

Chapter 6. Management Direction

Note: Comprehensive conservation plans provide long-term guidance for management decisions and set forth goals, objectives, and strategies needed to accomplish refuge purposes and identify the U.S. Fish and Wildlife Service's best estimate of future needs. These plans detail program planning levels that are sometimes substantially above current budget allocations, and, as such, are primarily for Service strategic planning and program prioritization purposes. The plans do not constitute a commitment for staffing increases, operational and maintenance increases, or funding for future land acquisition.

6.1 Introduction

During the next 15 years, the objectives and strategies presented below will guide the management of these refuges and future allocations. The Service will implement this CCP with assistance from willing landowners, existing and new partner agencies and organizations, and the public. No action taken in this plan will have any negative impacts on endangered species (see "Appendix F, Section 7 Biological Evaluation").

Although a number of needs were identified during the planning process, there are no assurances that any projects would be fully or even partially funded. However, within every planning effort, there are opportunities to examine current allocations of funding and resources and determine the best available uses based on a more comprehensive planning evaluation of critical needs.

6.2 Refuge Divestiture Proposals

To date, over 93 percent of limited-interest refuge lands remain in private ownership. Within the approved acquisition boundary, 99 percent of the acres remain in private ownership. For all practical purposes, after 70 years, the Service is still at a starting point for attempting to give some assurance that these

lands can retain the qualities desirable in a national wildlife refuge. To that end, the Service first examined each refuge to determine if it should be retained in the National Wildlife Refuge System.

A Regional Team of managers, planners, and regional directorate convened to develop a Region 6 model for determining, as part of the CCP process, whether a refuge should be retained in the System (see "Appendix G, Divestiture Model"). Factors were considered in evaluating each refuge for retention, such as (1) ability to meet the goals of the System, (2) ability to meet the refuge purpose(s), (3) existing biodiversity including native habitat, (4) associated conservation lands, and (5) current state and other federal management of these areas. The limited-interest refuges planning team utilized this model in their decision making. The entire team reviewed land status maps and listened to a presentation by each managing station describing the negative impacts and potential of each refuge. Land status maps displayed associated wetlands and other habitats as well as other Service and state interests adjacent to or surrounding each refuge. These included Service wetland or grassland easements, WPAs, NDGF Wildlife Management Areas, and other NWRs.

Since the 1950s, when dozens of limited-interest refuges were divested, no attempt has been made to evaluate each refuge comprehensively to determine its capability to meet the goals of the System. In addition to refuges lacking biodiversity due to negative impacts, the Service also examined refuges currently owned or managed by the state or another federal agency. Because there will be no opportunity for the Service to acquire any additional interests in these lands, there is no logical reason for the Service to continue to retain any interest, particularly on state-owned lands currently being managed for wildlife. Additionally, the limited-interest refuges cannot be equated to a similar fee-title refuge where the Service has full management control.

In the past 70 years, the Service has acquired additional rights, primarily through acquisition, on only 1 percent of the approved acquisition boundaries. In addition, dozens of other limited-interest refuges have been divested since this Program was established. Most recently in 1999, Lake Elsie National Wildlife Refuge was divested due to habitat losses and issues similar to the following divestiture proposals.

Six refuges are being proposed for consideration for divestiture:

- Bone Hill NWR
- Camp Lake NWR
- Cottonwood Lake NWR
- Lake Patricia NWR
- School Section Lake NWR
- Sheyenne Lake NWR

During scoping, the Service received numerous requests from landowners to divest several of the limited-interest refuges. Each refuge was considered during discussions on divestiture. For example, the Service received requests to divest both Bone Hill and Sheyenne Lake NWRs, which are now on the divestiture list.

Several meetings were held with the landowners of Camp Lake NWR in the past to discuss divestiture and there is support.

Lake Patricia is primarily owned and managed by the state and has long supported divestiture.

Sheyenne Lake NWR is owned by the BOR and managed by the state under a 1980s agreement. The Service is present in name only and there will be no loss of habitat for wildlife from what occurs there today. BOR and the state support divestiture of Sheyenne Lake.

Cottonwood Lake received one comment against divestiture during scoping, but divestiture has been supported by the majority of the landowners in the past. The state also is interested in managing this popular fishery.

No comments were received for School Section Lake during scoping. However, the state owns the upland areas surrounding the lake and supports divestiture and acquiring management.

Each of these refuges were established either by executive order or other legislation. No approval from the Migratory Bird Conservation Commission was requested at the time these refuges were established. Although the specific details for divesting each of these refuges will be addressed when the CCP is implemented, the Service plans to provide the Migratory Bird Conservation Commission the proposals for divestiture and ask for its concurrence. The final approval for divestiture will require an act of Congress.

The following proposals provide a brief history and justification for considering each of the six refuges for divestiture.

Bone Hill NWR

Proposal and Justification

Three perpetual refuge and flowage easement agreements were signed by private landowners in LaMoure County in 1935. On May 10, 1939, an executive order was signed by President Roosevelt establishing these lands and waters as Bone Hill National Wildlife Refuge (figure 18). An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 640 acres to serve as a “refuge and breeding grounds for migratory birds.” Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge land is contained in the easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

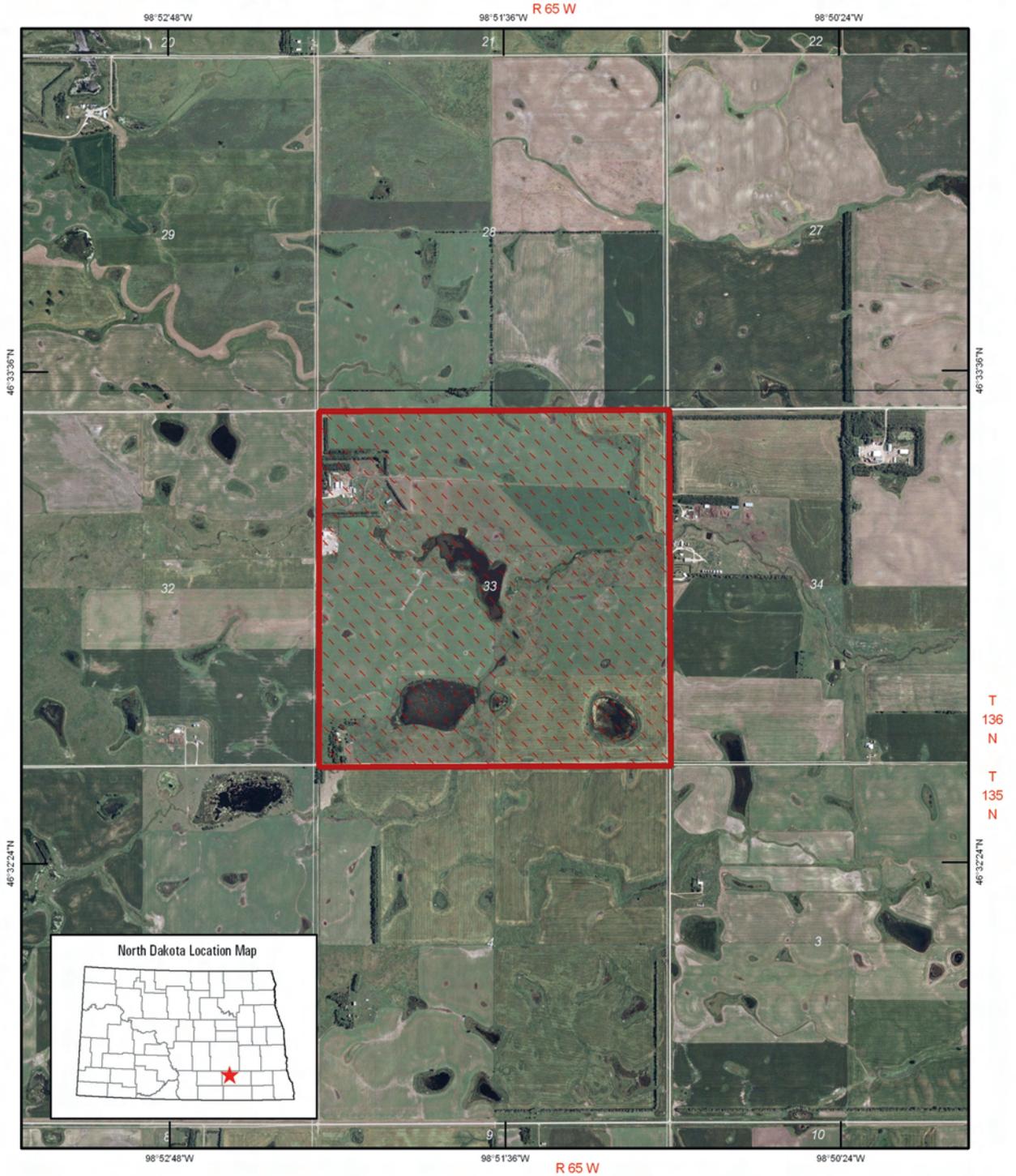
The land use and activities surrounding the constructed and natural wetlands on the Bone Hill NWR make management of these wetlands for the benefit of migratory birds impractical. Most of the refuge habitat has been converted for tillage agriculture. Some of the refuge, including the area around the main, constructed impoundment, is currently being used as a feedlot to raise domestic elk. As a result, the remnant areas of grass or native vegetation are severely overgrazed.

In addition, there is a farm house and associated outbuildings on the refuge along with a fertilizer plant. For this refuge to fulfill its intended purposes according to the executive order, the elk farm and the fertilizer plant would have to be removed and the grass areas restored, which is unrealistic to expect.

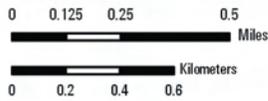


U.S. Fish & Wildlife Service
Bone Hill National Wildlife Refuge
LaMoure County, North Dakota

Kulm Wetland Management District



Produced in the Division of Refuge Planning
Denver, Colorado
Imagery Date: 2003
Projection: UTM Zone 14, NAD 27



Legend

- Refuge Approved Boundary
- Existing Refuge Easement

Figure 18. Bone Hill NWR

Additionally, the Service has no authority to restore these uplands under the current agreements.

Recommendation: Divest this limited-interest refuge, revoke all the refuge and flowage easement agreements, and voluntarily relinquish the water rights to the State. Negotiate with the state to manage the water resource.

Camp Lake NWR

Proposal and Justification

In 1935 and 1936, seven perpetual and one revocable refuge and flowage easement agreements were signed by the state and private landowners in McLean County. On May 10, 1939, an executive order was signed by President Roosevelt establishing these lands and waters as Camp Lake National Wildlife Refuge (figure 19). An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 1,212 acres to serve as a “refuge and breeding grounds for migratory birds.” Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge land is contained in the refuge and flowage easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

In 1974 the limited-interest refuge for refuge rights contained in Section 36 of T150N and R80W and owned by the North Dakota State Land Commissioner, acting on behalf of the Board of University and School Lands, was revoked on the non-meandered acreage. This revocation reduced the limited-interest refuge acreage to approximately 585 acres.

The current approximate boundary of the refuge consists of the E $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 25, T150N and R80W, the waters of Camp and Strawberry lakes in Section 36, the SE $\frac{1}{4}$ of Section 35, T150N and R80W, and the E $\frac{1}{2}$ of Section 2, T149N and R80W.

Camp and Strawberry lakes are controlled in elevation by a dam and water control structure located at the south end of Strawberry Lake. Currently, the uplands within the refuge boundary in Section 25 and the SE $\frac{1}{4}$ of Section 2



Boat docks and 149 cabins surround the lake on Camp Lake NWR.

Rod Krey/USFWS

are utilized for agriculture. The uplands in the NE $\frac{1}{4}$ of Section 2 and in Section 35 are dominated by cabins and recreational features.

The lands and waters in and around Camp Lake NWR have always been a popular recreational area, even prior to establishment of the national wildlife refuge. Recreational development on Strawberry Lake increased in the 1950s. Today development consists of over 149 cabins, a beach, resort, docks, boat ramp, a road system, and a recreational services district. The human impact of the cabins, boats, sewage, swimming, personal water craft, and recreational use on the refuge has greatly reduced or eliminated the ability of this area to meet its purpose and any goals of the System. In addition, with the revocation of the state's limited-interest refuge, the Service no longer has any means to regulate human disturbance immediately adjacent to and around the entire periphery of the lakes in Section 36.

The purpose for which this refuge was established was based on attributes it possessed and exhibited at the time of establishment. Those attributes were relative and conditionally linked to the original contiguous size and shape characteristics. The government's interest in this refuge no longer retains those size and shape characteristics. Most importantly, the development of dozens of lakeside cabins and the supporting recreational facilities have rendered this refuge incapable of ever meeting the purpose for which it was originally established.

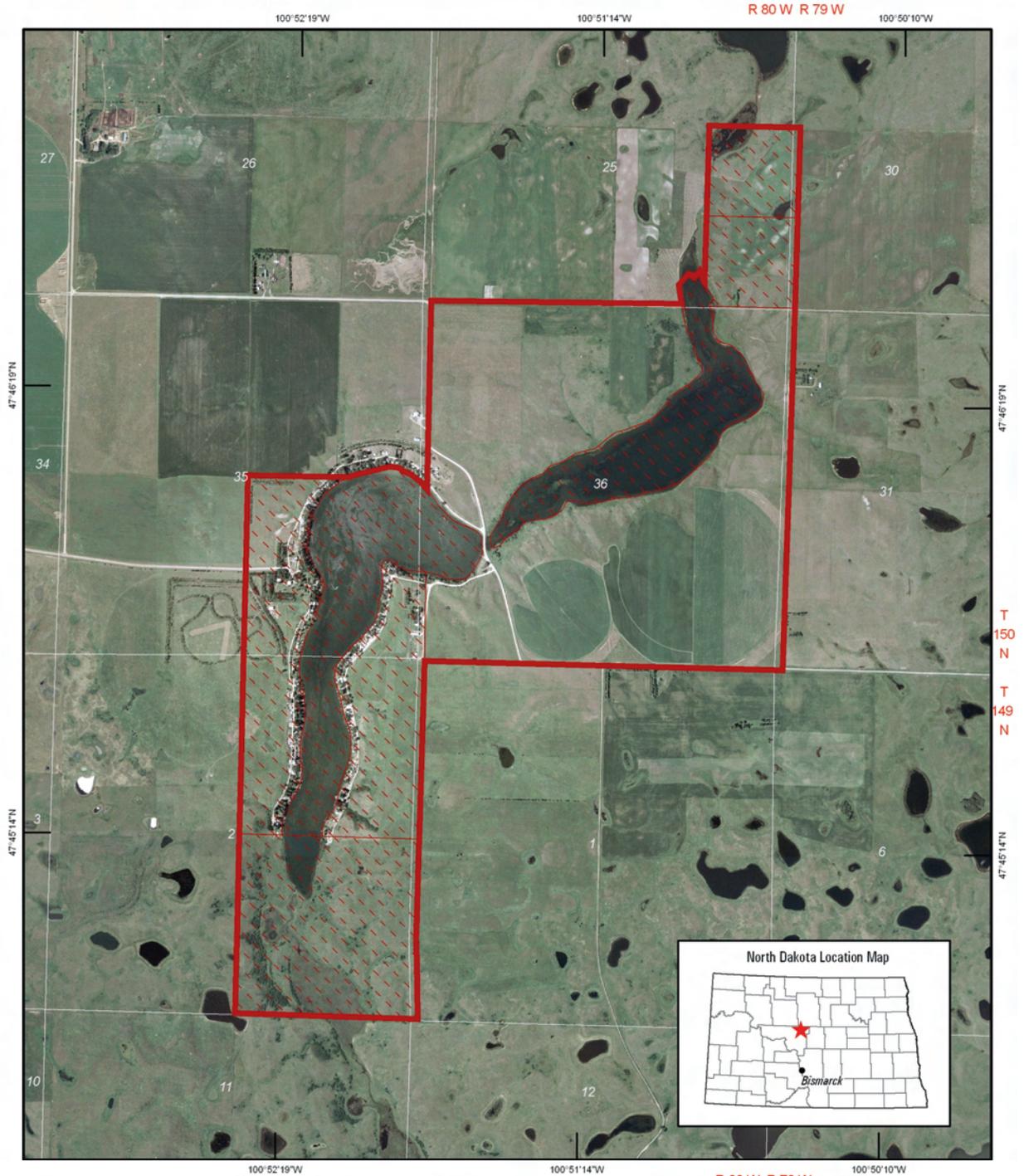


U.S. Fish & Wildlife Service

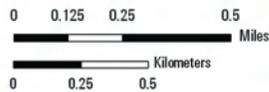
Camp Lake National Wildlife Refuge

McLean County, North Dakota

Audubon National Wildlife Refuge Complex



Produced in the Division of Refuge Planning
Denver, Colorado
Imagery Date: 2003
Projection: UTM Zone 14, NAD 27



R 80 W R 79 W
Legend

- Refuge Approved Boundary
- USFWS Refuge Easement

Figure 19. Camp Lake NWR

Recommendation: Divest the limited-interest refuge, revoke the refuge and flowage easements, and voluntarily relinquish the water rights. Transfer management of the dam to the McLean County Water Resource District or the Strawberry Lake Recreation District.

Cottonwood Lake NWR

Proposal and Justification

Seven perpetual refuge and flowage easement agreements were signed in McHenry County by private landowners between 1936 and 1937. On June 12, 1939, an executive order was signed by President Roosevelt establishing these lands and waters as Cottonwood Lake National Wildlife Refuge (figure 20). An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 1,013 acres to serve as a “refuge and breeding grounds for migratory birds.” Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge land is contained in the refuge and flowage easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

Cottonwood Lake is the principle water area on the refuge encompassing about 260 acres. It receives water from runoff to the west and a diversion ditch from the east. The boundary consists of over 500 acres of uplands in Section 28 and parts of Section 21 and Section 33. Most

of the Cottonwood Lake boundary is the high watermark on nearly two-thirds of the basin.

The uplands are in poor condition for waterfowl and other migratory birds. Nearly all uplands have been cultivated at some time and all have planted tree lines and shelterbelts, as well as trees that escaped cultivation, dotting the landscape. Three roads either bisect the refuge or transverse its boundary. There are two large farmsteads within the boundary, two permanent homes, and a seasonal mobile home.

The water control structure and spillway are in disrepair and do not function as originally planned. The diversion ditch to the east is filled with sediment, has become overgrown with brush and trees, and only functions under flood conditions. Local residents poured concrete into the water control structure and raised the lake level by 1 foot. The spillway in most years is nonfunctional and has blown out several times in the past.

The NDGF completed repairs on the structure to maintain the fishery. It also constructed a boat ramp on the west shoreline on other private land and encouraged fishing. This is the main fishing area for the rural residents of the Butte area. Historically, the residents have worked to keep the lake deep so as to maintain the fishery. The state periodically stocks the lake with game fish.

Some local anglers want the lake maintained for recreation. Attempts to plug the water control structure and spillway have occurred several times over the years. There also have been attempts to divert more water to the lake when possible. Any attempt to manage the lake for migratory bird use was abandoned in the 1960s due to local resident hostilities.

By keeping the lake deep, the habitat value for waterfowl has diminished. Little if any submerged vegetation has been noted over the years and little emergent vegetation has established itself along the shore. Previous managers have noted the area gets little use by waterfowl or other water birds except for small groups of birds during migration. Most times nesting birds are disturbed by the numerous boats using the area.



Cottonwood Lake NWR

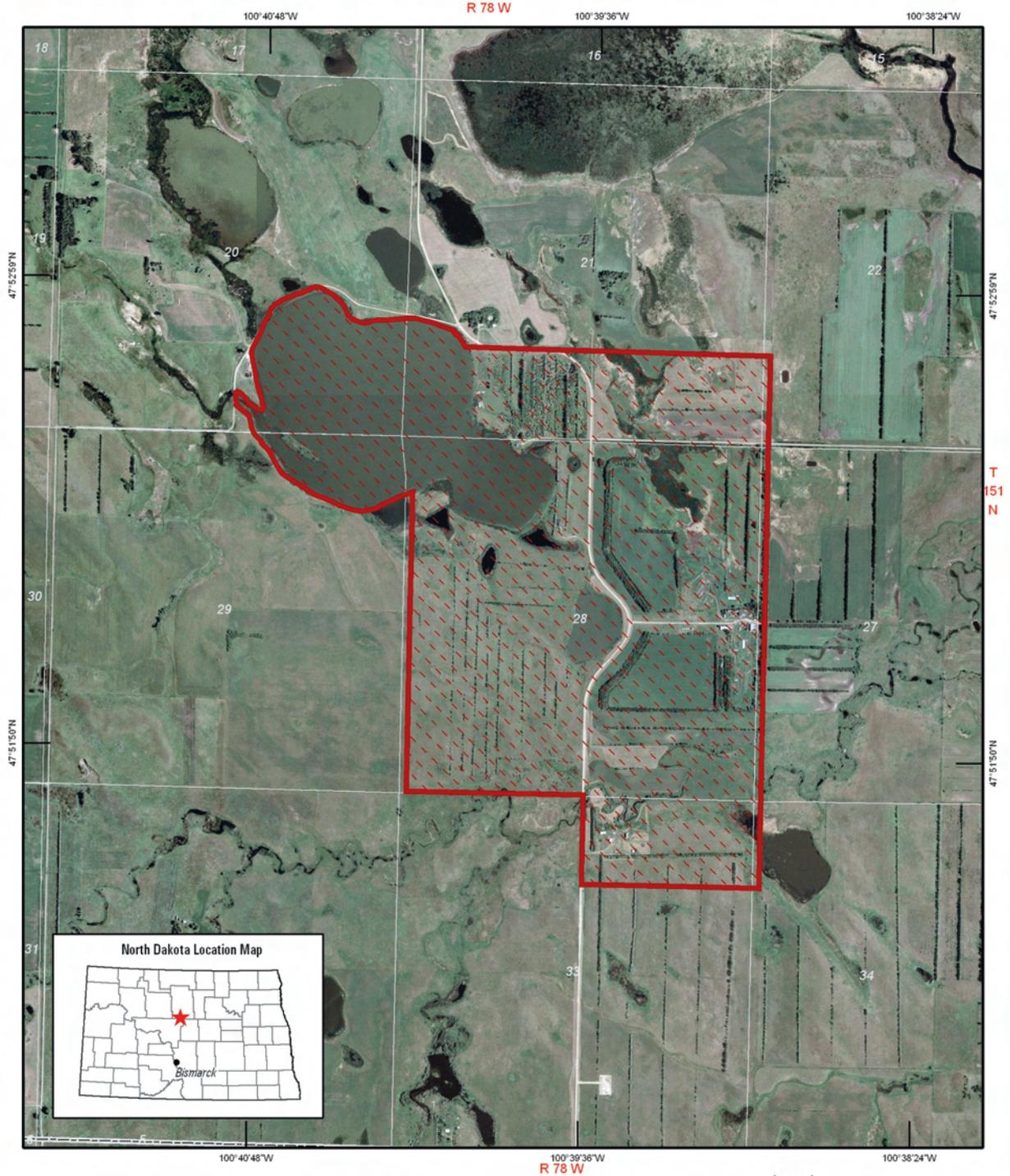


U.S. Fish & Wildlife Service

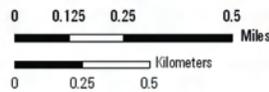
Cottonwood Lake National Wildlife Refuge

McHenry County, North Dakota

J Clark Salyer National Wildlife Refuge Complex



Produced in the Division of Refuge Planning
Denver, Colorado
Imagery Date: 2003
Projection: UTM Zone 14, NAD 27



- Legend
- Refuge Approved Boundary
 - USFWS Refuge Easement

Figure 20. Cottonwood Lake NWR

Wildlife use has been severely compromised leaving limited remaining biological values combined with long-standing law enforcement issues, which will undoubtedly increase as future developments (uses the Service does not regulate) continue.

Recommendation: Divest the limited-interest refuge and revoke the refuge and flowage easement agreements. Voluntarily relinquish the water right to the State, which should be allowed to continue to operate the area as a recreational fishery. Negotiations should be initiated with the state to determine if a trade for management responsibilities for Cottonwood Lake NWR could be exchanged for management rights on another limited-interest refuge with greater wildlife values. The Service should concentrate its efforts on other neighboring Service interests with greater potential, including the Cottonwood WPA and the Wintering River NWR (another limited-interest refuge).

Lake Patricia NWR

Proposal and Justification

Five refuge and flowage easement agreements were signed by private landowners and the state in Morton County between 1936 and 1938. Two of these agreements with the state, totaling 800 acres, are revocable; the remaining four agreements are perpetual. On June 12, 1939, an executive order was signed by President Roosevelt establishing these lands as Lake Patricia National Wildlife Refuge (figure 21). An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 1,434 acres to serve as a "...refuge and breeding grounds for migratory birds." Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge land is contained in the refuge easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

In 1949, the state of North Dakota revoked one limited-interest refuge agreement for 640 acres. These lands and waters are located in the center of the refuge in Section 36. The state has an additional 160 acre area in Section 26, where the easement has yet to be revoked.

The major feature of this refuge as established was Lake Patricia. The majority of this lake is located in Section 36 and is no longer protected by a limited-interest refuge agreement. The revoked lands surrounding Lake Patricia in Section 36, are managed as wildlife habitat by the NDGF. The remaining uplands still covered by a limited-interest agreement, are used for agricultural purposes and are of marginal wildlife value.

In 1955, the U.S. Fish and Wildlife Service entered into a management agreement with NDGF to manage the entire refuge. The long-range plan was for the state to work with the landowners within the refuge to acquire state agreements similar to the federal refuge and flowage easement agreements. This was necessary as the federal agreements could not be transferred to the state. The state has been unable to obtain these agreements; therefore, they requested the federal agreements remain in effect. Nevertheless, the state has continued to manage most of the refuge as a Wildlife Management Area.

The purpose for which this refuge was originally established was based on attributes it possessed and exhibited at the time of establishment. Those attributes were relative and conditionally linked to the original size and features. This refuge no longer retains those characteristics. The majority of refuge and migratory bird breeding use exists or is associated with the part of Lake Patricia where the limited-interest refuge agreement was revoked. It would be more appropriate for the state, which owns and currently manages most of the lands within the refuge boundary, to take jurisdiction over the area.

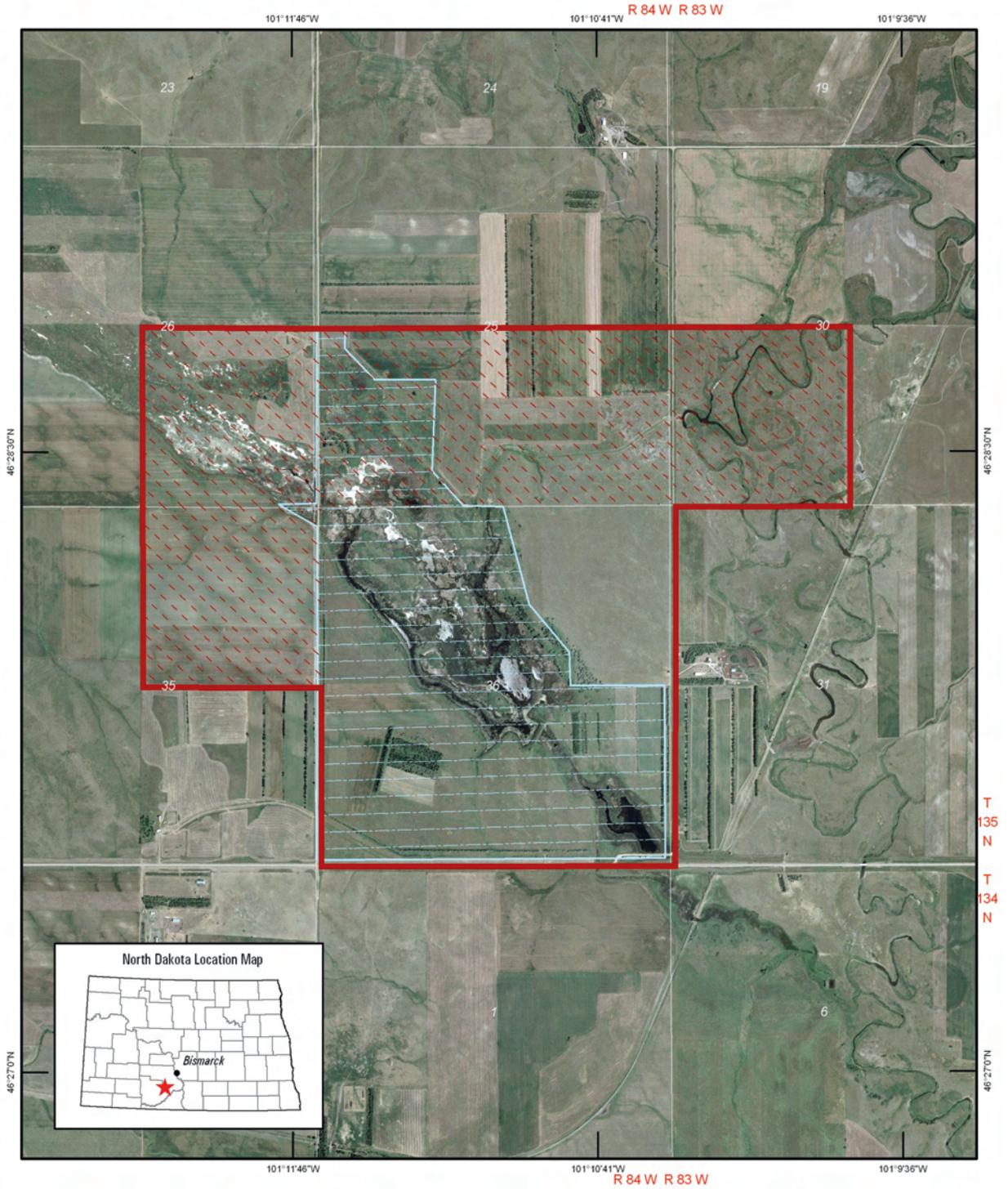
Recommendation: Divest the limited-interest refuge, revoke the refuge and flowage easement agreements, and voluntarily relinquish the water rights and transfer management of the structure to the State. Allow the State to continue to operate the area as a Wildlife Management Area. Negotiations with the State will include determining if these management responsibilities could be exchanged for management rights on another limited-interest refuge with greater wildlife values.



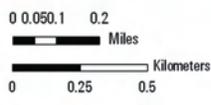
U.S. Fish & Wildlife Service

Lake Patricia National Wildlife Refuge
Morton County, North Dakota

Audubon National Wildlife Refuge Complex



Produced in the Division of Refuge Planning
Denver, Colorado
Imagery Date: 2003
Projection: UTM Zone 14, NAD 27



- Legend
- Refuge Approved Boundary
 - USFS Refuge Easement
 - ND Game & Fish WMA

Figure 21. Lake Patricia NWR

School Section Lake NWR

Proposal and Justification

One revocable and two perpetual refuge and/or flowage easement agreements were signed between 1935 and 1937 in Rolette County by private landowners and the state. On December 21, 1948, these lands and waters became School Section Lake National Wildlife Refuge (figure 22) under the authority of the Act of August 14, 1946, a precursor the Fish and Wildlife Coordination Act. An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 680 acres. Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge is contained in the refuge and/or flowage easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

In 1996, the revocable refuge and flowage easement signed by the state was cancelled by them. The agreement covered the land described as T163N, R72W, Section 16, frac. ALL (also described as Gov. Lots 1 thru 9, S½SE¼). This area (tract 2a) was about 383 acres of upland surrounding the 261-acre lake in Section 16. The only remaining upland within the existing limited-interest refuge boundary is in another agreement described as T163N, R72W, Section 9, Lot 4 comprised of 37 acres. The original refuge consisting of 680 acres has been reduced to 297 acres. Of the remaining refuge, 88 percent is composed of the 261-acre lake. The government no longer has jurisdiction to prevent human disturbance immediately adjacent to and around the entire periphery of the lake.

Within Section 16, the legal boundary of the lake is the now the legal boundary of the remaining limited-interest refuge. To enforce provisions of the limited-interest refuge, the legal boundary must be adequately signed. For the legal boundary to be signed, it must be identifiable on the landscape. The water levels in the lake fluctuate seasonally and from year to year. Thus, this legal boundary is not evident on the landscape. For this reason, management personnel responsible for enforcement of the limited-interest refuge provisions have been reluctant to place signs that would identify the modified boundary. In addition, a lake does not make a refuge. The

diversity of habitats, found both on the lake and in the surrounding uplands are necessary for adequate protection, diversity, enhancement, and management of a balance of habitats necessary for healthy wildlife populations, in particular federal trust species such as nesting waterfowl and grassland birds.

The purpose for which this refuge was originally established was based on attributes it possessed and exhibited at the time of establishment. Those attributes were relative and conditionally linked to the original size and features. This refuge no longer retains those characteristics. Thus, in its downsized state, it no longer meets the purpose for which it was originally established.

Recommendation: Divest the limited-interest refuge and revoke the refuge and/or flowage easement agreements. Voluntarily relinquish the water rights to the State.

Sheyenne Lake NWR

Proposal and Justification

In 1935, six separate perpetual refuge and flowage easement agreements were signed by private landowners in Sheridan County. On December 21, 1948, these lands became Sheyenne National Wildlife Refuge (figure 23) under the authority of the act of August 14, 1946, a precursor the Fish and Wildlife Coordination Act. An approved acquisition boundary was designated within and around these limited-interest refuge lands totaling 1,273 acres. Because the Service never acquired any of these lands fee title, the purpose of this limited-interest refuge land is contained in the refuge and flowage easement agreements including (a) water conservation, (b) drought relief, (c) a wildlife demonstration unit, and (d) a closed refuge and reservation for migratory birds and other wildlife.

The lands on which the limited-interest refuge is located have been purchased in fee title by the BOR for Garrison Diversion Unit purposes, a large irrigation project. As part of the 1986 Garrison Diversion Reformulation Act, the area surrounding and containing the refuge became known as the Lonetree Wildlife Management Area. NDGF currently manages the area under an agreement with BOR.

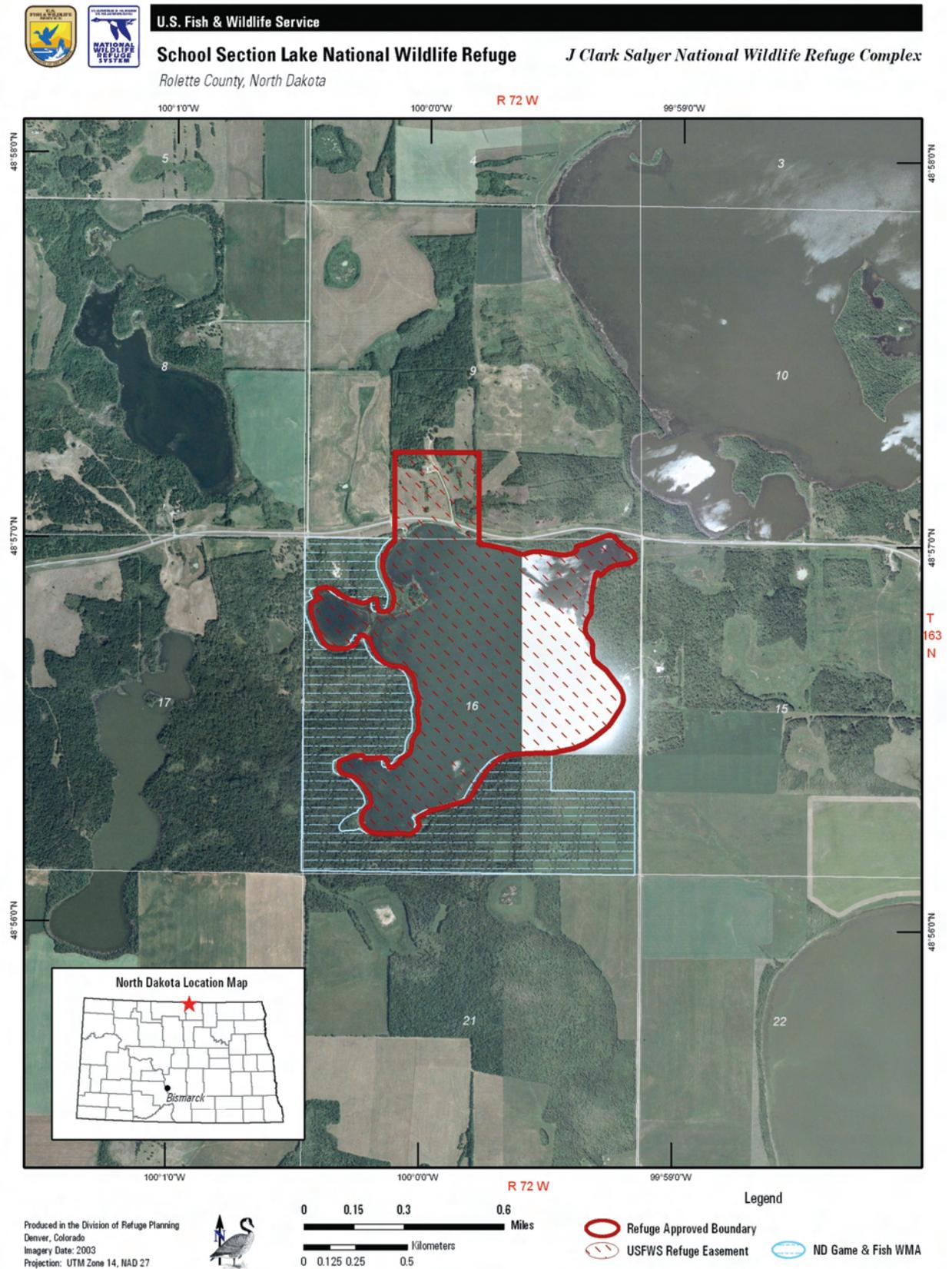


Figure 22. School Section Lake NWR

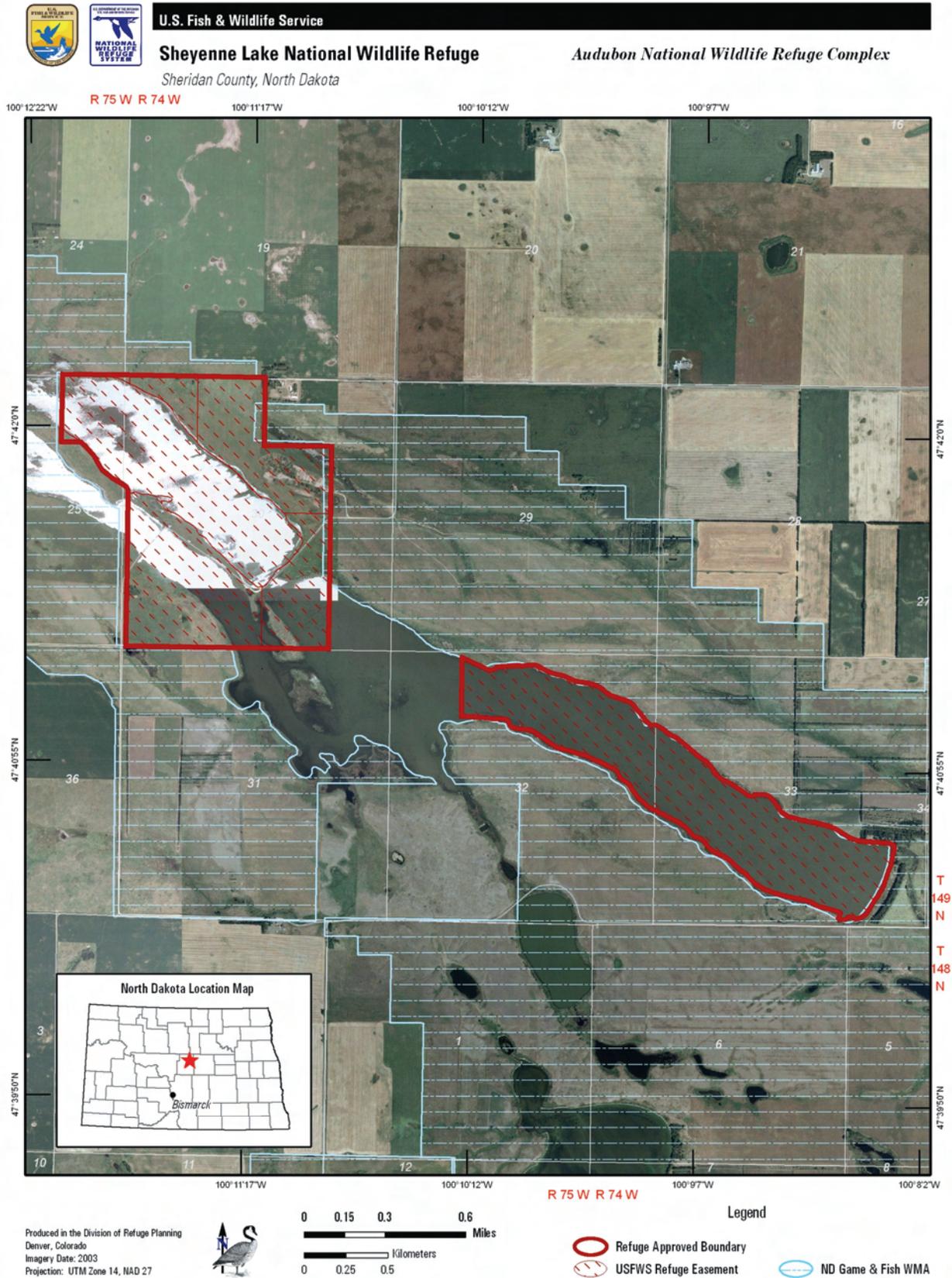


Figure 23. Sheyenne Lake NWR

The refuge contains both Sheyenne and Coal Mine lakes, which are the principle water areas on the refuge. These lakes provide breeding and migration habitat for waterfowl and other waterbirds. A small amount of uplands surround Sheyenne Lake within the refuge boundary. The NDGF currently manages all lands and water as quality wildlife habitat for migratory birds and other wildlife. Because the wildlife values are being effectively protected and managed by the BOR and the NDGF by order of the 1986 Garrison Diversion Reformulation Act, there is no need for continuing the Service's interest in the agreements or the refuge status.

Recommendation: Divest the limited-interest refuge and revoke the refuge and flowage easement agreements, transferring management and voluntarily relinquishing the water rights to BOR or the State.

Once this CCP is approved, the managing stations would work with the Division of Realty and Land Protection Planning to prepare a combined Program proposal to divest these refuges. As a courtesy, this proposal would be submitted to the Migratory Bird Conservation Commission for concurrence and then submitted for congressional approval. This process could take some time as final divestiture will take an act of Congress.

6.3 Goals, Objectives, and Strategies

The following goals, objectives, and strategies outline the actions needed to achieve the Program vision for the refuges that are not being proposed for divestiture.

The following objectives and strategies address the remaining 33 refuges not proposed for divestiture. The Service will not implement any of the following actions, outside the authority of the limited-interest refuge agreement (see section 2.3), without the cooperation of willing landowners.

Wetland Habitat

Goal: Maintain and manage natural and created wetlands within the approved acquisition boundary to provide habitat for international populations of waterfowl and other migratory birds along with other wetland-dependent wildlife.

Objective 1: Work with the Service's Division of Engineering to evaluate the safety and integrity of all water management facilities; thereafter, annually manage water levels, protecting the Service's water right while working cooperatively with willing landowners to reduce negative impacts from upland uses to ensure productive wetland habitat for wetland-dependant migratory birds.

Completion Year: 2020

Rationale: The structures that impound and control water bodies on the limited-interest refuges were built in the 1930s and 1940s. Some have been replaced or updated, while many others have been altered, removed, or are in disrepair and not fully functioning. Most of the impoundments have not been historically managed for maximum wetland habitat production, primarily due to a lack of staff, funding, and management capability to implement any water level management programs. Many areas have been kept at higher than desirable water levels for many years and several have become popular fishing and boating areas. This was not the intent of the Program as evidenced by the installation of the water level management structures and the agreements. Restoration of the management capability, supported by the necessary staff and funding, is essential to provide habitat to wetland-dependent migratory birds.

Strategies:

Priority 1 (initiate year 1 and thereafter)

- 1) Refuge staff will work with the Division of Engineering to plan and conduct annual safety and maintenance inspections of water management structures until all have been inspected and maintenance needs have been identified.
- 2) Install water elevation gauges on all impoundments that have the capability to manage water levels and record levels in the

spring and late summer/early fall during the migration periods.

3) Identify and protect the Service’s water rights (see table 10.)

Priority 2

1) Implement any necessary maintenance, repair and replacement to maximize management capabilities. Schedule projects based on safety needs and the habitat protection priorities established by each managing station.

2) Use existing and updated water control structures to create optimum and stable wetland conditions during the nesting and migration seasons of wetland-dependent birds.

Priority 3

1) Develop standard protocol using GIS technologies for monitoring migratory bird response to management actions and make adjustments to maximize production, natural diversity, and survival.

Objective 2: Restore and protect over 2,000 seasonal, temporary, and semi-permanent wetlands, totaling nearly 2,500 acres, that exist within the approved refuge boundaries.

Completion Year: 2020

Rationale: The Service’s definition of wetlands states that, “Wetlands are land transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water” (Cowardin et al. 1979).

Wetlands are the link between land and water and serve not only as storage areas for water, preventing flooding, but also absorb excess nutrients, sediments, and other pollutants before they reach rivers, lakes, and other waterbodies. Nearly half of all wildlife species use wetlands at some point in their lives. Many of the U.S. breeding bird populations—including ducks, geese, hawks, wading birds, and songbirds—feed, nest, and raise their young in wetlands. Nevertheless, the U.S. continues to lose over 60,000 acres of wetlands every year (U.S. Environmental Protection Agency 2004).

According to data provided by HAPET, almost 2,500 acres of natural wetlands occur within the

boundaries of the limited-interest refuges. Currently, the Service has little ability to manage or protect wetlands for wildlife, particularly for waterfowl and other migratory birds. The Service will need to work with willing landowners to provide additional compensation for critical protection.

Strategies:

Priority 1

1) Provide information on available compensated programs to limited-interest refuge landowners owning lands within priority wetland habitat zones in order to determine their interest in receiving additional compensation for protecting natural wetlands.

2) Each managing station will use HAPET data and other available information to develop a wetland habitat protection priority list for the limited-interest refuges. This list should be reviewed every 10 years, ensuring that the most critical habitat protection needs identified in both regional and national plans (including the North American Waterfowl Management Plan, Shorebird Conservation Plan and others) are being adequately addressed.

Priority 2

1) Using the following programs and funding sources, work with willing landowners and partners to ensure the identified wetlands are restored and protected:

- Acquire wetland easements on natural wetlands in priority areas/counties.
- Refuge Inholding Fund.



Service staff inspects a structure at Sheyenne Lake NWR.

Mike Goos/USFWS

- Prioritize fee acquisition of limited-interest refuges and compete for funding from the Refuge Inholding Fund. To compete for funding from this account, a copy of a signed option to purchase the property must be submitted with the request. The Washington Division of Realty limits funding from this account to tracts of \$250,000 or less.
- Migratory Bird Conservation Funds
 - Use of Migratory Bird Conservation Funds would require lands to be managed as WPAs. To spend these funds to acquire land, the Service would need the approval of the Governor and the Migratory Bird Conservation Commission.
 - Land and Water Conservation Fund Project
 - Limited-interest refuge lands within the approved acquisition boundary, as identified in the establishing authority, can be purchased from willing landowners using Land and Water Conservation Funds.

Upland Habitat

Goal: Establish a land protection program within the approved acquisition boundary to maintain, restore, and enhance uplands to provide habitat for international populations of waterfowl, other migratory birds, and other wildlife.

Objective 1: Provide opportunity and incentives to all willing landowners to implement upland conservation measures, in particular for native prairie protection, to maintain, enhance, and preserve migratory bird breeding and nesting habitat while reducing negative impacts to the adjacent wetlands, rivers, lakes, and impoundments.

Completion Year: 2020

Rationale: Except for hunting, the Service does not control activities that occur in upland areas. Construction, farming, grazing, economic developments, have occurred on many of the refuges before and since they were established. The water feature of these refuges have made them attractive for residential and recreational development and for economic endeavors such



Appert Lake NWR

Paul Van Ningen/USFWS

as farming, livestock rearing, fertilizer plants, and bait shops. Varying degrees of negative impacts from these activities include a loss of wildlife habitat and an increase in disturbance. Other upland areas remain intact, including large areas of native prairie; however, nothing protects this prairie habitat from plowing or other impacts except for the economic value the land has for grazing and haying. There is an urgent need to work with willing landowners to protect upland habitat from further impacts, particularly lands with intact native prairie habitat. Compensation would be provided and habitat would be restored for the use of migratory birds, waterfowl, and grassland birds. Resident wildlife also would benefit.

Strategies

Priority 1

1) Contact all refuge landowners to provide information on upland habitat enhancement opportunities through the Service Partners Program, NDGF, USDA, and other Program possibilities. Continue to update landowners on program options through the annual newsletter.

2) Each managing station will utilize HAPET data and other available information to develop an upland habitat protection priority list for the limited-interest refuges. This list will be reviewed every 10 years to incorporate any new information, ensuring that the most critical habitat protection needs continue to be addressed. Highest priority will be given to those lands containing native prairie habitat.

3) Work through the Service's Partners for Wildlife Program to offer landowners incentives for restoring and protecting upland habitat for wildlife.

4) Work cooperatively with the USDA to provide information to landowners on BMPs for farming and grazing and other available conservation programs.

Priority 2

1) In cooperation with willing refuge landowners, develop and implement a conservation limited-interest refuge strategy to limit development within the refuge boundary and adjacent zone of influence.

Priority 3

1) Annually evaluate refuge uplands and record opportunities for habitat restoration, enhancement, creation or preservation.

2) Determine which landowners would like their lands evaluated for additional compensation and protection and pursue one of the following methods and/or funding sources based on the landowner's desires and the level of protection needed:

- Acquire grassland easements on upland areas, giving highest priority to lands supporting native prairie habitat.
- Refuge Inholding Fund
 - Prioritize fee acquisition of limited-interest refuges and compete for funding from the Refuge Inholding Fund. To compete for funding from this account, a copy of a signed option to purchase the property must be submitted with the request. The Washington Division of Realty limits funding from this account to tracts of \$250,000 or less.
- Migratory Bird Conservation Funds
 - Use of Migratory Bird Conservation Funds would that lands be managed as WPAs. To spend these funds to acquire land, the Service would need the approval of the Governor and the Migratory Bird Conservation Commission.

■ Land and Water Conservation Fund Project

- Limited-interest refuge lands within the approved acquisition boundary, as identified in the establishing authority, can be purchased from willing landowners using Land and Water Conservation Funds.

Priority 4

1) Using GIS technologies, annually monitor the effects of management actions and modify the Program as needed to provide habitat for nesting waterfowl and other migratory birds.

Partnerships

Goal: Foster landowner, community, and regional partnerships to assist in achieving the Program vision while ensuring that 100 percent of all partners gain a greater understanding of the management and resources of these limited-interest refuges.

Objective 1: Landowners would be given the opportunity to participate as partners in managing their respective limited-interest refuge within the context of the refuge and/or flowage easement agreement.

Completion Year: 2007

Rationale: Although the limited-interest refuges are national wildlife refuges, over 93 percent of the lands (44,285 acres) remain in private ownership. The Service owns the water rights (excluding Lake Otis) and can manage water levels on impoundments for migratory birds. The Service also can regulate public uses, including hunting, trapping, and fishing.

Control of uplands and naturally occurring wetlands remains with the landowners. Nevertheless, there has never been a structured program where landowners had a regular avenue to provide feedback or gain information on this Program. Landowners must be kept informed and given opportunities to participate in this Program if the limited-interest refuges are to have any future value for wildlife.

Strategies:

Priority 1

1) Maintain a mailing list and legal descriptions for each landowner, updating it at least annually (county tax assessor offices can provide the most up-to-date ownership information).

2) Contact each landowner prior to implementing a management practice that may have the potential to affect property or adjacent lands.

3) Each refuge headquarters will contact its respective refuge landowners annually through an informational newsletter that includes Program highlights and information on compensation programs available to landowners to further protect and enhance their refuges. A postage-paid comment form will be included with each newsletter to receive any feedback from the landowners.

Priority 2

1) Provide landowners a wildlife observation reporting form in the annual newsletter to record unusual observations of wildlife on their property or other areas of the refuge. Solicit this observation information from willing landowners on a bi-annual basis and highlight unique sightings in the annual newsletter.

Objective 2: Identify and coordinate with potential partners to achieve common goals that enhance and support the North Dakota Limited-interest Program.

Rationale: There is a great potential and need to compensate the limited-interest refuge landowners willing to provide the necessary protections so that these refuge resources will remain protected and intact. It will be essential that all potential partners are informed and engaged in this opportunity to further protect and fulfill the intent of the Program.

Completion Year: 2010

Strategies:

Priority 1

1) Coordinate with all limited-interest refuge managers to develop a list of potential national and regional partners. Prepare an informational packet on the Program including a history of the Program and the need and opportunities for protection; provide this packet to all potential partners.

2) Invite all interested landowners to meet with potential partners and learn about any programs available for compensating landowners for added wildlife habitat protections.

Objective: On the current 607 NWR fee-title acres (and any future fee-title lands), utilize fire management to protect life, property, and other resources from wildfire while utilizing an ecosystem management approach to restore wildlife habitat.

Priority 1

1) Work cooperatively with affected landowners when planning any prescribed fire operations.

2) Include all NWR fee-title lands within the limited-interest refuges in any managing station fire management plans.

Visitor Services

Goal: Where compatible, and in cooperation with willing landowners, allow public fishing, hunting, trapping, and other high quality wildlife-dependent recreation opportunities that foster an appreciation and understanding of the management and resources of the Program and the System.

Objective 1: Where compatible and in cooperation with willing landowners, the Service's fisheries management program, and the NDGF, evaluate each refuge for the potential to develop consumptive public use programs (hunting, sport fishing, and trapping) that will not negatively impact migratory birds.

Completion Year: 2013



Ring-necked Pheasant

Bob Savannah/USFWS

Rationale: The Service acquired the right to control fishing, trapping, and hunting on all limited-interest refuges. Since the refuges were established in the 1930s and 1940s, all have been open to trapping, while only a few have been officially opened to hunting and fishing. When they were established, market hunting was rampant and there was a need for sanctuaries for migratory birds and other wildlife. Today, hunting, trapping, and fishing uses are strictly regulated and considered by many to be a legitimate, traditional recreational use of renewable natural resources. Healthy wildlife and fish populations produce harvestable surpluses that are a renewable resource. As practiced on refuges, hunting, trapping and fishing do not pose a threat to the wildlife populations and, in some instances, are actually necessary for sound wildlife management. In particular, trapping of smaller predators is essential to the future survival of waterfowl and other ground nesting birds. These small predators (such as raccoon and skunks) have responded favorably to the fragmented habitats that occur in North Dakota. This fragmentation is caused by development and agriculture. Larger predators, such as wolves and bears, have been extirpated from the landscape due their needs for unbroken large tracts of land. Smaller predators have thrived in this unnatural habitat, expanding their populations, which then feed on ground nesting birds, their eggs and young. This combined with habitat losses has imperiled many populations of ground nesting birds. Man created this situation and it is only man's intervention that can correct it. The most effective means, short of acquiring very large tracts of intact habitats (rarely seen today) is to control these predators at more natural population level. This also benefits the predators themselves and the surrounding communities by reducing disease outbreaks amongst wildlife and domestic animals. It also reduces economic damage caused by these predators such as crop depredation. Trapping supports the purposes for which these refuges were established; protection of migratory birds.

Several landowners asked the Service to address crop damage due to the concentration of white-tailed deer and geese within these protected areas. There were other requests to open these areas for additional recreational opportunities. The decision to permit hunting, trapping and fishing on the limited-interest refuges would be made on a case-by-case basis.

Landowners must be willing to provide access to the public. Once access is granted, the final decision to open a refuge would be based on biological soundness, economic feasibility, effects on other refuge programs, resident landowner and visitor safety, and public demand.

The limited-interest refuges are still in private ownership; if they are to be opened to any visitor services, they must be open to the public. The Service may restrict the number of users and the length of the seasons, but it may not exclude the public from the opportunity to participate.

Strategies:

Priority 1

- 1) Working with the Service's fisheries management program, develop a partnership with NDGF to develop hunting, fishing, and trapping programs and monitor the results.
- 2) Meet with willing landowners to discuss the opportunities and need for a consumptive use program and determine how public access will be provided.
- 3) Provide ice fishing opportunities on refuges where the use is compatible.
- 4) Ensure the existing permit-only trapping programs focuses efforts on those habitats most suitable for ground nesting birds in order to improve survival rates. Implement the International Association of Fish and Wildlife Agencies recommendations for Best Management Practices for trapping wildlife, when available.
- 5) Ensure that existing hunting and fishing programs have been determined to be compatible and are open to the general public.

Priority 2

- 1) Do compatibility determinations on each refuge for every individual use being considered.
- 2) Use the provisions and procedures outlined in the Code of Federal Regulations, Title 50, part 32 to evaluate expanded hunting and fishing opportunities.

3) Determine the need for any restrictions on hunting, fishing, and trapping such as issuing a limited number of permits, shortened seasons, and closed areas.

Priority 3

1) Annually monitor migratory bird breeding and staging use at each refuge to determine the continued compatibility of fishing, hunting, and trapping.

2) At a minimum, every 5 years, the Service will evaluate the Program with the landowner and the NDGF to determine the continued need for hunting, fishing, and trapping uses.

Objective 2: Where compatible and in cooperation with willing landowners, evaluate each refuge for the potential to develop nonconsumptive wildlife-dependent public use programs (wildlife viewing and photography, environmental education, and interpretation) for the general public to better enjoy and understand the Program.

Completion Year: 2013

Rationale: No organized nonconsumptive activity occurs on the limited-interest refuges. In fact, most of the public is unaware these refuges exist. Most of the refuges have the boundaries posted, but few have entrance signs and none have information stations. The public and several landowners expressed some interest in providing opportunities for wildlife viewing and photography, interpretation and environmental education. On any lands not owned by the Service, the landowners have the right to deny access for nonconsumptive visitor services. Therefore, any development of these programs on private lands will only be with the permission of willing landowners.

Strategies:

Priority 1

1) In cooperation with willing landowners, work with state agencies and other interested partners to develop nonconsumptive wildlife-dependent recreational programs.

Priority 2

1) Use the provisions and procedures outlined in the Code of Federal Regulations, Title 50,



One of the few entrance signs.

Mike Coors/USFWS

part 26, Subpart C, Public Use and Recreation, to evaluate and open the limited-interest refuges to any nonconsumptive visitor services.

2) Do compatibility determinations on each refuge for every nonconsumptive use being considered.

Priority 3 (initiate year 3)

1) Work with willing landowners, area groups, and schools to promote awareness of key refuge resources. Look for opportunities to develop cooperative interpretive and environmental education programs for adults and students while promoting ecotourism opportunities for the general public.

2) Place entrance signs and informational kiosks on refuges that provide these opportunities.

Priority 4 (initiate year 3 and thereafter)

1) Monitor migratory bird breeding and staging use at each refuge to determine the continued compatibility of wildlife viewing, photography, interpretation and environmental education.

Objective 3: Provide for visitor safety and ensure adequate signage on all limited-interest refuges.

Completion Year: 2008

Rationale: Since these refuges were established, there has been some variation in the identification of the refuge boundaries and names of the limited-interest refuges. Most

have posted boundaries using the common “blue goose” sign, but few have the traditional entrance sign identifying them as national wildlife refuges. There needs to be some consistency in identifying and posting, based on the public activities that are allowed by the landowners. At a minimum, all of the limited-interest refuge boundaries need to be identified due to their restricted uses, such as hunting and fishing, and refuge purpose, to reduce disturbance to migratory birds.

Strategies:

Priority 1

1) Develop a unique boundary sign for all limited-interest refuges so the public may distinguish these privately owned refuges and their restrictions from a traditional fee-title refuge.

Priority 2 (initiate year 1 and thereafter)

1) Inspect and replace boundary signs as needed on all limited-interest refuges.

Priority 3

1) As new wildlife-dependent recreational activities are established, identify unmet law enforcement and visitor services needs and develop a Refuge Operating Needs System and a Maintenance Management System to ensure a safe, quality experience for refuge visitors.

Administration

Goal: Secure and effectively use funding, staffing, and partnerships to ensure the Program meets its full potential of habitat protection and visitor use.

Objective: Secure funding, staffing and develop partnerships to protect and manage the limited-interest refuges, their resources and values, and achieve all Program objectives.

Rationale: Since the Program was established, no staff and little to no funding has been available to manage the refuges. In the past 70 years, the Service has acquired 7 percent (3,443 acres) of the total acres, 2,828 acres of which were acquired as WPAs. There have been a few attempts to review this Program and determine the resources needed to ensure these areas were adequately managed, enhanced, and protected. Most of these

attempts have been unsuccessful, resulting in a continued altering or loss of wildlife habitat. It is imperative that resources and partnerships are sought to ensure adequate protection and management.

Strategies:

Priority 1

1) Recruit one North Dakota Limited-interest Program Coordinator to facilitate the implementation of this plan.

Priority 2

1) Develop Cooperative Conservation Initiative, Challenge Cost Share, and North American Wetlands Conservation Act grants and other grants with available partners to obtain funding for habitat and other protection work.

2) Incorporate management of limited-interest refuges into annual work plans.

3) Use volunteers to assist with management, maintenance, and visitor use programs.

4) Complete a Refuge Operating Needs System or a Maintenance Management System proposal to request dollars for any projects requiring Service funding.

5) Recruit four seasonal law enforcement officers to ensure visitor safety and enforce established refuge regulations.

6.4 Step-down Management Plans

This strategic CCP will guide the future direction of the Program. Implementation of this CCP will require further strategies detailed in step-down management plans (see table 16).

Most of the limited-interest refuges have been included in the managing stations management plans. Because these refuges are in private ownership, opportunities for management, beyond those described in section 2.3, are limited. This fact makes it difficult to complete many step-down plans until the future of these refuges is more certain. However, a significant part of implementing this CCP will be for each managing station to complete an evaluation and prioritization of their refuges identifying the

Table 16. Limited-interest refuge step-down management plans

<i>Plan/Proposal</i>	<i>Years 1–3</i>	<i>Years 4–6</i>	<i>As Related to Changes in Individual Refuge Status</i>
Limited-interest Refuge Habitat Priority List	X		
Divestiture Proposals	X		
Wildlife Management Plans (may be incorporated in Complex/WMD plans)			
Waterfowl	X		
Shorebirds and Water Birds	X		
Neotropical Migrant/Birds of Concern		X	
Resident Game Species			X
Nongame Species			X
Fisheries		X	
Wildlife Inventory	X		
Integrated Pest Management Plan	X		
Habitat Management Plans (may be incorporated in Complex/WMD plans)			
Moist Soil/Water	X		
Grassland			X
Fire Management Plan			X
Visitor Services Plans			X
Hunting and Trapping			X
Fishing			X
Wildlife Observation and Photography, Environmental Education and Interpretation			X
Sign	X		
Law Enforcement	X		

most imperiled and critical habitat areas. This will assist in ranking future project opportunities.

Step-down plans are primarily for those refuges where the Service will be able to secure additional protections from willing landowners. These step-down plans may continue to be incorporated into Complex or WMD plans, if appropriate.

6.5 Partnership Opportunities

A major objective of this CCP is to establish partnerships with landowners, volunteers, private organizations, and state and federal natural resource agencies. In particular, voluntary participation from limited-interest refuge landowners is essential to the success of this plan. Landowners will be informed of opportunities to participate in compensated habitat protection programs; it will be their option to participate. Opportunities exist near the limited-interest refuges to establish

partnerships with sporting clubs, elementary and secondary schools, and community organizations. A strong partnership already exists between the Service and NDGF. At regional and state levels, partnerships might be established with organizations such as Ducks Unlimited, The Nature Conservancy, Audubon Society, National Wild Turkey Federation, North Dakota Wildlife Federation and Wildlife Societies, and Delta Waterfowl.

6.6 Monitoring and Evaluation

Adaptive management is a flexible approach to long-term management of biotic resources. Adaptive management is directed over time by the results of ongoing monitoring activities and other information. More specifically, adaptive management is a process by which projects are implemented within a framework of scientifically driven experiments to test the predictions and assumptions outlined within a plan (figure 24).

To apply adaptive management, specific survey, inventory, and monitoring protocols will be adopted for the Complex. The habitat management strategies will be systematically evaluated to determine management effects on wildlife populations. This information will be used to refine approaches and determine how effectively the objectives are being accomplished. Evaluations will include HAPET, ecosystem team, and other appropriate partner participation.

If monitoring and evaluation indicate undesirable effects for target and nontarget species or communities, alterations to the management projects will be made. Subsequently, the CCP will be revised.

Specific monitoring and evaluation activities will be described in the step-down management plans (see section 6.4).

6.7 CCP Amendment and Revision

This CCP will be reviewed annually to determine the need for revision. A revision would occur if and when significant information becomes available, such as a change in ecological conditions or significant landowner interest in additional programs. The final CCP would be augmented by detailed step-down management plans to address the completion of specific strategies in support of the Program’s goals and objectives. The step-down management plans and revisions to the CCP would be subject to public review and NEPA compliance.

At a minimum, this CCP will be evaluated every 5 years and revised after 15 years.

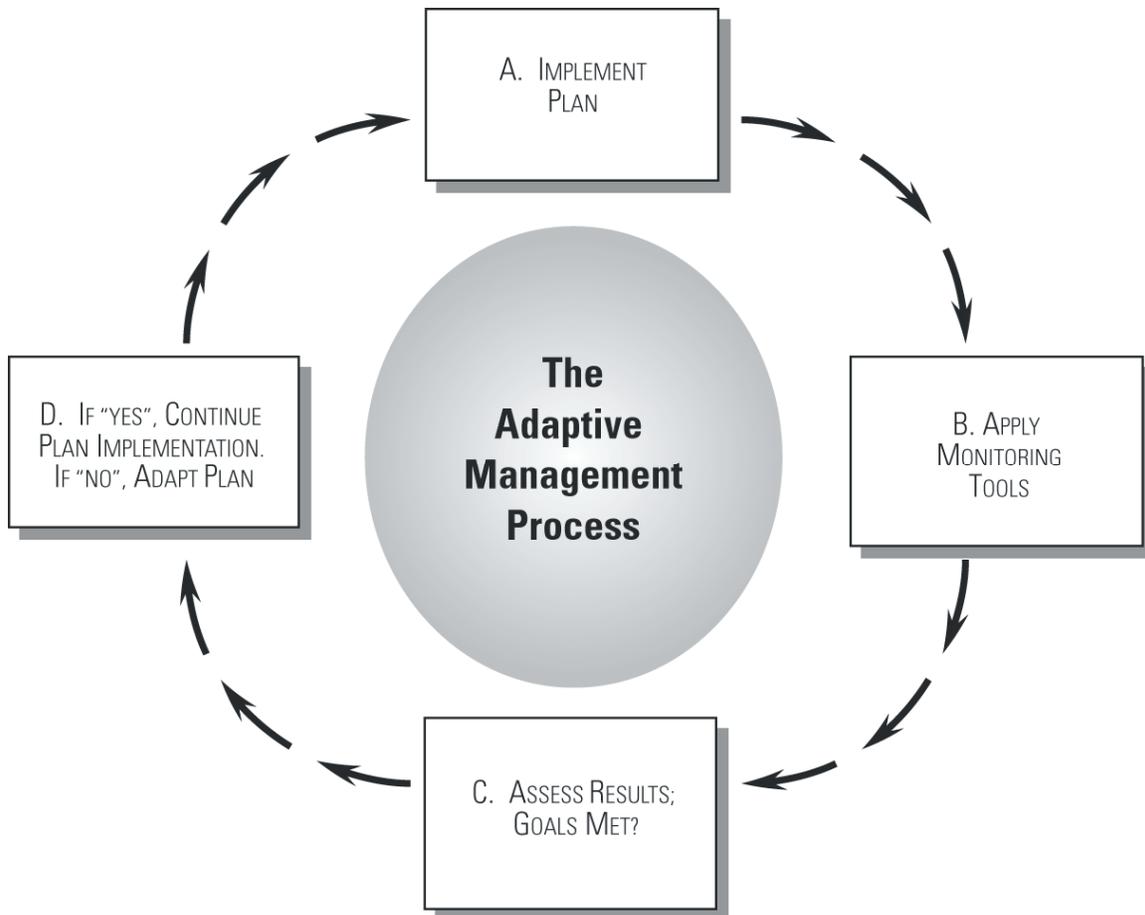


Figure 24. Adaptive Management.

