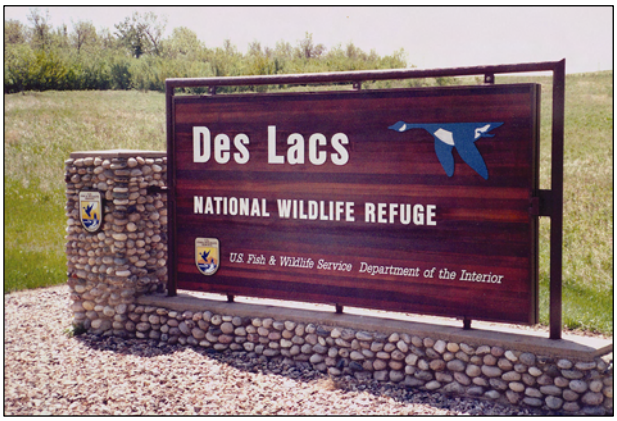
2 The Refuges

The three Souris River basin refuges were established by executive order in 1935.



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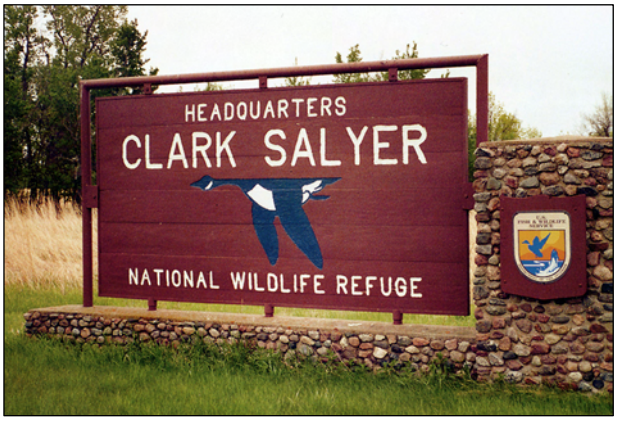

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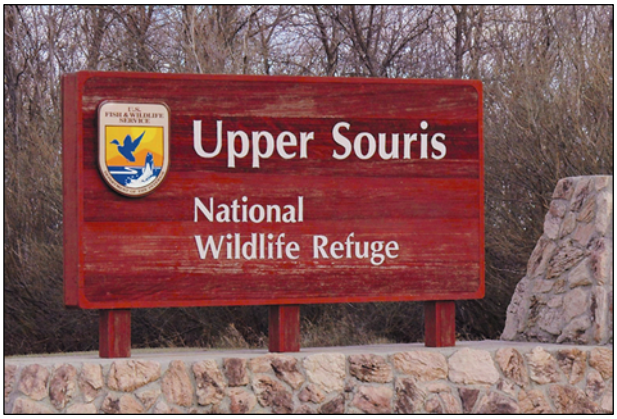

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The Des Lacs Migratory Waterfowl Refuge (later renamed "Des Lacs National Wildlife Refuge") was established by Executive Order (EO) 7154-A (figure 6).

> *By virtue of and pursuant to the authority vested in me as President of the United States, and in order to further the purposes of Migratory Bird Conservation Act (45 Stat. 1222), it is ordered that the following-described lands, acquired or to be acquired by the United States, in Burke and Ward Counties, North Dakota, consisting of 24,100 acres, more or less, be, and they are hereby, reserved and set apart for the use of the Department of Agriculture, subject to valid existing rights, as a refuge and breeding ground for migratory birds and other wildlife: Provided, that any private lands within the areas described shall become a part of the refuge hereby established upon the acquisition of title or lease thereto by the United States: (legal description of land)… This refuge shall be known as the Des Lacs Migratory Waterfowl Refuge.*
>
> —Franklin D. Roosevelt, August 22, 1935

The Lower Souris Migratory Waterfowl Refuge (later renamed "J. Clark Salyer National Wildlife Refuge") was established by EO 7170 (figure 7).

> *By virtue of and pursuant to the authority vested in me as President of the United States, and in order to further the purposes of Migratory Bird Conservation Act (45 Stat. 1222), it is ordered that the following-described lands, acquired or to be acquired by the United States, in Bottineau and McHenry Counties, North Dakota, consisting of 40,000 acres, more or less, be, and they are hereby, reserved and set apart for the use of the Department of Agriculture, subject to valid existing rights, as a refuge and breeding ground for migratory birds and other wildlife: Provided, that any private lands within the areas described shall become a part of the refuge hereby established upon the acquisition of title or lease thereto by the United States: (legal description of land)… This refuge shall be known as the Lower Souris Migratory Waterfowl Refuge.*
>
> —Franklin D. Roosevelt, September 4, 1935

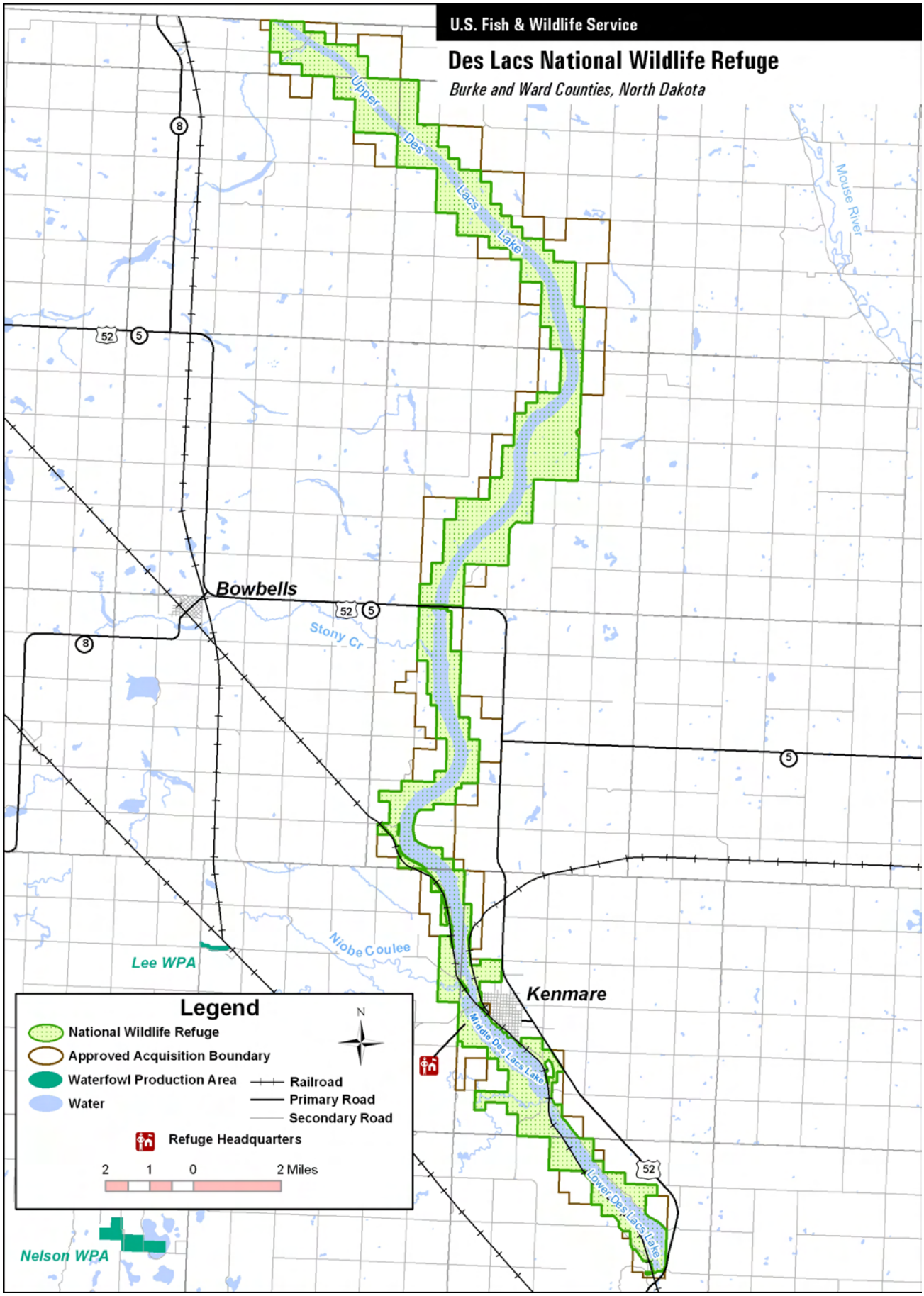


Figure 6. Base map for Des Lacs NWR, North Dakota.

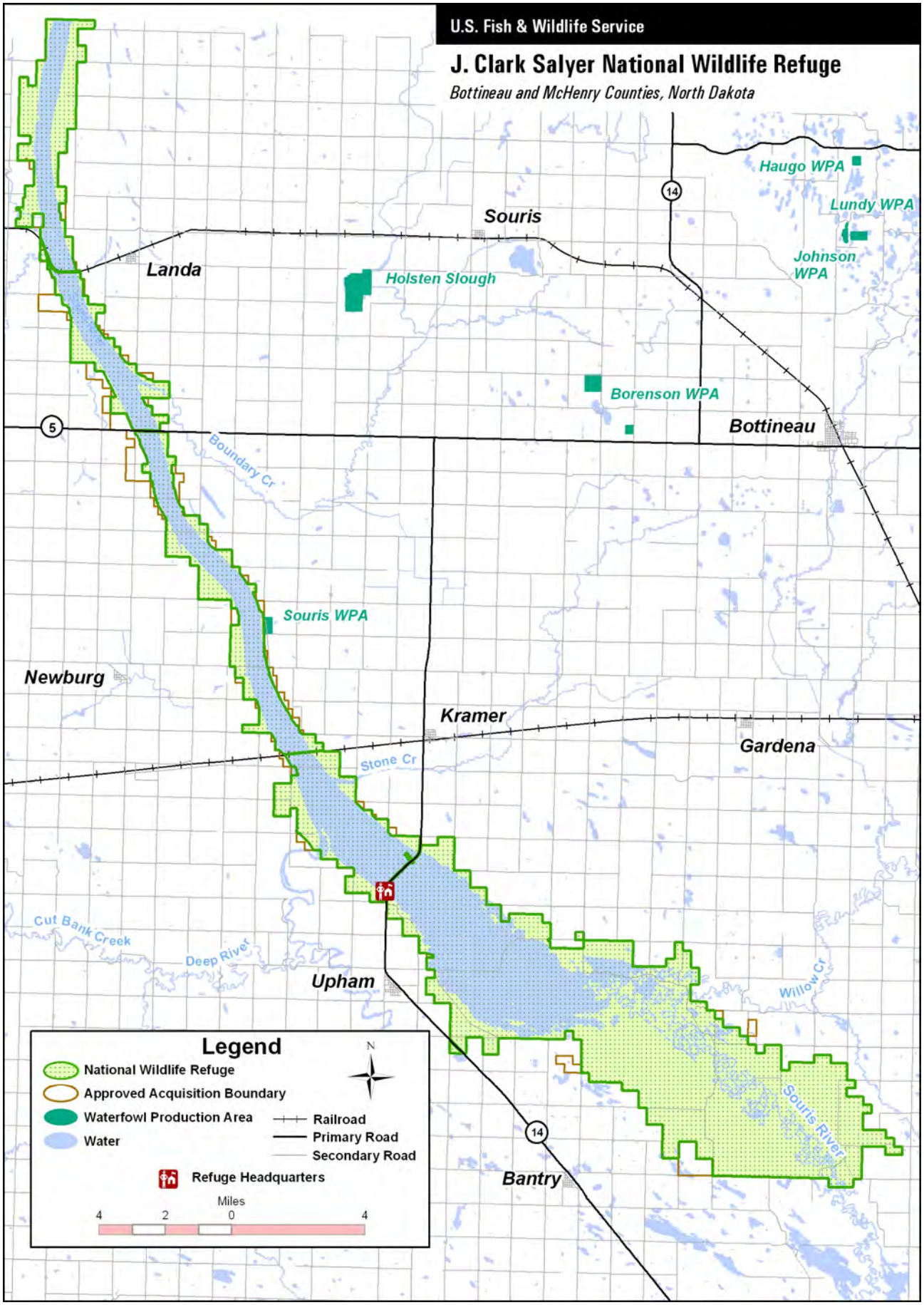


Figure 7. Base map for J. Clark Salyer NWR, North Dakota.

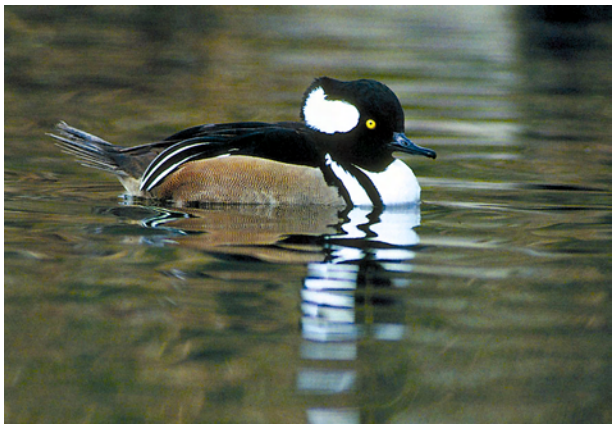
The Upper Souris Migratory Waterfowl Refuge (later renamed "Upper Souris National Wildlife Refuge") was established by EO 7161 (figure 8).

> *By virtue of and pursuant to the authority vested in me as President of the United States, and in order to further the purposes of Migratory Bird Conservation Act (45 Stat. 1222), it is ordered that the following-described lands, acquired or to be acquired by the United States, in Renville and Ward Counties, North Dakota, consisting of 40,000 acres, more or less, be, and they are hereby, reserved and set apart for the use of the Department of Agriculture, subject to valid existing rights, as a refuge and breeding ground for migratory birds and other wildlife: Provided, that any private lands within the areas described shall become a part of the refuge hereby established upon the acquisition of title or lease thereto by the United States: (legal description of land)… This refuge shall be known as the Upper Souris Migratory Waterfowl Refuge.*
>
> —Franklin D. Roosevelt, August 27, 1935

Purpose

Refuge System lands have been acquired under a variety of legislative acts and administrative orders. The transfer and acquisition authorities used to obtain the lands usually have one or more purposes for which land can be transferred or acquired. Over time, an individual refuge may contain lands that have been acquired under a variety of transfer and acquisition authorities with different purposes.

As stated in the executive orders, the purpose of all three Souris River basin refuges is for a "refuge and breeding ground for migratory birds and other wildlife."



Tim McCabe/USFWS

The hooded merganser is a common migratory bird that nests at the Souris River basin refuges.

Vision and Goals

The vision describes what the refuges will be, or what the Service hopes to do, and is based primarily on the Refuge System mission and specific purpose of each refuge.

The vision is a future-oriented statement designed to be achieved through refuge management by the end of the 15-year CCP planning horizon.

Vision

From Paleo-Indians on the tails of the Ice Age—
to the Assiniboine and Chippewa,
early fur trappers, explorers, and naturalists;
eminent bison herds and astoundingly
abundant bird life; fires stretching for miles to
revitalize treeless prairie; and determined
homesteaders and vanquished farms
of the Dust Bowl era…

The Souris River basin figures prominently
in the cultural and natural history of
midcontinent North America's plains and
prairies. Three national wildlife refuges of the
Souris River basin—Des Lacs, J. Clark Salyer,
and Upper Souris—will enhance populations
of migratory birds, including waterfowl, and
other wildlife native to the landscape by
conserving the ecology and natural character
of the northern plains region.

The refuges will create a sense of awe and wonder
by providing an array of wildlife-dependent
recreational and educational experiences
that enhance visitor awareness of the
splendid natural and cultural heritage
of the northern plains.

Functioning as integral parts of the ecosystems
and human communities to which they belong,
the Souris River basin refuges
will seek collaborative partnerships
to attain common goals.

A diverse and passionate refuge workforce
will rely on sound science to understand
and restore or emulate natural processes
essential to the integrity and perpetuation
of major biological communities
with which the refuges are entrusted.

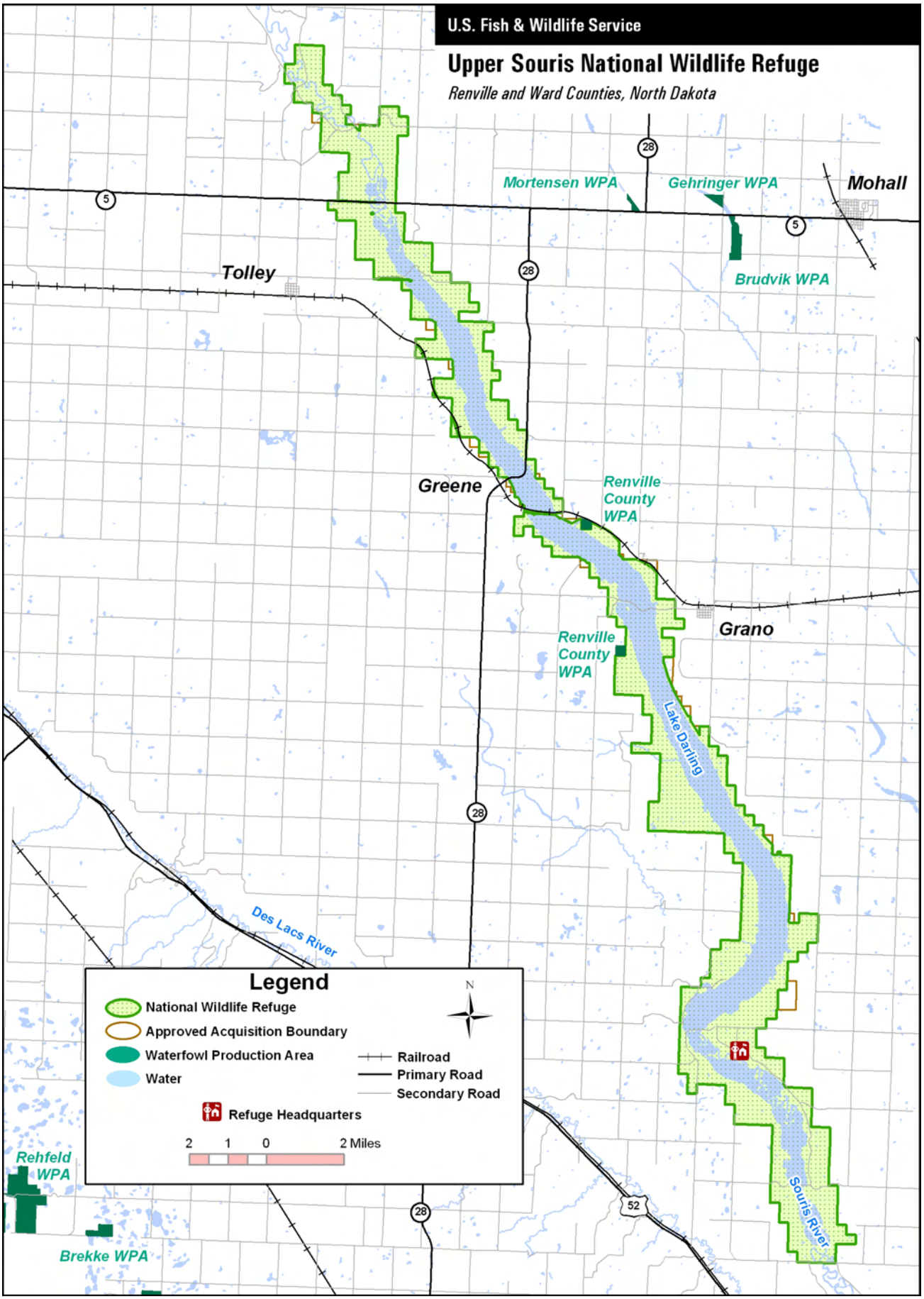


Figure 8. Base map for Upper Souris NWR, North Dakota.

The Service developed a set of goals for the refuges based on the Improvement Act and information developed during project planning. The goals direct work toward achieving the vision and purpose of the refuges, and outline approaches for managing resources. Some goals apply to all three refuges, while other goals apply to only one or two of the three refuges based on occurrence of habitat types.

Descriptions of maor habitat types are in chapter 3, "Refuge Resources and Descriptions."

Drift Prairie Goal

Restore and maintain extensive examples of plant communities dominated by native flora characteristic of the mid-1800s drift prairie. Create the temporally and spatially dynamic habitat conditions that will attract most breeding bird species and other vertebrate fauna characteristic of that era.
(Applies to all three Souris River basin refuges.)

Prairie Slope Goal

Restore representative examples of prairie slopes to preserve some of the most pristine plant communities that remain in the Souris River basin and promote appreciation and stewardship of prairie resources.
(Applies to all three Souris River basin refuges.)

Prairie Parkland Goal

Restore and maintain extensive examples of plant communities characteristic of the mid-1800s prairie parkland. Create the temporally and spatially dynamic habitat conditions that will attract most breeding bird species and other vertebrate fauna characteristic of that era.
(Applies only to J. Clark Salyer NWR.)

Sandhills Goal

Restore and maintain plant communities characteristic of the mid-1800s sandhills within the prairie parkland landscape.
(Applies only to J. Clark Salyer NWR.)

Old Cropland Goal

On high-priority old cropland areas, establish native-dominated, perennial herbaceous cover that, with modest management, resists invasion by introduced cool-season grasses and noxious weeds. This seeded cover will help form extensive, contiguous blocks of structurally diverse, open grassland for grassland-dependent, breeding bird species.
(Applies to all three Souris River basin refuges.)

Coulee Woodland and Coulee Woodland Edge Goal

Acknowledge a nearly irreversible, localized establishment of mature, contiguous woodland and minimally manage these areas as breeding and migration habitat principally for forest-interior, migratory bird species such as veery and ovenbird. Strive to eliminate remaining, noncontiguous, edge-dominated tree and tall shrub cover, particularly near high-priority drift prairie and the largest, most contiguous grassland tracts.
(Applies only to Des Lacs NWR and Upper Souris NWR.)

Riparian Woodland Goal

Maintain the approximate presettlement extent of green ash–American elm riparian woodland within the floodplain of the Souris River to benefit a broad suite of woodland-associated, breeding bird species.
(Applies only to J. Clark Salyer NWR and Upper Souris NWR.)

Meadow Goal

Restore and maintain extensive examples of plant communities dominated by native flora characteristic of seasonally flooded meadows within the Souris River floodplain to attract grassland- and wetland-dependent bird species and other wildlife.
(Applies to all three Souris River basin refuges.)

Wetland Goal

Manage riverine wetlands, including marshes and lakes, to sustain the long-term capacity of riverine wetlands to support diverse plant and wildlife communities. Restore ecological processes that sustain long-term productivity of wetlands.
(Applies to all three Souris River basin refuges.)

Island Goal

Manage islands to attract waterfowl and increase nest survival, especially during drought years when wetland habitat outside of the Souris River basin refuges is limited.
(Applies to all three Souris River basin refuges).

Cultural Resource Goal

Discover and protect cultural resources and interpret sites when the interpretation does not adversely affect habitat management.
(Applies to all three Souris River basin refuges.)

Visitor Service Goal

Provide wildlife-dependent recreational opportunities to a diverse audience when the administration of these programs does not adversely affect wildlife and habitat management.
(Applies to all three Souris River basin refuges.)

Research and Science Goal

Conduct innovative natural resource management using sound science and applied research to advance the understanding of natural resource

function and management within the northern Great Plains.
(Applies to all three Souris River basin refuges.)

Operations Goal

Efficiently use funding and staffing for the benefit of all natural and cultural resources, the National Wildlife Refuge System, and present and future generations. Effectively manage visitor service programs that complement habitat management.
(Applies to all three Souris River basin refuges.)

SPECIAL VALUES

During the vision and goals workshop, the planning team identified the outstanding qualities of the refuges. Qualities are the characteristics and features that make the areas special and worthy of refuge status.

The Souris River basin refuges

- preserve a large component of the natural environment totaling 110,220 acres;
- provide breeding habitat for five bird species that are endemic to the northern mixed-grass prairie region (an endemic species is one with a distribution that is limited to a specific, relatively small, geographic area);
- represent a comprehensive collection of most North Dakota plant communities;
- have some of the only remaining representative tracts of native prairie on the Drift Plain, a declining and threatened type of prairie habitat;
- are associated with rivers and serve as sediment traps for the Hudson Bay drainage;
- are a critical area of the Central Flyway and provide resting and breeding habitat for migratory birds;
- are in an area that has been a gathering spot for people and wildlife through time;
- occur in an area with a rich history of paleohistory, early exploration, and settlement;
- were originally developed in part by the Civilian Conservation Corps (CCC);
- have potential for a broad range of partnerships that are integral to every aspect of refuge management (hunting, fishing, research, and education).

PLANNING ISSUES

Several key issues were identified following the analysis of comments collected from refuge staffs and the public, and a review of the requirements of the Improvement Act and the NEPA. Substantive comments (those that could be addressed within the authority and management capabilities of the Service) were considered during formulation of the alternatives for future management. These key issues are summarized below.

Gary Eslinger/USFWS

Stiff sunflower.

Habitat and Wildlife Management

Complex ecological processes and disturbance regimes are fundamental to the evolution and maintenance of prairie and wetland habitat in the northern Great Plains. These dynamic phenomena have been drastically impaired, however, since Euro-American settlement of the region a century ago. Processes such as fire, grazing, and drought shaped plant communities of the region. When these important processes change (for example, decrease in the frequency of fire), native plant communities and wildlife populations are negatively affected.

Refuge management decisions are often based on economic and political factors rather than on ecological principles or biological needs of wildlife species and their habitats entrusted to the Service's care. Biology should guide management decisions for the Refuge System. Too often, however, biological needs of wildlife and their habitats receive less consideration than socioeconomic and political factors in the decision-making process.

Some refuge habitats are so badly degraded that they may no longer have potential to be restored. Beyond some biological threshold, many plant communities or habitats are unlikely to be restored regardless of effort expended. Invasive species—namely woody plants, introduced cool-season grasses (for example, smooth brome and Kentucky bluegrass), and noxious weeds (for example, leafy spurge and Canada thistle)—compromise the integrity of refuge habitats and devalue the areas for wildlife. Programs to control these plants divert

important resources from other habitat management initiatives.

Prescribed fire, haying, and grazing can be controversial management tools, especially when goals and objectives that direct their use are unclear or poorly understood by the public. The public often is either strongly supportive or adamantly opposed to use of these tools. Use of fire and grazing can be controversial simply because their use in other regions is highly controversial (for example, grazing is extremely controversial in arid western states).

Personnel of the three refuges suggest that (1) goals and objectives should emphasize management of plant communities as habitat for wildlife, and (2) research and monitoring should be used to predict wildlife response to management. Most factors that influence the dynamics of wildlife populations, especially those of migratory birds, may not be directly influenced at the individual refuge level; but can be influenced indirectly through appropriate or inappropriate management of habitat.

Direct control of mammalian and avian nest predators (mainly predators of waterfowl nests) is controversial with the public and within the scientific community. Some groups and individuals question the ethics of killing one group of species to benefit another group, especially to increase recreational hunting. Predator control is known to increase the survival of duck nests in northern prairies, but its indirect effects on other grassland bird and nontarget mammal species are poorly understood.

Current and future effects of emerging wildlife diseases, especially West Nile virus, avian influenza, and chronic wasting disease are unknown. Efficacy of methods to contain and control avian botulism remains a concern. Real and perceived threats of wildlife to human transmission of some diseases are a concern with the public.

Water Quality and Management

Wetland management practices, especially lowering water levels ("drawdowns"), can be controversial with the public. The role of drawdowns in maintaining long-term marsh productivity is poorly understood by the public. Refuge visitors see a dry wetland and conclude that this condition is not beneficial to wildlife. Refuges can do a better job of educating the public on the need and benefits of manipulating water levels.

Sustained long-term productivity of riverine marshes in the Souris River basin is likely compromised by physical modifications of the Souris River (for example, dams, channelization, and sedimentation) and by political constraints associated with management of the river (for example, flood control and altered hydroperiod).

Sedimentation and nonpoint source pollution affect water quality and long-term management potential of refuge wetlands. The public is interested in having a high-quality water source within the Souris River basin. Refuge staff is also concerned that highly variable water supplies (timing and duration of river flows), coupled with increased sediment loads associated with flooding and wetland drainage within the Souris River basin, may hinder wetland management and restoration.

Public Outreach and Partnerships

Opportunities are often missed for the public to learn about refuges and their management. Communication could be enhanced regarding topics such as public use opportunities, habitat management, water management, and the economic benefits of the refuges.

Partnerships with local schools, universities, special interest groups, and state and local governments should be strengthened to further education, especially experiential learning.

Opportunities for outreach and partnerships are constrained by declining rural populations, especially by outmigration of people to urban centers outside North Dakota. In addition, few nongovernmental organizations exist in North Dakota that have an interest in wildlife and habitat.

USFWS

Environmental education at Des Lacs NWR.

Visitor Service Programs

Today's increasingly mobile society is demanding greater use of refuges for uses such as hunting, fishing, wildlife observation, and environmental education. Increased levels of these uses may exceed the capacity at which services can be provided, unless refuge staff and budgets also increase.

However, increased visitor service can elevate the profile and awareness of refuge-related issues and activities. Some requested activities are not allowed because they are incompatible with the purpose of the refuges (for example, all-terrain vehicle [ATV] and snowmobile use). At Upper Souris NWR, facilities may be inadequate to accommodate all who wish to participate in refuge activities.

Refuges are probably underused for nonconsumptive recreation such as wildlife observation and photography. These opportunities may increase as refuge habitat and wildlife management are enhanced.

Refuge Operations

The refuges are currently understaffed and poorly funded relative to the scope and responsibility of management. Service personnel at national wildlife refuges in North Dakota manage more land with fewer people than other refuges in the Refuge System.