road issues. For example, we have agreed to control muskrats along Refuge roads with Complex staff when we get specific requests. The staff has no plans to control, or permit others to control pocket gophers along Complex lands.

**Input:** Continue to have flexibility to burn wetland vegetation on wetland easements. **Response:** The wetland easement policies allow for the issuance of a permit to burn wetland vegetation once every five years. This allows for the regeneration of these wetlands with the removal of layers of dead vegetation layer. This is a written policy and the staff will continue to follow the written policy in the District.

**Input:** Current easement enforcement is inflexible and detrimental. Need alternatives, balance of long-term and short-term contracts. **Response:** When the government initially purchased easements (real property interest) it did not expect to have to actively enforce the terms of the agreement. However, with the development of more effective and efficient draining equipment it has been necessary to enforce the property interests that were purchased. Easement enforcement follows specific policies and court decisions in order to protect the wetlands and grasslands for wildlife use. The wetlands may be farmed in dry years so the areas are not always inaccessible to the farmer. An analogy that could be used is a farmer leasing a landowners farm, planting a crop, and then the landowner removing the crop. This would not be fair to the lessee and would void the rental agreement. The Service is trying to protect the interest that was purchased in the agreement. Flexibility can occur in certain areas including health and safety issues. Complex staff have been working with landowners to resolve flooding issues that have developed in the last four years. Long-term contracts are the best value for the government's money, protecting resources indefinitely, and we will continue to look at perpetual easements from willing sellers. Short-term contracts do not provide a large enough payment to the landowner to make them saleable in the area.

**Input:** Hold water back in Refuge pools longer in spring runoff season. If feasible, provide some type of water control on lakes that allows flood control. Work with water commission. Water management plan should help prevent flooding in the Red River Basin. **Response:** Refuge pools were designed as shallow marshes for waterfowl use. They do not have the capability to hold large amounts of water, especially the runoff that we have seen in the last four years. Our management plans do take into account spring runoff, and the goal each year is to pass as much water in the spring as early as possible then slowly release flows to prevent excessive flooding downstream. Some rainfall events make this impossible and the frequency of flooding has increased in the recent wet cycle. Fluctuations from rainfall can increase water levels up to six feet in 12 hours. These large rain events can be very difficult to manage with our shallow pool capabilities. We will continue to work with local water boards, Resource Conservation Districts, and ND State Water Commission on water use and management. See Refuge Managed Wetlands Section.

**Input:** Concerned about illegal collection of Echinacea species (Purple coneflower). **Response:** This is also a concern of the Complex staff and efforts have been made to patrol areas on the Complex where known populations exist. So far no illegal collection has been noted but if evidence is found, regulations will be enforced. It is illegal to remove any plants, animals or parts, historic and prehistoric artifacts from a National Wildlife Refuge property unless covered by hunting season or other valid permit.

**Input:** Research seems to be focused on what will prove presumptions, not unbiased results. Research projects need to be longer term to be significant. **Response:** The majority of the research conducted on Complex lands are administered by colleges, universities, other governmental agencies or research groups. Each research project conducted on the Complex must be reviewed by Refuge staff and determined to be useful for management on Complex properties. The majority of the research projects are to resolve or answer management questions. The Service encourages long-term research projects on its properties.

**Input:** Continue to get local input in the planning process periodically through the 15 year period. The CCP should have at least a 100 year orientation. Build flexibility in the CCP to reflect changes in land use and farming practices adjacent to the Refuge, and adjust for resulting changes in wildlife needs. **Response:** The CCP will guide management on the Complex for the next 15 years. A copy of the Plan will be provided to all those that have interest and public input will continue to be a priority. The Complex staff will review the Plan every five years to determine if it needs revision. In the case of severe circumstances, the project leader has the authority to modify management actions to respond appropriately. The Plan will be revised no later than 2015.

**Input:** No more land acquisition. Enough taken out of production already. Work with private landowners instead. **Response:** The Complex staff will continue to look at all options in protecting wildlife habitat including acquisition from willing sellers (upon concurrence with County commissioners and the Governor), the purchase of long-term easements, and any other process that is available. See District Habitat Grassland Section.

**Input:** Manage water for multiple benefits when possible. **Response:** The water management plan will continue take into account management for waterfowl, other migratory birds, fisheries, recreation, facilities maintenance, and limited flood control. Local conditions including weather, dam maintenance, and local water conditions will also be a factor.

## 5. Resident Wildlife

**Input:** Stock wild pheasants at Refuge. Work with Game and Fish and Pheasants Forever to transplant wild birds (Pheasants) on the Refuge. Put a wild flock of pheasants in predator fence. **Response:** Currently, the Refuge pheasant population is doing well. This nonnative species is thriving as a result of management practices that benefit waterfowl such as predator management, habitat management, and crop management. The National Wildlife Refuge System exists for the protection and management of plants and animals native to the United States. Service policy is to prevent further introduction of nonnative species except when a species would have value as a biological control agent. We do not plan to augment the Refuge pheasant population. See Refuge Wildlife Nonnative Section.

**Input:** Has observed that pheasant hunting is best when there are large stands of cattails. Cattail cover more effective than food plots. Wants to see cattail spreads that are not allowed to flood and die off. **Response:** Providing a greater range of conditions as described in the wetlands section of the Plan should yield more cattails in a given year. Wetlands will still be managed to provide migratory bird benefits. See Refuge Habitat Managed Wetlands Section.

**Input:** Work with ND Game and Fish and Pheasants Forever to transplant wild birds on the Refuge. Plant more food plots. **Response:** Since pheasants are a nonnative introduced species, the Refuge will not carry out management activities that specifically encourage population expansion. Other management activities for migratory birds that will benefit pheasants include cropland management, predator control, and grassland cover improvements. See Refuge Wildlife Nonnative Section.

**Input:** Stock and provide food for wild turkeys. **Response:** Due to the lack of suitable turkey habitat, no plans exist at this time to stock wild turkeys.

**Input:** Hawks, owls are taking too many pheasants. Wants more protection for pheasants from aerial predators. Need to deal with avian predators. **Response:** Raptors are protected under the Migratory Bird Treaty Act and cannot be directly managed. However, historical records indicate that these species were less numerous when trees were limited to riparian areas. Raptor populations increased in response to the increase in nesting and perching trees. Some areas will be targeted for removal of these large trees. See Refuge Habitat Grassland Section.

**Input:** Continue resident wildlife management. **Response:** Complex staff will continue to manage resident wildlife. The Refuge was established to benefit migratory birds and other wildlife. Most CCP management actions are planned to benefit migratory birds. These actions will benefit resident wildlife by providing habitat that will favor species that utilize grasslands. Several CCP goals directly address management for resident wildlife. See Refuge Wildlife Migratory Birds and Other Native Wildlife Sections.

**Input:** Work with U.S. Forest Service and ND Game and Fish to encourage prairie chickens on Stacks Slough and south unit of Grasslands. **Response:** The Complex staff will continue to work with Forest Service and Game and Fish to evaluate Complex lands for prairie chicken releases. Currently, not many habitat blocks are on the Complex that are large enough to support prairie chicken releases. Efforts will continue on providing appropriate habitat for resident species. See Refuge Other Native Wildlife Section.

## **6. Farming**

**Input:** Cropland for wildlife (more, less and none). Establish upper limit on cropland, wildlife needs come first. Put food plots on WPAs adjacent to CRP or on private lands. Unwise to plant crops for waterfowl on Refuges.

**Response:** The Refuge will maintain no more than 500 acres of cropland to reduce depredation on adjoining properties; provide food for both migratory and resident wildlife; and to prepare a clean seedbed for grassland re-seeding. Previously, up to 1,000 acres was farmed; however, this was more acreage than needed to provide food for wildlife. Grassland habitat will still be the primary focus of Refuge management efforts as this is a limiting habitat component in the area. Tewaukon Complex staff will continue to utilize crop management for seedbed preparation on Waterfowl Production Areas. See Refuge Wildlife Migratory Birds Section.

**Input:** Feed geese in spring but not in fall to manipulate when they use the area. **Response:** Current cropland management provides for some green browse in the spring and fall. Only post harvest grain is available in the fall. Standing crops are mowed for waterfowl in the spring. Refuge wetlands also provide food sources throughout the year. Typically waterfowl rest on the Refuge in the fall and feed in the adjacent private farm fields. No plans exist to require additional tillage in the fall to limit food sources on harvested Refuge fields.

**Input:** Put vegetative buffer zones around wetlands in Refuge farmland.

**Response:** Biologically this is a good idea; administratively it is more difficult to achieve. Portions of wetlands in Refuge farmlands are only farmed in dry years. The Refuge staff recognize the negative effects cropland tillage can have on prairie wetlands with increased sedimentation and chemical impacts. These plowed wet areas provide important migratory habitat for shorebirds.

**Input:** Less farming on the Refuge due to problems with chemical runoff into the wetlands. No farming on the Refuge. Farming on Refuge should be enough for deer and pheasant and no more. **Response:** The current farming program is conducted on less than 6 percent of Refuge lands (approximately 500 acres) and provides benefits for migrating waterfowl and resident wildlife. It also reduces impacts to adjacent private crop and hay fields. Chemical use on these farmed areas is limited to chemicals with a low toxicity to wildlife. The Refuge staff will continue to evaluate the use and need of these areas and will modify the program as necessary. See Refuge Wildlife Migratory Birds Section.

## 7. Recreation

**Input:** Provide overnight camping. **Response:** Overnight camping and developed facilities are available on an adjacent County property at Silver Lake. Current staffing and funding are not sufficient to support this activity on the Refuge. Overnight camping permits have been issued to groups that have incorporated camping into natural resource education (i.e. Boy Scouts). We will continue to consider special use permits in these cases.

**Input:** No development of roads at Stacks Slough. Wants boat access to Stacks Slough and road access to marsh. **Response:** At this time, the Service has no plans to develop roads at Stacks Slough. Several section line roads and trails already allow access to the area. Vehicle traffic is not allowed off section line roads and trails on Waterfowl Production Areas.

**Input:** Continue to monitor and evaluate public uses and its effect on wildlife. **Response:** Complex staff currently monitor public use and wildlife impacts in conjunction with their daily activities around the Refuge. For example, in 1999 boat use periods on Refuge lakes were modified to limit disturbance to migratory birds after boat use periods had been extended the previous year.

**Input:** Jet ski regulations on Lake Elsie. Suggests a focus group for Lake Elsie. Keep Lake Elsie as an Easement Refuge and retain water rights. What does or how does the "No Boats" on south side of Lake Elsie relate to the easement language? Fall management of 1073 for 2 feet cushion to take winter increases. Create connection between Murphy Slough and Lake Elsie where Lake Elsie provides water to Murphy Slough. At 1073 water won't go to Murphy. **Response:** Lake Elsie National Wildlife Refuge interests were divested by Congress by Public Law 105-312 in October of 1998 due to an increase in recreational use and a loss of waterfowl values. Water based recreation regarding types of craft, use zones, and water elevation management are the responsibility of the State and other local government now that the Service has divested its interest in Lake Elsie NWR (See Easement Refuge Section). The Service has retained an easement interest in Murphy Slough. Additional survey data would have to be available to determine the relationship of Murphys Slough and Lake Elsie at 1073.

**Input:** More road access for wildlife viewing especially during migration and peaks. **Response:** Currently, no plans exist to open additional road areas which would increase migratory bird disturbance. One of the purposes that the Refuge was established was to serve as a rest area for migratory birds. Currently, a number of areas and observation points are available to the public for viewing of wildlife during migration and peaks.

**Input:** Liked having picnic areas. **Response:** Refuge staff will continue to maintain the picnic areas as support for the Refuge fishing, hunting, and wildlife observation programs. These picnic areas are popular areas for anglers and hunters to rest, eat, use facilities, and are some of the primary access points for boat launching and fishing. These areas have little impact on wildlife due to the small amount of acreage involved.

**Input:** Non-consumptive multiple use is best unless biological control of a species is needed. **Response:** The Complex staff attempts to provide multiple use on the Refuge including fishing and hunting of pheasants and deer. The Improvement Act stated that six priority public uses should be considered if they are compatible with the Refuge purpose. These include hunting, fishing, wildlife observation, photography, environmental education, and interpretation.

**Input:** The Refuge has become a "people Refuge" not a wildlife Refuge. Do not increase public use from present level unless it benefits wildlife.

**Response:** Refuge staff have attempted to balance wildlife use and public use. The majority of public use is limited to the east side of County Road 12, and the west side is closed to public access to provide for relatively undisturbed wildlife habitat. If people were excluded from the entire area, it would be difficult to obtain public support of our wildlife programs if no one realized they were there. Our primary mission of the Service also has the clause "for the benefit of the American People."

## **8. Education and Interpretation**

**Input:** Focus on pro-active approach on issues, also as a regular occurrence for coordination. Recognize the importance of outreach and continue efforts such as Jr. Duck Stamp, etc. Thinks school programs are great. Work on having joint programs with ND Game and Fish Department. Work with 4-H, Scouts, to have a Tewaukon Days at Stacks Slough. Education about good land management practices (be an example) and community involvement will allow the Refuge to impact a larger landscape. Work with others to educate and market products. **Response:** In the last 10 years, the Complex staff have expended considerable effort in trying to provide information, education, and outreach to the local communities and beyond. Our hope is to continue this effort as funding and staff allow. See Refuge Public Use Section.

**Input:** Development of Stacks Slough: involve school, community, and other groups in a long-term environmental education center and effort along with a trail. **Response:** The Complex staff has worked with local groups to improve interpretive facilities and will continue to work towards improvement of educational and additional interpretive facilities. A prairie interpretive trail was developed in 1999.

## **9. Ecosystem (Partners)**

**Input:** Continue to work with local waterboards and soil conservation districts for input, cost shares and funding, and grass seeding. Improve coordination with Regional Conservation Districts. Need to work together to implement wildlife management on large areas (landowners, ND Game and Fish, Service, and other groups). **Response:** The Tewaukon Complex staff will continue to work with local waterboards, government agencies, and nongovernmental agencies to provide for the best possible wildlife habitat in the area. The Complex staff realizes that the majority of the lands are in private landownership, and in order to implement best wildlife management practices on large areas, we need to work cooperatively. For a list of our current partnerships, see Appendix I. We will also continue to work with local, County, and State government to provide input on projects that may affect Complex resources. See Refuge and District Partnership Sections.

**Input:** Continue to work with private landowners to create win-win results for wildlife and landowners. The CCP should make provisions for small family farm units that practice innovative techniques that are respectful of the environment. **Response:** Tewaukon Complex staff intends to continue to work with private landowners to improve and develop wildlife habitat. Efforts will continue to develop additional funding, share resources, and form additional partnerships for the benefit of wildlife on private lands. Other agencies may be better suited to provide benefits for the family farm. Complex staff will try to provide interested landowners with a variety of information on available opportunities. See Refuge and District Partnership Section.

**Input:** Need more education and communication between managers, researchers, biologists, and private landowners. Go to annual community clubs meetings to get management input. Include U.S. Department of Agriculture representatives in CCP planning project. **Response:** In the last 10 years, the Complex staff have expended considerable effort in trying to provide information, education, and outreach to the local communities and beyond. Our hope is to continue this effort as funding and staff allow. Complex staff are available for group tours and presentations and educational programs. Outreach will continue to focus on improved education and communication. The Complex staff will continue to request input from all interested parties during the Comprehensive Conservation Planning process and when significant management changes are proposed. See Refuge and District Environmental Education and Public Outreach Section and Partnership Section.

## ***Input Outside the Scope of the CCP***

The following Input is not addressed in the planning process because they are the primary responsibility of other government agencies or organizations or are outside the scope of this planning process (National topics):

***Input:*** Be careful of waterfowl. Numbers seem to be too high, i.e. snow geese. Some waterfowl populations need drastic reductions; spring seasons?

***Response:*** These items are handled by the Flyway Councils and the Migratory Bird Office in consultation with the States who set seasons and limits. Complex staff do provide input on large scale issues, like snow goose issues, at meetings and through other planning efforts.

***Input:*** More emphasis needs to be placed on keeping species from ending up on the T&E list, not waiting until they are already on it. ***Response:*** Endangered Species listings are handled by the Ecological Service branch of the U.S. Fish and Wildlife Service. Complex habitat programs like grassland easements can maintain habitat supporting rare species like Dakota skipper and white lady's slipper that may help prevent endangered species listings.

***Input:*** Depredating birds on private land would be available for hunting there. Goose populations: Local numbers have reached top of acceptable levels. Problems with goslings in row crops. Spring goose depredation on crops-wants compensation or help running them out. In ND after November 20 would like 2 to 3 full days per week of goose hunting north of Highway 2 to push birds to southern North Dakota sooner. Longer hunting, day long hunting on snow geese, and a spring goose season. More discretion at local level to use available options for minimum wildlife damage. Continue coordination with Animal Damage Control to address damage control issues. Access to Federal land to help adjoining landowner depredation problems. Provide options to landowners for wildlife damage to crops. ***Response:*** The Migratory Bird Office works with the States and USDA, APHIS Animal Damage Control Program to resolve migratory bird crop depredation issues. The Complex staff will continue to work with the agencies and landowners involved, however, these other divisions have the primary responsibility for these problems.

***Input:*** Need to be locally sensitive to bird and deer populations when setting limits for State wildlife species. Out-of-state waterfowl hunter days. State control program of predators. ***Response:*** The agency with primary responsibility for these items is the ND Game and Fish Department and the North Dakota State Legislature.

***Input:*** Transplant wild pheasants from Refuge where population is high to Refuge or private land where population is low. ***Response:*** The ND Game and Fish Department has the primary responsibility for the management of resident game including pheasants. Any releases or transplants from or to Service lands would require discussions with the ND Game and Fish Department and Service approval.

***Input:*** Improve Nickeson Bottoms-access roads to transport boats and gear to the marsh. ***Response:*** The access point for this area is managed by the ND Game and Fish Department and is located on the Tewaukon Wildlife Management Area.

***Input:*** CRP weed control assistance and tree plantings in CRP. ***Response:*** The CRP program is the primary responsibility of the Department of Agriculture. ND Game and Fish also works with landowners to provide shrub plantings on CRP.

***Input:*** Suggest a Texas crossing on Hwy #1 (Richland County) instead of a culvert. ***Response:*** Road maintenance is the responsibility of the respective State, county, or township entity. The Complex staff consults with these agencies only when actions affect property interests of the Service. The agency can then select from a range of alternatives that will not impact the Service's interests.

Other input which cannot be addressed in this Plan include items that are regulated by laws which would take an Act of Congress to change.

\* Avian predator hunting.

\* Endangered species; limit of number of listed species, target numbers for de-listing.

\* Changes in the migratory bird laws.

### ***Draft CCP Input and Responses***

The Draft CCP was released in June of 2000. It was mailed to over 400 people and was available on the Service web site. An open house was held on June 27, 2000, to answer questions and take comments. Only a few comments were received by the end of the 30-day comment period, and several requests were made to extend the comment period for an additional 30-day period. The comment period was extended into August. During this time meetings were set up with local sportsmen's clubs, county commissioners, and other groups to answer questions and discuss concerns. All public comments received were considered in the final plan. Sixteen letters were received from groups and individuals on the Draft CCP. Many of the comments included support for the Plan. Public input that was not previously addressed in the Scoping Input and Response Section and the planning team's response to the input follow.

### **National, Regional, and State Group Input**

#### ***Animal Protection Institute, The Fund for Animals, Friends of Animals, Earth Island Institute, and In Defense of Animals***

**Input** The preferred alternative is unacceptable because of its continuance and/or expansion of recreational and predator trapping of furbearing mammals and of hunting of deer and ring-necked pheasants (an exotic species) as well as the increase of other recreational activities that are potentially detrimental to wildlife. **Response** Deer hunting is utilized as a Refuge management tool to ensure that populations do not damage the habitat they need to survive or grow to levels that may be severely impacted by disease or winter weather. Hunters are the best tool managers have to replace large natural predators that were extirpated by human settlement. The population information in the Draft CCP was developed primarily through staff observations of deer herds (300 in the winter), impacts to vegetation, adjacent crops and hay supplies, and ND Game and Fish Department monitoring information. Pheasant hunting is a recreational opportunity offered on the Refuge. A wide variety of research indicates that pheasant hunting (limited to males) does not impact populations. Weather is the primary factor that regulates pheasant populations.

The Draft Comprehensive Conservation Plan (CCP) attempts to balance wildlife needs and public recreational opportunities (see Public Use and Recreation Sections). The Refuge Improvement Act recognizes the importance of compatible wildlife-dependent recreation, and the refuge managers are charged with considering these recreational uses on Refuge lands where they are shown to be compatible with the purpose of the Refuge (see Compatibility Determinations Appendix G). Limited pheasant and deer hunting are compatible recreation opportunities on the Refuge that do not negatively affect these animal populations. Pheasant and deer hunting are permitted on WPAs by statute.

Documentation of predator impacts on waterfowl nests has been conducted on the Refuge for the past 12 years. Ground nesting bird nest predation still occurs when predator control is conducted, which indicates that small predator populations are still healthy. The predator control strategy was developed to maintain a viable self-sustaining population of ground nesting waterfowl that has the potential to increase (30 percent Mayfield). Research indicates that mallard nest success must be approximately 15 percent Mayfield to be self-sustaining. In some years, nest success has fallen below the self-sustaining level when predator control is not conducted on the Refuge.

Recreational trapping has not taken place on the Refuge recently due to lack of interest, however, may be considered in the future based on demand. WPAs are open for recreational trapping by statute.

**Input** Need for a rigorous biological assessment and inventory of all flora and fauna inhabiting the Tewaukon National Wildlife Refuge. Complete prior to any management. **Response** Complex staff agree with a need for biological assessments and inventory of flora and fauna. Most objectives include monitoring strategies. Information on the particulars of the monitoring is included in the Monitoring Section of the Plan. Many of the strategies developed in the Draft CCP are attempts to collect better information about unknown populations such as grassland nesting songbirds, reptiles, and amphibians. Ideally, baseline data would have been gathered prior to management action. However, management has been ongoing since 1935 and stopping that management at this stage would be detrimental to wildlife that management has favored.

Since management was initiated, Refuge employees have tried to utilize available research to develop a best management practices approach. A great deal of the management work that has been done in the past is not likely to be detrimental to many species in a fragmented landscape. This approach is documented in past management planning efforts. For example, much of the Refuge was farmed prior to designation. Planting grassland cover on old farm fields based on research recommendations has provided a lot of important wildlife habitat for grassland nesting waterfowl. The CCP continues and refines this approach and includes strategies that consider block size, species composition, and structure components the grassland cover should have in order to benefit grassland nesting songbirds as well. The compatibility of management activities will continue to be reviewed as additional information becomes available.

**Input** The incompatibility of recreational and commercial killing of wildlife on the Tewaukon NWR and the use of Refuges by consumptive and non-consumptive users. **Response** Information was provided in the Compatibility Determinations (see Appendix G) concerning these uses. The proposed uses of recreational hunting and trapping were not found to be incompatible with the purposes of the Tewaukon NWR. Deer hunting and predator control are actually used to manage wildlife offsetting the loss of large natural predators or the growth of small predator populations caused by the drastic changes to the landscape over the last 100 years. Theodore Roosevelt, who established the National Wildlife Refuge System, was an avid hunter and supporter of active wildlife management. Wildlife populations are impacted by landscape changes which put them "out of balance." Management strategies are developed to ensure that Refuge habitats will support healthy and balanced populations of wildlife.

Near large population centers the demand for non-consumptive wildlife recreation may be higher than the demand for consumptive use. While non-consumptive wildlife recreation on the Great Plains is growing, consumptive wildlife recreation is the most common form of wildlife recreation and the demand is high. The majority of our Refuge visitors are consumptive users. The CCP attempts to balance consumptive and non-consumptive uses on the Refuge and provide opportunities that are compatible with Refuge purposes.

**Input** Development of long-term, effective, humane, and socially acceptable management strategies to protect nesting waterfowl. **Response** In the Great Plains, trapping is a socially acceptable management tool. Other more humane tools that are used and identified as strategies in the Draft CCP include predator exclosure fences. At this time, animal population control through sterilization is cost prohibitive, labor intensive, and unproven as a management tool.

A number of Draft CCP strategies address habitat loss and fragmentation and its impacts to nesting waterfowl. The Service is still acquiring habitat and utilizing predator fences on the Tewaukon Complex. As noted in your letter, without large budget increases, these approaches will not be funded at a level that will improve low waterfowl nest success significantly in the near future. As a result, in some years the Refuge waterfowl nest success will be too low to sustain populations. Predator control is the best tool to address waterfowl populations that are not sustainable. Your reference to the source, Rimmer and Deblinger 1990, provided to support the use of non-lethal predator management as more effective, discusses avian predator control on shorebirds. Only mammals are discussed in the Refuge CCP predator control strategy.

**Input** Snowmobiles for ice fishing access and ice fishing should not be continued on the Refuge. **Response** The Final CCP devotes an entire section to wildlife disturbance where additional information can be reviewed. Information about the limitations and regulations concerning ice fishing and snowmobile use on Lake Tewaukon and Sprague Lake in order to reduce impacts to wildlife and provide safe wildlife-dependent recreation for the public is discussed. Snowmobiles are only used for access to ice fishing when snow conditions do not provide clear access for cars and trucks. Wintering wildlife populations seldom use lake ice. The Final CCP recognizes disturbance of wildlife associated with recreation and strives to balance the use. A strategy to monitor wildlife disturbance and evaluate additional research is still included in the Final CCP. The Refuge Improvement Act recognizes the importance of compatible wildlife-dependent recreation and the need to balance the needs of wildlife with the secondary use of public recreation.

### **Wildlife Management Institute**

**Input** Critical to have ND Game and Fish Department involvement.

**Response** The Complex staff recognized this (especially with ownership of State lands adjacent to the Refuge and in the Complex) and requested involvement at the beginning of the planning process. The ND Game and Fish Department committed their area manager to be involved as a planning team member. The agency also provided comments on the Draft.

**Input** Identification of outcomes without additional resources and priorities among goals. **Response** The majority of the objectives in the Draft CCP are already being accomplished in a limited capacity. Additional funding and staff will allow the staff to spend more time on monitoring and habitat management. Rather than prioritize goals or objectives, we chose to prioritize the additional requests for resources in the Implementation Section of the CCP. As these projects are funded, additional emphasis will be placed on the project objectives and strategies.

**Input** Distribution of vegetative heights should include adjacent private lands in the Prairie Focus Area Objective (Refuge Tallgrass Prairie Management Approach Section). **Response** The Complex staff does not have management responsibilities or control adjacent private lands. Their management varies from year-to-year and were not considered.

**Input** Maintain some of the existing DNC fields rather than converting all to native plant species. Use farming to manage DNC. **Response** The CCP includes a section on maintaining existing DNC (Introduced/Planted Cover - Dense Nesting Cover Section) on both the Refuge and District recognizing the importance of this habitat type to ground nesting birds, especially waterfowl. The Final CCP was modified to include farming as a tool to manage of DNC.

**Input** A plan to increase independent operation of managed wetlands should be developed. **Response** While a flow through system of water management does make it more difficult to manage pools independently, installing a pumping system and the cost of operation and maintenance at this time would be cost prohibitive. Topography also plays a role in the feasibility of such a system.

**Input** If a five year cycle of manipulation is used, the objective on pool management may over-emphasize dry pools and under-emphasize very shallow water and mudflats. **Response** The managed wetland objective provides a variety of water depths for the Refuge pools. This includes dry, shallow, mid-depth, and deep water as well as 20 percent to manage for what is missing in the system. Though the narrative for this section does not elaborate, many of the pools that are in various stages of drawdown will have mudflat areas, shallow water areas, and mid- and deep-water areas. When evaluating the objective, a wetland may be classified as mid-depth, but it will likely have zones that meet all of the objective depths. The objective's purpose is to mimic natural wet and dry cycles and was written as a quantifiable goal that can be monitored and evaluated. Wetlands are not necessarily on a five year cycle; they may spend several years at any one stage depending on area weather conditions.

**Input** Include strategies on reduction of nitrates and sediments; construct filtration marshes, and place buffers around non-managed Refuge wetlands.

**Response** The water quality objective assumes that nitrates and sedimentation are problems, but the first strategy discusses the need to determine what the water quality problems are before determining what actions to take. The remaining strategies reflect the fact that the best opportunities to improve water quality are likely to occur off-Refuge in the watershed and that it is likely that the Service will only be part of any watershed quality effort rather than the initiating agency. One of the strategies listed under the Water Quality Objective included the restoration of wetlands to improve the water quality. Vegetative buffers around non-managed Refuge wetlands are discussed under the Refuge Non-managed Wetlands Section and the strategy to, "Implement management methods to reduce or eliminate threats to wetland productivity and function" could include buffers around wetlands.

**Input** Accounting of CRP retirement schedules may afford opportunities to plan replacement nesting cover in key areas where CRP acreage is expected to be reconverted to cropland (possibly fee title). **Response** The Complex staff does monitor the CRP contracts in conjunction with private land activities. The political and social climate is not conducive to acquiring high wetland density CRP tracts that may be brought back into agricultural production. While the presence of adjacent CRP fields may afford the staff an opportunity to consider rejuvenating cover on adjacent Service lands, these decisions are primarily driven by willing cooperators since neighboring farmers do most of this work.

**Input** The 135 acres of cropland on the Refuge seems insufficient. Human influences off the Refuge long ago eliminated any opportunity to passively manage the system as a pristine unaltered environment. Farming must remain a tool available to refuge managers, and it must be aggressively and effectively utilized. **Response** Staff observations of wildlife Refuge crop use indicates that during a difficult winter sufficient food is provided by the current 135 acre Refuge share. During milder winters, surplus corn has occurred in the Refuge share fields. Refuge wildlife populations also use food plots on the adjacent ND Game and Fish Department lands. The CCP describes the intent of managers to continue to utilize farming as a management tool for grassland rejuvenation and wildlife food.

**Input** Departures from State hunting regulations should be made only when there is a body of supporting data relevant to specified management needs of the refuge. **Response** The few departures from State hunting regulations deal with herd management, Federal regulations (use of non-toxic shot for upland game birds), and public use management on the Refuge. The purpose of the Refuge, Refuge resources, recreational programs, public demand, State management goals, and the safety are all considered when evaluating hunting, fishing, and trapping opportunities.

**Input** Consider another strategy involving contract, or no-fee, rough fish removal (carp) in relatively small waters that lack complete water level control as it may prove to be cost effective. **Response** Currently, commercial interest in Refuge carp is limited. Fish located in other lakes are easier to harvest. We contact commercial harvesters occasionally to see if they are interested.

**Input** Refraining from carrying out additional management activities for nonnative species to the detriment of native species may imply intent to avoid management activities that benefit pheasants and are neutral to other species. **Response** This section has been modified in the Final CCP to make it clearer to the reader that the intent is to refrain from conducting activities to benefit nonnative species that would negatively effect the native species.

**Input** The closure of the Refuge during October is appropriate, but should not unnecessarily limit recreation access, including hunting and trapping, especially where recreational opportunities can be provided without the use of vehicles, and without negative impacts to focus species. **Response** Closure strategies are designed to balance migratory bird and recreational use. Migratory bird use, a primary Refuge purpose, must be considered first under the National Wildlife Refuge Administration Act and the National Wildlife Refuge Improvement Act. Some recreational opportunities are available, but hunting seasons in October would produce a steady level of disturbance that would affect migratory bird use.

**Input** Exceptions for access of areas normally closed to the public should be based on an equitable system that utilizes written permits for enforceability and potential monitoring. **Response** The exceptions for access would be evaluated to determine if the use is beneficial (research or education) or will have minimal wildlife impacts. Permits would be issued for exceptions if the visitors are not accompanied by staff. Examples of some of the possible exemptions include school group visits, research, and special events.

**Input** Hunting Section states that “Waterfowl and other migratory bird hunting is contrary to Refuge purposes as an ‘involute sanctuary for migratory birds.’” While the function of a waterfowl refuge certainly requires some area of undisturbed sanctuary, at least seasonally, this sentence overstates the need to restrict hunting in a refuge climate. **Response** Policy requires that no more than 40 percent of an involute sanctuary refuge may be opened for waterfowl hunting. A compatibility determination must be completed prior to opening the Refuge to any hunting. Due to the availability of hunting on adjacent public lands and private lands, opening the Refuge to waterfowl hunting was considered, but not adopted as part of the hunting objective. The Final CCP Refuge Hunting Section has been modified to provide additional information and clarification.

**Input** The reason for restricting of opening pheasant season to after the close of deer gun season is not stated. If this restriction is due to safety considerations it is unnecessary if pheasant hunters wear blaze orange. **Response** The reason for late opening of pheasant season is to avoid hunter conflicts and excessive wildlife disturbance which includes migrating waterfowl in October and movement of deer by pheasant hunters. Safety for deer and pheasant hunters is also a consideration since Refuge hunter concentrations are much higher than other areas. The density of pheasant hunters that would be expected during the deer season would likely reduce deer hunter success resulting in a harvest below herd management goals. Pheasant hunting on the Refuge is a popular pastime that draws a large number of hunters from the city of Fargo and surrounding areas in North Dakota and Minnesota.

**Input** Should plan for at least one full-time and part-time interpreters. **Response** A request has been submitted for additional staff and funding to implement the interpretation and environmental education objectives and strategies. (see Implementation and Monitoring Section).

**Input** Public Outreach Section would benefit from inclusion of components that recognize needs and opportunities to contact agricultural organizations and local farmers and ranchers regarding refuge issues. **Response** Refuge staff currently visit with agricultural producers and groups especially involving management of Refuge crops, haying and grazing, and private lands programs. Additional discussion about working with these groups and continuing those relationships is available in the Habitat Management and Partners Sections.

**Input** The Cultural Resource Section would be strengthened by relating all of the cultural resources and interpretation thereof to either impacts on or influences of wildlife resources. **Response** Discussion of this relationship in the CCP can be found in the Historical Resources, Cultural Values, and Uses Section and the Land Use and Wildlife Species Changes Section. Cultural wildlife relationships will be taken into consideration on any new interpretation efforts.

**Input** The volunteer program should include a volunteer management plan and documents (job descriptions, training requirements, recognition, etc.) which may be obtained through and adopted from existing volunteer management programs. **Response** These suggestions will be fully implemented as funding and staff become available and the program grows. The Complex staff goal is to provide a quality experience for all volunteers. Administration of the volunteer program at this level of detail is beyond the scope of the CCP considering the Refuge volunteer participation is usually for short duration, single events. The staff does discuss job responsibilities, provides training, and rewards volunteers.

**Input** We support the objectives for elimination of nonnative plants and cropland to native prairie conversion, but the scientific support is unclear for the distribution of varying vegetative structure heights. **Response** Varying vegetative heights are required for the selected indicator species to provide habitat for these declining migratory grassland birds. A Habitat Based Approach to Management of Tallgrass Prairies at the Tewaukon National Wildlife Refuge by Schroeder, R.L. and K.L. Askerooth supports this objective (see literature cited and Refuge Tallgrass Prairie Management Approach Section).

**Input** The Monitoring and Evaluation Section would benefit from the inclusion of components that provide for study of human use, recreational demands, and other human dimension aspects of the Refuge. **Response** This section will be further defined in a step-down plan. Plans are to include monitoring and evaluation of wildlife and human impacts/interactions.

### ***ND Office of the State Engineer***

**Input** In the proposed water level management there should be recognition of State and local water management interests, laws and needs. Impacts of water management changes should be distinctly defined in the CCP.

**Response** During yearly planning for water level management, impacts to State and local water interests are taken into account as well as laws and needs. Water releases are timed to have the least impact to downstream, adjacent, and upstream landowners. Staff will continue to work to resolve any problems that come up and ensure holding water does not impact adjacent landowners. Local water board meetings are attended and management plans are yearly sent to ND Office of the State Engineer. Detailed water management information will be discussed in the step-down Water Management Plan as this information is more detailed than the scope of the CCP.

**Input** Concerns that the protection of an additional 60,900 acres within the District with grassland and wetland easements will have a definite impact on local and state water management efforts and should be defined in the CCP and Environmental Assessment. **Response** The CCP describes broad habitat protection objectives. At this time, it is impossible to identify where easement and fee title acquisition will take place since this effort is driven by landowners interest. Each property would have to be evaluated on a case-by-case basis to determine if possible impacts may occur to water management. While a formal process is in place to discuss fee title transactions, this is not the case for easements or cooperative agreements. State and local water management personnel need to keep the Complex staff informed about water management projects that may impact Service interests. Counties have maps that show Service tracts which are periodically updated. We encourage County Commissioners and Water Management Boards to contact us early in their project planning process so we can discuss the potential for impacts to Service resources. We also initiate these contacts if we become aware of any project discussion that may impact Service interests.

### ***Delta Waterfowl Foundation***

***Input*** Concerns on inflammatory statements on predator control. ***Response*** While the wording may be considered inflammatory, it is true. Predator control is conducted in the spring because research shows it is effective and because waterfowl and other ground nesting birds are being severely impacted by furbearers that are hunting for their young.

***Input*** Waterfowl nesting reference does not give information on the current distribution or population status of these predators is not what historically existed. ***Response*** This information is discussed in the Land Use and Wildlife Species Changes Section. We referred readers to this section in the Final CCP Waterfowl Nesting Section for additional information.

***Input*** Waterfowl Nesting Objective is too restrictive (approximately two to three weeks) for a management tool that may need to be used under less specific terms. For example when this amount of effort is insufficient to control a large number of predators prior to the nesting season. ***Response*** Staff felt that this approximate duration of trapping was sufficient to improve nesting success and provide flexibility. The time period could be modified if it is found to be insufficient.

***Input*** Would emphasize that the purpose for the Refuge relates to migratory bird production. ***Response*** The Refuge was established as “a refuge and breeding ground for migratory birds and other wildlife.” This includes meeting migratory bird production and migration life needs during the time they utilize the area.

### ***ND Chapter of The Wildlife Society***

***Input*** Support for the following items in the Draft CCP: restoration of old DNC fields to more diverse native plant communities, water management strategy for Refuge impoundments, continued maintenance of recreational fishing program on Lake Tewauckon and Sprague Lake, continued Refuge hunting program for white-tailed deer and ring-necked pheasants, maintenance of 135 acres of cropland for migratory waterfowl and wintering wildlife, maintenance of native woodland habitat, and the enhancement of native prairie grasslands and other grassland habitats without the introduction of tree plantings.

### ***North Dakota Game and Fish Department***

***Input*** Fish are not recognized in the Draft Plan, need to be included. Better definition of recreational fishing. ***Response*** New sections were written to address fish populations on the Refuge and District. The Public Use and Recreation Fishing, Wildlife Disturbance, and Partners Sections discuss the role and importance of Refuge recreational fisheries.

***Input*** Refuge fisheries are important to the local area due to lack of other resources. Allowing fishing until sunset in the winter and boating access until after dark in the summer (11 pm) would enhance local fishing opportunities. ***Response*** The Draft CCP recognizes the importance of Refuge recreational fisheries in the local area. Fishing is allowed from one-half hour before sunset until 10:00 pm, approximately five hours after sunset during the winter. The CCP does not address fishing access hours, but this period has been posted in public use guides for the past 10 years, and no plans are in place to change it. While staff recognizes that having later fishing hours in the summer would increase local fishing opportunities and may be compatible with Refuge purposes, consideration must be given to the ability of staff to manage the recreation. At this time, sufficient staff is not available to extend the fishing hours.

***Input*** Specify boat launching sites in the plan and winter angler access. ***Response*** Boat ramps were identified on the Refuge maps included in the Draft CCP. Winter angling access points are discussed in the Public Use and Recreation Fishing and Wildlife Disturbance Sections in the Final CCP.

***Input*** Stocking of yellow perch particularly during high water levels, would also enhance recreational fishing opportunities. ***Response*** Yellow perch are being stocked in Lake Tewaukon and Sprague Lake. Most recent releases in 1998 included 63,000 perch fry in Lake Tewaukon and 15,000 perch fry in Sprague Lake; 1999 included 50,000 perch fry in Lake Tewaukon. Fish will be stocked according to Missouri River Fish and Wildlife Assistance Office recommendations based on their sampling and management plan.

***Input*** The structural classification is incomplete on the six prairie focus areas (only 60 percent accounted for) and rationale and methodology for measuring the desired structure is also missing. Has the potential structure of the climax communities been identified? ***Response*** The Tallgrass Prairie Management Approach Section objective in the Final CCP was modified to include all structure categories. Rationale for the structure is included in the text (see reference Schroeder and Askerooth 2000). Methodology for the monitoring will be more specific in the step-down plan. A list of climax tallgrass communities is listed in the Refuge Grasslands - Native Prairie Section.

### ***U.S. Forest Service***

Brian Stotts, manager of the Sheyenne National Grasslands U.S. Forest Service came in to discuss his questions and concerns on the Draft CCP. The following topics were discussed:

***Input*** Acreage figures for remaining tallgrass prairie are lower than the HAPET information used. ***Response*** At this time, this is the best Service data available for identifying remaining tallgrass prairie. Some professional debate may occur about the accuracy of this information. A review of the Draft CCP showed that the percentages of remaining tallgrass in some sections of the Plan were inaccurate and they were modified to agree through out the Final CCP. Remaining tallgrass prairie in North Dakota is estimated to be 1 percent in the Final CCP.

***Input*** More emphasis should be placed on the possible rare plants on the District. The Sheyenne National Grasslands has 40 species and there should be possibilities of these existing on Service lands. ***Response*** The Draft CCP recognizes that the Service has an information gap regarding the presence of rare plant species on Service lands. The Final CCP identifies the need to survey prairie tracts for rare plant species (see second objective under ND State Listed Rare and Unique Species Section for further information).

***Input*** Would like to see the Complex work towards replanting of natives, especially rare plants so that all the eggs are not in one basket. Use local seed sources. ***Response*** The Complex CCP describes management strategies that will preserve the plant diversity on native prairie sites and strategies for converting some grassland tracts to a diverse native floral community (See Native Prairie and Planted Cover Sections). Local seed sources will be used when available, including those that may be available from private landowners. If sites are appropriate and sources are available, rare plants could be utilized to enhance plant diversity.

***Input*** How are the priorities set for land acquisition. Is duck nesting habitat more important than orchid habitat when easements are being considered? ***Response*** The Complex staff has a responsibility to manage the Complex for the primary purpose of migratory bird management. However, staff also have responsibilities to trust species including endangered species. Both waterfowl and orchid values and other values such as tract size and location are considered when easement tracts are evaluated. Generally, tracts with high evaluation scores contain habitat for both species and are not mutually exclusive.

***Input*** Grassland easements should have more rights for protecting endangered species like prairie fringed orchids (mow areas after September 15 - not July 15 to preserve seed source) and management of grasslands for improving the species diversity. ***Response*** Easement documents have been standardized for legal reasons. In addition, easements are structured to keep grasslands from being converted to farmland and maintain grassland cover through the nesting season in a manner that is compatible with cattle operations. Management of easement grasslands could also be accomplished through agreements with the landowners to protect orchid seed source by delayed mowing, grazing, etc.

***Input*** Why is specific orchid management required in the Forest Service Management Plan and not included in the Draft CCP? ***Response*** Currently, no orchid populations occur on Service fee title lands. A specific objective is listed for orchid habitat protection and enhancement on private lands in the CCP. The Final CCP includes a Section 7 Consultation which provides additional discussion on orchid habitat protection and management opportunities.

### **Local Group Input**

The following local groups requested that Refuge staff meet with them during the second open input period to answer their questions about the CCP and to accept their comments. Below are the comments that the staff recorded.

Three topics of discussion were common to all of the groups and are addressed below:

**Point Road Access** - Concerns were raised about restricting access to the Point Road from October 1 to April 30. Most individuals did not agree that this form of public use would significantly disturb the resting waterfowl during migrations in the spring and fall. This area is a popular place for shore fishing. Suggestions included not setting a specific date but closing the road only during deer season and when the road was impassable either from snow or during wet spring conditions. **Response** The strategy in the Final CCP has been modified. The Point Road will be closed to all public access if it becomes impassable due to snow conditions or on November 1 to limit winter wildlife disturbance and for ice fishing safety. This will be evaluated and monitored for several years to determine the scope and degree of wildlife disturbance. The Point Road may then be closed from October through April if migratory bird disturbance is determined to be significant.

**Tree Removal** - During the first comment period, many rumors were going around in the local community that the Draft CCP described removing all trees. Sentiments of the public include the need to maintain the tree belts for wintering deer and pheasants. Also, some mentioned that any tree removed should be replaced with a tree elsewhere. **Response** A lengthy discussion on the Tallgrass Prairie Management Approach is in the CCP. The CCP does provide for tree removal in specified prairie grassland focus areas. These focus areas were selected due to the presence of existing native prairie and very few trees. The majority of tree removal will include individual trees, mostly Russian Olive. Only one tree belt on the Refuge (north Pool 2) may be removed after monitoring and more on-site evaluation is done; this constitutes less than 1 percent of the trees on the Refuge. Some tree belts on the Guinness WPA and the Gainor WPA are at the fringes of the grasslands and at this time, no plans exist to remove them. Several tree belts and individual trees exist on the Hartleben WPA. Initially, an area of 160 acres or greater will be selected and only trees from this area will be removed at this time. The remaining tree belts on the Refuge and District would still provide adequate habitat for deer, pheasants, great horned owls, red-tailed hawks, and other wildlife. Further tree removal on the Hartleben WPA will be considered after monitoring and evaluation. The Final CCP does not call for planting any new trees on the Complex.

**Pheasant Management** - Pheasant hunting and observation are a favorite past time for local residents. They enjoy seeing pheasants and hunting them. Many questions came up on whether we were trying to totally remove pheasants from the Refuge. **Response** The second objective in the Refuge and District Wildlife Nonnative Section applies to nonnative species such as the ring-necked pheasant. The objective states that management activities conducted specifically for pheasants to the detriment of native species will not be done. Management activities that benefit native species and also benefit pheasants will be done. Removal of pheasants and partridge are not a CCP objective.

### ***Cogswell Gun Club***

***Input*** Prioritize what species of nonnative plants you intend to control first (i.e. spurge, thistle, bluegrass). ***Response*** A new section on Nonnative Plant Management was developed to provide more information. The control of leafy spurge, Canada, musk, and bull thistle will continue to be Complex priorities. A combination of biological, mechanical, and chemical control methods will continue to be used on these four species. Currently, staff and funding are not available to include an integrated management of the other nonnative plant species, i.e., Kentucky bluegrass and smooth brome. Prescribed burning and limited grazing are currently the only tools used on these species because they are relatively inexpensive and involve less staff time.

***Input*** The Refuge and District need to provide fishing and hunting access for the public. ***Response*** Hunting and fishing access were considered in the CCP (see Refuge Public Use Section and District Public Use Section) and several objectives were designed to continue and enhance these programs.

***Input*** The Service needs to take measures to resolve the Canada goose damage to farmers crops. ***Response*** The Service is working with the North Dakota Game and Fish Department, the U.S. Department of Agriculture's Animal Plant and Health Inspection Service, and local landowners to try to resolve this issue. An early Canada goose hunt was initiated in 1999 and expanded in 2000 to work on decreasing the number of resident Canada geese.

***Input*** What is the cost of providing for butterfly habitat and is this realistic. ***Response*** Rare prairie butterflies use primarily native prairie tracts. Managing for these species involves managing the plants on these sites. A variety of tools can be used to enhance the plant diversity on the sites including haying, burning, and nonnative plant control. Haying, by cooperators, and burning are relatively inexpensive methods. Nonnative plant control can be more expensive but biological control (insects) is most often used on these sensitive sites. The presence of butterflies indicates that plant communities are healthy and diverse. Grassland management goals are developed to provide habitat for all grassland species. Grasslands that support butterflies support a broad diversity of migratory birds and other wildlife.

### ***Lake Region Wildlife Club***

***Input*** No deer hunting on the Refuge (individual comment). ***Response*** Deer hunting will continue to be utilized as a management tool to manage populations to limit habitat damage and ensure the health of the Refuge deer population.

***Input*** Pheasant season open after South Dakota Deer opener so that Refuge deer are not run off and shot by SD residents. ***Response*** Pheasant season opener will continue to be held after the close of the ND deer gun season. The size of the Refuge wintering deer population does not indicate that Refuge deer are pushed to South Dakota during the pheasant season.

### ***Red River Area Sportsmen***

***Input*** More emphasis on spring predator trapping on the District. Only ranked 12th on the funding projects yet it is cost effective and gets results. Minor amount of money when you look at the other more costly projects. ***Response*** The Tewaukon Complex has many priorities which must be balanced with funding and staffing. Spring predator trapping is still a priority on the District and was discussed in the District Waterfowl Section. In the strategy, it indicates that staff will work with partners to accomplish this when funding through the Fish and Wildlife Service is not available.

***Input*** Provide more opportunities and projects for volunteers especially young people. Devote more time and effort to providing projects for volunteers that are meaningful and would provide good experiences for the Refuge and volunteers. ***Response*** The CCP recognizes the importance of volunteers of all ages. The Refuge Volunteer Section provides an objective to address these needs for the Complex and will be fully implemented as funding and staff become available. The Complex staff goal is to provide a quality experience for all volunteers.

### ***Rutland Sportsmens Club***

***Input*** Close the Point for weather related problems only. ***Response*** Weather related conditions will be considered when closing the Point Road (see above discussion).

***Input*** Mow roadsides beginning in June, once per month, two swaths wide to prevent deer/car accidents. ***Response*** The purpose for the Refuge is for migratory birds, and these birds utilize the grass habitat along the roadsides so no roadside mowing will be done prior to July 15. The Refuge will abide by North Dakota roadside regulations and ensure mowing of roadsides by October 1.

***Input*** Conduct recreational fall trapping on a non-bid system (no charge to the trapper). ***Response*** Current demand for trapping is not sufficient to justify continuing this program. If fur prices increase and along with that the demand increases, the program will be reevaluated.

***Input*** Do not reduce the current farming acreage of 500 acres on the Refuge. ***Response*** Plans are to continue the current farming program at 500 acres which includes the cooperator share.

***Input*** Clarify what you mean by nonnatives (section on Carp). Does it include pheasants. ***Response*** The Nonnative Section in the Final CCP has been modified to clarify the different types of nonnative wildlife. Pheasants, which come from China, are a nonnative species but unlike carp do not compete directly with native species for resources. No management will be done to specifically manage for pheasants if it is to the detriment of native species. Pheasants do benefit from other habitat management on the Complex done for other species (i.e. predator control).

***Input*** Have all night fishing. ***Response*** See response under Fishing in the Scoping Input and Response Section.

### ***Sargent County Weed Board***

***Input*** Restricting the Point Road access for the public is not popular.

***Response*** See previous paragraph on the Point Road Access.

***Input*** Maintain Crop acreage (would reduce weed problem). ***Response*** Plans are to continue the current farming program at 500 acres which includes the cooperator share (135 acres as Refuge share). Farming will also be used as a tool in the reestablishment of grassland habitat. See Refuge Wildlife Waterfowl Planted Foods and Refuge Habitat Management Grasslands Sections.

***Input*** Weed management is important especially with existing thistle problems. ***Response*** The staff recognizes the growing problem with Canada thistle invasions. A combination of control methods including chemical, mechanical, and biological will continue to be used in an integrated approach to the problem. We encourage the Board to refer Complex weed complaints to us. See Refuge Nonnative Plant Management Section for more information.

### **Individual Comments**

Individual comments which were discussed at the open house (on July 28), by other individuals or have not previously been discussed follow:

**Input** Would this CCP supercede the 1962 Master Plan. Concern that Master Plan focused more on waterfowl where other migratory bird species should also be considered. **Response** The CCP will supercede the 1962 Master Plan and provide direction on Complex management, activities, and programs for the next 15 years. The CCP includes a wide variety of goals and objectives that cover a wide spectrum of migratory birds, including waterfowl, and other wildlife. Several habitat objectives were developed to focus more attention on grassland migratory birds.

**Input** How will you monitor your indicator migratory bird species when other factors come into play on their numbers. **Response** In this CCP, habitat monitoring receives the primary emphasis because migratory birds are impacted by a variety of factors on their wintering and nesting grounds and all along their migration pathways. Managers will continue to review current research and monitor the critical habitat needs of wildlife species. Monitoring migratory bird use over a long period of time can still provide some general local population trend and habitat use information. Monitoring specifics will be addressed in a Monitoring step-down plan.

**Input** What is the difference between the two water quality objectives in the Refuge Section. **Response** The first objective deals with managed Refuge wetlands and the second objective is specific to wetlands that are not managed.

**Input** In the Refuge Migratory Bird - Shorebird Section when you refer to 37 shorebirds and 28 sandpipers; are the sandpipers part of the shorebird number? **Response** Yes, sandpipers are part of the shorebird number. The text has been modified to reflect this.

**Input** Concern about the management of nonnative species particularly the ring-necked pheasant and gray partridge. CCP indicates removal of nonnative wildlife. **Response** Refer back to the Pheasant Management discussion in the Local Group Section.

**Input** The Point Road should not be closed for a longer period of time. Wildlife disturbance on the Point is crap. **Response** Refer back to the Point Road Access discussion in the Local Group Section.

**Input** Under the Refuge and District Tallgrass Prairie Management Approach Section it stipulates that tracks must be 50 meters from woody vegetation, and no woody vegetation taller than 1 meter. Does this mean planted shelterbelts at these sites will be killed/removed? What about removal of trees in sandy soils which could contribute to wind erosion? Do they have to be to get your 160 acres? Some of these areas have trees on or near the edge. Could you not move 50 meters away for your study areas? **Response** A lengthy discussion on the Tallgrass Prairie Management Approach is in the CCP. Refer back to the Tree Removal discussion in the Local Group Section. Great care will be take to remove trees in such a way to minimize the soil erosion especially on sandier soils.

**Input** In the Refuge Nonnative Wildlife Section, the objective states that you will do nothing to help pheasants and partridge that hurts native birds. Does this mean removing trees, shelterbelts? Also will you continue millet bales? **Response** Currently, the only tree removal on the Refuge that might be done will be in the prairie focus areas as discussed previously. Millet bales benefit deer and other birds and will continue to be placed on the Refuge winter wildlife food.

**Input** In the Wildlife Disturbance Section, the research indicates that the least disturbance to waterfowl is from shore fishing and traffic. Providing these activities around Lake Tewaukon causes very little disturbance. If traffic is so disturbing - why do so many ducks and pheasants nest in road ditches - even on the refuge? The Refuge does not mow road ditches for hay until after July 15 just to avoid the nests. **Response** Shore fishing and shoreline traffic cause less disturbance than jet skiing and power boating but that does not mean that they do not cause disturbance. Birds will be disturbed (flush and move) in response to shore fishing and traffic. The staff recognizes that shore fishing and wildlife observation are popular activities. We must consider this is a Refuge for migratory birds and that wildlife comes first. Traffic is allowed around Lake Tewaukon during the duck nesting season. While some birds nest in road ditches, the majority of the birds are widely dispersed throughout Refuge grasslands. Wildlife select nesting areas based on various habitat components. Waiting until after July 15 to mow road ditches increases the potential for nests in road ditches to hatch successfully.

**Input** Use of references from Germany and England are not relevant in the Refuge Disturbance Section without more information such as how many anglers, did the wildlife have anywhere else to go, how big was the area studied, etc. **Response** These references are examples of wildlife disturbance used to base management objectives. Another study, conducted in Wisconsin on a refuge, on recreational disturbance (shore anglers) to waterfowl was added to the Final CCP. Staff also rely on observations made here at the Refuge and from discussion with other staff at other refuges. As part of the CCP, a need for more monitoring has been identified on wildlife disturbance and Refuge recreational programs.

**Input** Strongly oppose the use of herbicides and pesticides. **Response** The Complex uses an integrated management approach to control nonnative plant species including biological and mechanical methods in addition to herbicides. Due to the aggressive nature of many of these nonnative species, a combination of these methods (Integrated Pest Management) is usually the most effective. Herbicides used on the Complex must go through a review process before they can be used. Only chemicals that are the least toxic to wildlife are used. Currently, no pesticides (insecticides) are being used on the Complex. See Refuge Nonnative Plant Management Section.

**Input** Urge the reintroduction of river otter and other extirpated species. **Response** The CCP calls for the preservation and restoration of endangered, threatened, and unique native flora and fauna that occur or have historically occurred on the Complex. Each species considered for reintroduction would have to be reviewed to assure that the Refuge or WPA has both the quantity and the quality of habitat to support that species. River otters have been recorded historically in the Red River of the North. Historically, the Wild Rice River provided only marginal river otter habitat with its intermittent water flows and small size. The Wild Rice River through the Refuge does not provide good otter habitat because it is a series of managed wetlands with little stream habitat. No river otter habitat occurs on the District on Service lands.

**Input** Include hiking trails, interpretive trails, expanded visitor center hours, and a paved auto tour route. **Response** Trails and expanded visitor center hours were included in the Draft CCP under the Refuge Wildlife Observation and Photography and the Interpretation Section. Paving the auto tour route was not considered due to the current amount of traffic and visitor use and anticipated construction and maintenance costs.

**Input** Disappointed in the lack of birding opportunities in spring and summer. Would like to see more interpretation on WPAs and other public use. **Response** The Refuge Wildlife Observation and Photography Section discusses the opportunities available to the public. An overlook exists on the south shore of Lake Tewaukon for viewing waterfowl migrations as well as the North Boat Ramp and the East Boat Ramp Areas which are open year-round. The Refuge Wildlife Disturbance Section discusses the purpose of area closures and a strategy specifies that exemptions for public access will be evaluated on a case-by-case basis. The CCP also has strategies to develop an observational platform and hiking trail on the Refuge. An interpretive trail is located on the Hartleben WPA near Hankinson. The CCP also identifies a need for more interpretation on WPAs. As the demand for these activities increases, staff will reevaluate the current opportunities with Complex purposes and possibly develop additional opportunities.

**Input** Do not agree with the cooperative farming where 500 acres are planted for a benefit of only 135 acres. Find other alternatives such as hiring a local farmer to plant food plots or hire local sportsmens clubs. **Response** In the Refuge Planted Foods Section the strategy includes the flexibility to hire a local farmer to plant 135 acres for wildlife if adequate and consistent funding are provided. This approach would eliminate the need to farm the additional acres. Current funding is not adequate for this option to be utilized. The District has four WPAs that have been adopted by local sportsmens clubs which plant and manage food plots. Funding is not adequate at this time to hire the clubs to plant food plots.

**Input** How come gray partridge are not included in the hunting season when pheasant hunting is permitted? **Response** Staff observations of gray partridge show an insufficient number to hunt on the Refuge (low population numbers and only occasional sightings). If gray partridge numbers increase to a huntable population this opportunity would be reevaluated.

**Input** There is no mention of the Refuge using the Americorps Program for volunteers. **Response** Currently, Refuge housing and staff to administer the program is limited for volunteers. To provide a quality experience for volunteers and the resource, additional staff and funding is needed. The variety of sources mentioned in the first volunteer strategy in the Refuge Volunteer Program Section would include the Americorps Program.

**Input** A single WPA or part of the Refuge should be singled out for high intensive management utilizing intensive short-term grazing, controlled burns, mowing and haying to reduce the amount of undesirable plant species and communities. **Response** The CCP utilized all of these management tools and singled out priority WPAs and Refuge Prairie Focus Areas for a more intensive management approach (see Refuge Grassland Management Section, District Grassland Management Section and Refuge Nonnative Plant Management Section).

**Input** Raise more soybeans to keep Canada geese on Refuge and off private land. **Response** Currently, some soybeans are grown in the Refuge crop fields as the cooperators share. Geese, however, are flexible feeders and tend to distribute themselves on the landscape due to water availability. Growing crops on the Refuge is unlikely to lure geese away from private croplands. Increasing the amount of Refuge cropland is likely to add more geese to the area population and increase crop damage.

**Input** Would like the Refuge to be more involved in the flooding issues in the Wild Rice River Watershed both in watershed management, water quality, and flooding. **Response** For discussion, see the response to the ND Office of the State Engineer in the National, Regional, and State Group Input Section.

**Input** Continue to reduce carp in the lake and decrease the number of bullheads. **Response** Refuge staff are working to control carp (see previous Public Scoping Input and Responses under Fishing for further information). Bullhead populations are cyclic, when populations are high they compete with game fish for resources. Removing bullheads is costly and inefficient considering that populations will decrease naturally.

**Input** Clean out trees by boat ramps and dock on east side of Lake Tewaukon for better access for shore fishing. Remove some trees on the east boat ramp to improve vehicle/boat access to the ramp (corners too tight) and to provide for improved shoreline fishing. **Response** Refuge staff will review and look at these areas. Trees in this area provide shade and some wind protection for visitors.

**Input** Have three to four 50 foot walk-out docks for fishing on the north and south sides of Lake Tewaukon. More shore fishing access; level off some of the sharp embankments on the north side of Lake Tewaukon. **Response** In order to expand the recreation fishing access in this way would require costly sloping of the Lake bank which would require a lower water level in Lake Tewaukon to maintain the banks. This in turn would reduce fish survivability in the lake.

**Input** Maintain alfalfa in fields. **Response** Alfalfa will be maintained in the DNC fields (see Refuge Introduced/Planted Cover Section and the District Introduced/Planted Cover Section) and in our crop rotations on the Refuge.

**Input** Would like a walk-thru gate for fishing access to Wahl Lake through the Boehning WPA in Richland County. **Response** Complex staff will review the site to determine the feasibility of this request.

**Input** Would like steps on the north side boat ramps on Lake Tewaukon. **Response** Anglers are able to access the Lake through the north side boat ramps which are less steep than this bank. Keeping steps ice and snow free during winter conditions would be very difficult. Winter access is likely to be better if the staff concentrates on maintaining the boat ramp area.

**Input** Concerned about the fishery with current low water levels (during construction projects). **Response** Lake levels were lowered approximately one and one-half feet to accommodate the construction of two areas damaged during flooding in 1997 and 1998. Water management plans included storing water upstream to add to the Lake after construction and prior to freeze up to ensure fish survival. A one foot drop occurs naturally during dry summers from evaporation and has had no detrimental effect on the fishery.

**Input** Would like the Service to purchase land to the south of the Refuge to provide for more hunting access. **Response** The Service is always open to opportunities for land purchase, especially adjacent to the Refuge. The landowners would have to approach the Service first and the purchase would require a County Commissioner recommendation and approval from the North Dakota Governor.

**Input** Don't think there should be hunting of pheasants past November. **Response** See the Scoping Input and Responses under the Hunting section.

**Input** Too many beaver, they need to be trapped out. Hire someone to trap. **Response** The Refuge currently has a small population of beaver that are not a concern. If a problem develops, staff can deal with problem beaver on case-by-case basis.

**Input** Concerned about loss of fish from the lake both downstream and upstream (especially upstream where they cannot fish). **Response** Lake Tewaukon currently has a good fishery. While some fish may migrate upstream or downstream, good populations of fish exist especially with yearly stocking of the lake. The four large dams on the Refuge limit fish movement upstream.

**Input** Would like continued and additional emphasis on environmental education. More field trips and after school events. **Response** The objective and strategies listed under the Refuge Environmental Education Section provide for additional environmental education activities. Tewaukon Complex staff would also like see additional environmental education activities. More will be considered as staff and funding become available.

**Input** Goose problems need to be solved - include in plan working through the system to reduce numbers, pay farmers for losses or other options.

**Response** Canada goose problems are occurring nationwide, and the Fish and Wildlife Service is working with the North Dakota Game and Fish Department, USDA Animal Plant Health and Inspection Services, and local landowners to try to resolve this issue. Currently, no program or enough funding is available in North Dakota to compensate farmers for crop losses caused by Canada geese. The ND Game and Fish Department has established an early Canada goose season to control the resident populations of geese. If this does not work, other options will need to be explored.

**Input** Request a food plot on the Hartleben WPA (20 to 30 accessible acres).

**Response** Currently the Hartleben WPA is being intensively managed for the existing native tallgrass prairie (of which only 1 percent remains in the State) and introduced grasslands are being restored to diverse native plantings. A local sportsmens group was contacted and were not interested in maintaining a food plot when this WPA was acquired.

**Input** Artificially feed deer corn in hard winters. **Response** The Refuge has 135 acres of cropland that is planted to a variety of wildlife foods including corn. Additional corn fields are maintained on the adjacent State Wildlife Management Area. This has proven to be adequate for the number of deer on the Refuge. Even in a record winter (1997) much of the corn that was available and useable in these fields was not used up. Staff documented deer use in these fields and noted that grain was still left after the hard winter. Artificially feeding deer is time consuming, expensive, and would not be an efficient means to provide winter food. Concentrating large numbers of deer can increase the risk of disease.

**Input** Drain all temporary wetlands on private land into one large wetland with permanent tree belts around wetlands to protect the cattails from filling up with snow. **Response** Large wetlands do not provide the spring invertebrate production found in small temporary and seasonal wetlands required by migratory waterfowl and shorebirds. Smaller wetlands are vital for spring waterfowl pairing. North Dakota produces over half of all ducks in the lower 48 states because of these small wetlands.

**Input** Private landowners should be listed as partners. **Response** The Final CCP was modified to include private landowners as partners in the management of wildlife.

Tewaukon National Wildlife Refuge  
9754 143 1/2 Avenue SE  
Cayuga, ND 58013  
701/724 3598  
r6rw\_twk@fws.gov

U. S. Fish and Wildlife Service  
<http://www.fws.gov>  
<http://www.r6.fws.gov/larp>

For Refuge Information  
1 800/344 WILD

September 2000



