

1 Purpose and Need

This document presents an environmental assessment (EA) that evaluates alternatives for, as well as expected consequences of, management of the Sand Lake National Wildlife Refuge in northeastern South Dakota (figure 1).

The draft comprehensive conservation plan (CCP) for the refuge is represented by alternative 3 (chapter 4).

The Sand Lake National Wildlife Refuge manages the Sand Lake Wetland Management District (WMD), which contains 162 waterfowl production areas (WPA). This entire area is known as the Sand Lake National Wildlife Refuge complex.



Scaup

© John Jave

This draft CCP does not address management of areas other than the refuge itself, because a separate CCP will be developed to guide management of the WMD.

The National Wildlife Refuge System Administration Act, as amended by the National Wildlife Refuge System Improvement Act (1997), requires that CCPs be in place for all national wildlife refuges within 15 years of enactment (2012).

A CCP is needed to guide the conservation and use of resources on the refuge for the next 15 years.

In general, a CCP serves to do the following:

- Ensure that the purpose of the refuge and mission of the National Wildlife Refuge System are being fulfilled.
- Ensure that national policy direction is incorporated into refuge management.
- Ensure that opportunities are available for interested parties to participate in the development of management direction.

- Provide a systematic process for making and documenting decisions.
- Establish broad strategies for programs and activities.
- Provide a basis for evaluating accomplishments.

AGENCY GUIDANCE

The U.S. Fish and Wildlife Service is the principal agency responsible for conservation of our Nation's fish, wildlife, and plant resources. This responsibility is shared with other federal agencies and state and tribal governments.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

The Service manages a diverse network of more than 540 national wildlife refuges within the National Wildlife Refuge System, which encompasses 95 million acres of lands and waters. Sand Lake is one of six national wildlife refuges in South Dakota and was the 71st national wildlife refuge established.

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

Operation and management of national wildlife refuges are influenced by a wide array of laws, treaties, and executive orders (appendix A). The primary guidance comes from these laws:

- National Wildlife Refuge System Administration Act of 1966, as amended
- National Wildlife Refuge System Improvement Act of 1997

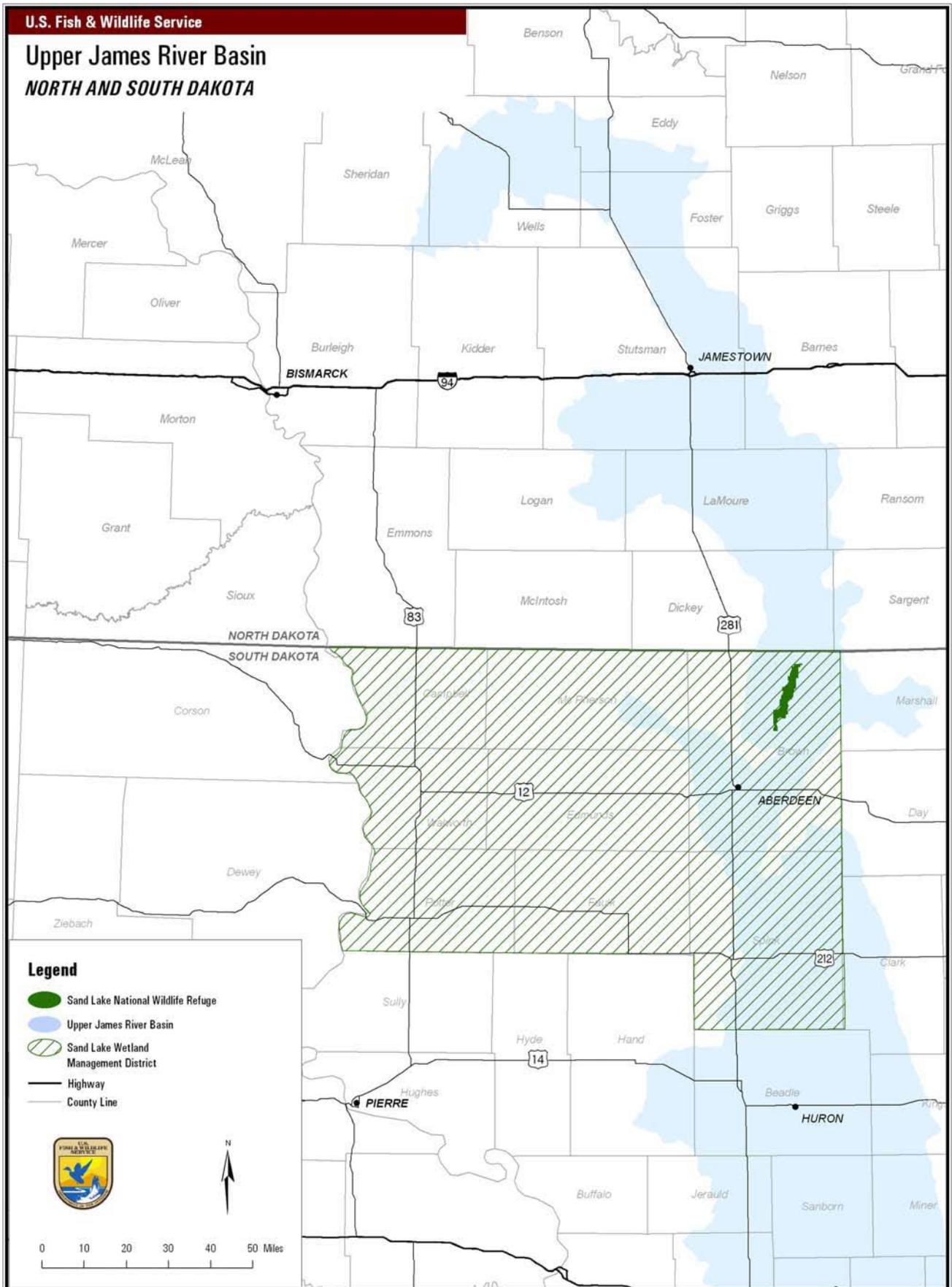


Figure 1. Vicinity map, Sand Lake National Wildlife Refuge, South Dakota

- All national wildlife refuges are established with these national goals (Service Director’s Order No. 132):
 - Fulfill our statutory duty to achieve refuge purpose(s) and further the Refuge System mission.
 - Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered.
 - Perpetuate migratory bird, inter-jurisdictional fish, and marine mammal populations.
 - Conserve a diversity of fish, wildlife, and plants.
 - Conserve and restore, where appropriate, representative ecosystems of the United States, including the ecological processes characteristic of those ecosystems.
 - Foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, quality, and compatible wildlife-dependent public use. Such use includes hunting, fishing, wildlife observation and photography, environmental education, and interpretation.

These goals help support the Refuge System mission and principles of the 1997 amendments to the National Wildlife Refuge System Administration Act. These goals serve as a foundation for stewardship of the Refuge System and define its role among various federal land systems.



Bobolink

© John Jave

The Improvement Act calls for making opportunities for wildlife-dependent recreation, as long as they are compatibly managed with other purposes and do not conflict with other use. Service policy allows use if it is appropriate (appendix B).

An appropriate use

- contributes to the Refuge System mission, the refuge’s major purposes, or refuge goals or objectives
- is a priority public use (hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation)
- supports the safe and effective conduct of a priority public use

It is the policy of the federal government—in cooperation with other nations and in partnership with states, local governments, Indian tribes, and private organizations and individuals—to administer federally owned, administered, or controlled prehistoric and historic resources in a spirit of stewardship for the benefit of present and future generations.

To maintain the health of individual national wildlife refuges, and the Refuge System as a whole, managers must anticipate future conditions—to avoid adverse effects and take positive actions to conserve and protect refuge resources. Effective management also depends on knowledge of larger systems and resource relationships.

REFUGE OVERVIEW

Sand Lake National Wildlife Refuge was established in 1935 as a refuge and breeding ground for migratory birds and other wildlife.

The marshes and open water impoundments of the refuge are surrounded by prairie grasslands, cultivated fields, and scattered woodlands along the James River. The refuge was formed primarily from farms and homesteads that failed during the drought of the 1930s.

The original purchase of 21,451 acres was completed by 1939. Since that time, several land exchanges with neighboring landowners and the South Dakota Department of Game, Fish and Parks (SDGFP) have resulted in boundary changes. An inholding along the west edge of the refuge was purchased in 1985, bringing the fee- title ownership to 21,498 acres. The refuge also has approximately 320 acres under agreement, lease, or easement, bringing the total acreage under refuge management to 21,820 acres.

PURPOSES OF ESTABLISHMENT

Management is dictated, in large part, by legislation that created the refuge and defines the purposes for which the refuge was established.



Five authorities exist for the acquisition and establishment of Sand Lake National Wildlife Refuge:

- Executive Order 7169 (September 4, 1935), "...as a refuge and breeding ground for migratory birds and other wild life..."
- Migratory Bird Conservation Act, "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds..."
- The Fish and Wildlife Act, "...for the development, advancement, management, conservation, and protection of fish and wildlife resources..."
- National Wildlife Refuge System Administration Act, "...conservation, management, and ...restoration of the fish, wildlife, and plant resources and their habitats...for the benefit of present and future generations of Americans..."
- The Refuge Recreation Act, "...for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species..."

The refuge was specifically established to improve and maintain habitat for nesting and resting waterfowl and other migratory birds, such as diving and puddle ducks, geese, grebes, herons, egrets, gulls, and terns. Management continues to be directed toward meeting the habitat requirements of these priority species as well as other migratory and resident wildlife, such as white-faced ibis, double-crested cormorant, tundra swan, American white pelican, perching birds, ring-necked pheasant, white-tailed deer, and furbearers. A complete list of vertebrate species that are known to occur on the refuge can be found in appendix C.

PURPOSE OF AND NEED FOR ACTION

As directed by the National Wildlife Refuge System Improvement Act, CCPs will be developed for all units of the National Wildlife Refuge System. These plans must include public involvement in their development. A CCP needs to set goals and objectives that meet the establishment purposes for the refuge, as well as contribute to the mission of the Refuge System. Wildlife has first priority in the management of national wildlife refuges.

The purpose of developing this CCP is to provide a 15-year management plan for the conservation of fish, wildlife, and plant resources and their related habitats on the refuge, while providing opportunities for compatible wildlife-dependent recreational uses.

The CCP, when fully implemented, should

- achieve refuge purposes
- maintain and restore the ecological integrity of the refuge
- help fulfill the Refuge System mission
- meet other mandates

VISION STATEMENT

As part of the planning process, the refuge staff and planning team developed the following vision statement for the Sand Lake National Wildlife Refuge.

Provide habitat for the production, maintenance, and basic life requirements for threatened and endangered species, migratory birds, and other wildlife species.

Promote the natural biological diversity of the region through preservation, management, and enhancement of refuge lands and waters.

Provide the public with the opportunity for wildlife-dependent recreation and the enjoyment and appreciation of America's wildlife resources.

GOALS

A goal is a descriptive, broad statement of desired future conditions that conveys a purpose, but does not define measurable units. Goals will direct work at carrying out the refuge's mandates and achieving the purposes. Each management alternative is designed to meet all the goals for the refuge, with

the exception of one subgoal noted below that differs between alternatives.

These goals are derived from the purposes and vision statement for the refuge to reflect the refuge's contribution to the National Wildlife Refuge System. The goals reflect the core mission of the U.S. Fish and Wildlife Service to protect fish, wildlife, and plant resources while providing compatible opportunities for the public to appreciate and enjoy the natural environment of the region.

BIOLOGICAL DIVERSITY GOAL

Promote the natural biological diversity of the area and, through management of refuge habitats, provide for the greatest number of native fauna and flora species within the capabilities of Sand Lake National Wildlife Refuge.

Threatened and Endangered Species Subgoal:

Provide for the protection and welfare of any threatened or endangered plants and animals that may occur on the refuge.

Waterfowl Resources Subgoal: Provide sufficient habitat (wetlands and grasslands) for the production and maintenance of waterfowl species.

[Addressed only in alternative 1.]

Waterfowl and Grassland-nesting Birds Subgoal:

Provide sufficient habitat (wetlands and grasslands) for the production and maintenance of waterfowl and grassland-nesting, nongame bird species.

[Addressed only in alternatives 2 and 3.]

Colonial Birds Subgoal: Provide and manage wetland habitats as nesting areas for the tremendous variety of colonial bird species using the refuge.

Resident Wildlife Subgoal: Contribute to habitat requirements for regional populations of resident wildlife including fish, reptiles, amphibians, mammals, and nonmigratory birds.

Grassland Habitat Subgoal: Restore, maintain, and provide quality habitat for the life requirements of a diversity of migratory birds and other wildlife species.

Wetland Habitat Subgoal: Provide and maintain a diversity of quality wetland habitat that meets the needs of wetland-dependent wildlife species.

WILDLIFE-DEPENDENT RECREATIONAL USE GOAL

Provide opportunities for quality, wildlife-dependent, recreation for visitors to Sand Lake National Wildlife Refuge.

Consumptive Use Subgoal: Provide wildlife-dependent, consumptive, recreational opportunities that are compatible with refuge purposes and that contribute to a quality outdoor hunting or fishing experience.

Nonconsumptive Use Subgoal: Provide wildlife-dependent, compatible, nonconsumptive, recreational activities that increase public understanding and appreciation of wildlife and its conservation.

PUBLIC EDUCATION AND OUTREACH GOAL

Provide wildlife- and wildland-viewing opportunities for the public to enjoy and, through education and outreach, encourage them to gain a greater understanding and appreciation of national wildlife refuges and wildlife resources in general.

AN ECOSYSTEM APPROACH

The Service has adopted an ecosystem approach to conservation to enable it to fulfill its federal trust resource responsibility with greater efficiency and effectiveness. Through this holistic approach to resource conservation, the Service can accomplish its mission to conserve, protect, and enhance the Nation's fish and wildlife and their habitats for the continuing benefit of the American people. Landscape-level goals have been developed within several wildlife conservation plans for North America (appendix D).

An ecosystem approach to fish and wildlife conservation means protecting or restoring function, structure, and species composition of an ecosystem, while providing for its sustainable socioeconomic use. Key to implementing this approach is recognizing that partnerships are an essential part of a diverse management plan.

The Service has adopted watersheds as the basic building blocks for implementing ecosystem conservation. Sand Lake National Wildlife Refuge is located in the Mainstem Missouri River ecosystem, which includes the Dakotas and northeastern Montana. This ecosystem is depicted in figure 2.



Northern Pintail

Dave Menke/USFWS

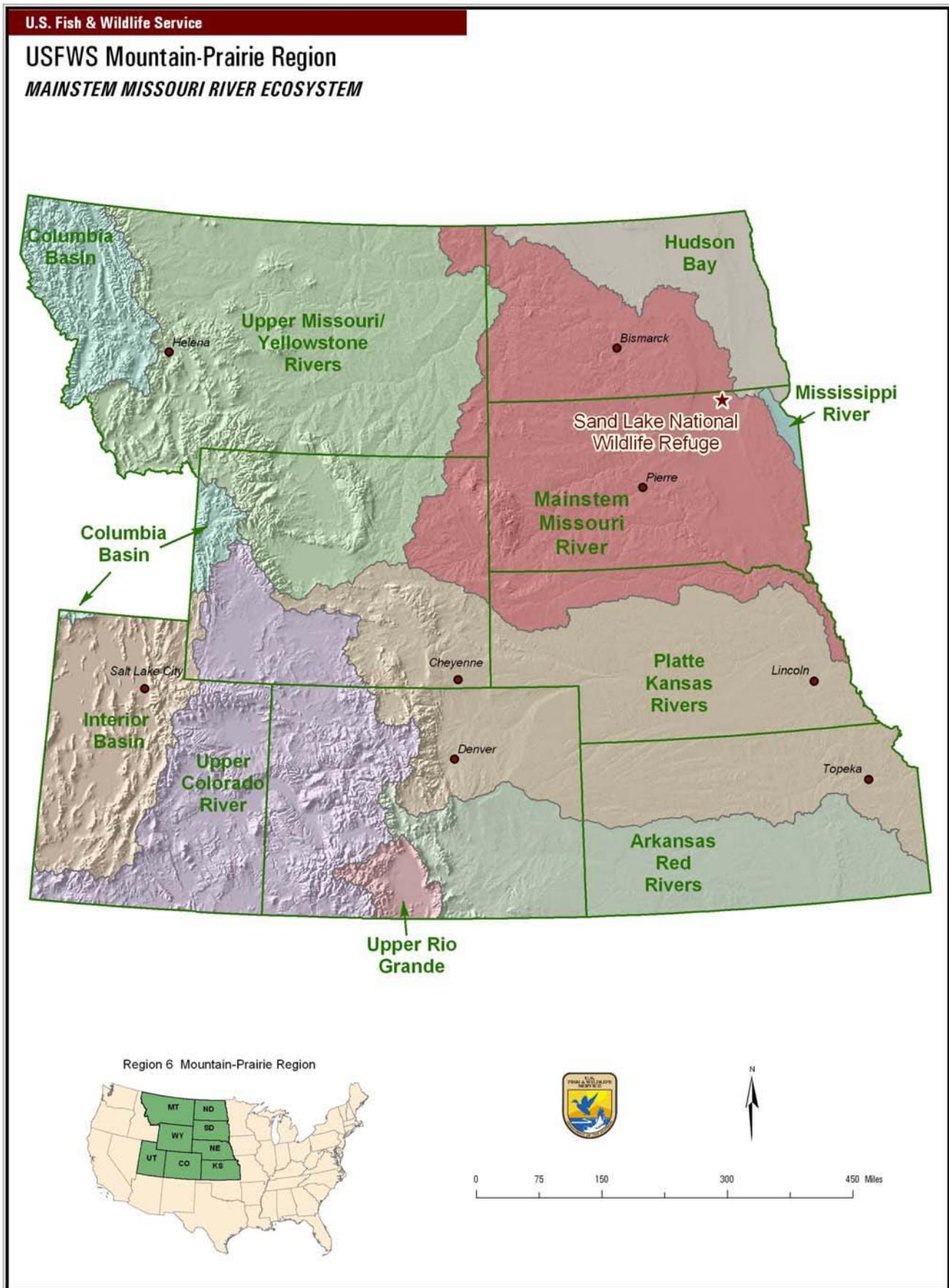


Figure 2. Mainstem Missouri River ecosystem

Planning for the Mainstem Missouri River ecosystem sets forth visions and goals for prairies, wetlands, and rivers to conserve fish and wildlife by protecting and restoring the natural ecosystem

(appendix E). The habitat and wildlife goals and objectives for the refuge will contribute to meeting the mission for the Mainstem Missouri River ecosystem.

