

Summary

Comprehensive Conservation Plan

Introduction



Marsh habitat on Agassiz NWR. USFWS

Some 10,000 years ago, the last Ice Age was nearly spent. As the frigid grip of the Pleistocene Epoch weakened, the great continental glaciers that had blanketed the northern expanses of North America under thousands of feet of ice for the better part of two million years melted and receded. One of these glaciers spanned an area greater than that of the present-day five Great Lakes, and meltwater poured from it to form an enormous inland sea. One hundred centuries later, that prehistoric, glacial lake would be named in honor of the Swiss-American naturalist and geologist, Jean Louis Rodolphe Agassiz.

Agassiz National Wildlife Refuge (NWR), established in 1937 as Mud Lake Refuge, was re-named in 1961 for this vast, ancient body of water – Glacial Lake Agassiz – that produced the exceedingly flat terrain characterizing the area today. The Refuge lies in the aspen parkland transitional zone between the coniferous or boreal forest to the north and east and the tallgrass prairie and prairie pothole region to the west and south. This diversity of habitats in turn supports a wide diversity of resident and migratory wildlife, including 287 species of birds, 49 species of mammals, 12 species of amphibians, and nine species of reptiles.

President Franklin D. Roosevelt established the Refuge by Executive Order 7583 on March 23, 1937. Its primary purpose was to be “a refuge and breeding ground for migratory birds and other wildlife.” Although its original focus was on waterfowl (ducks and geese), over the years other migratory birds and year-round resident wildlife, including mammals such as moose, deer, and wolves, have received an increasing emphasis in Refuge management.

The National Wildlife Refuge System Improvement Act of 1997 mandated that each national wildlife refuge in the country to develop a Comprehensive Conservation Plan (CCP) to direct its management. To that end, the Service, with the participation of the Red Lake Band of the Chippewa, the Minnesota Department of Natural Resources (DNR), and other partners, developed this draft CCP. It provides management goals and objectives to guide the Refuge and strategies to implement

over the next 15 years. An Environmental Assessment (EA) outlining several future management directions was also written and is published with the CCP.

The CCP is a vital part of the future of Agassiz National Wildlife Refuge. Although prepared by the U.S. Fish and Wildlife Service (Service), the Draft CCP and EA reflects the thoughts, ideas and concerns of many organizations and local residents.

Vital Statistics

The northern boundary of Agassiz NWR is within 40 miles of the Canadian province of Manitoba and Lake of the Woods, which straddles the U.S.-Canadian border. The nearest city is Grand Forks, North Dakota, 75 highway miles to the southwest. The City of Thief River Falls lies 25 miles to the southwest.

The Refuge's 61,500 acres are a key breeding ground for 17 species of ducks and the Refuge is an important migration rest stop for waterfowl. The Refuge is also noted for two resident packs of gray wolves, moose, and nesting Bald Eagles.

Agassiz NWR includes the following habitats, in the approximate acreages shown:

- # 37,400 acres of wetland and shallow open water ("pools");
- # 11,650 acres of shrubland;
- # 9,900 acres of woodland;
- # 1,710 acres of grassland;
- # 170 acres of cropland managed for the benefit of wildlife; and
- # 670 acres of developed land (roads, parking lots, etc.)

Agassiz NWR is an integral part of a sizeable complex of lands managed for wildlife. The Minnesota DNR has acquired and manages over 50,000 acres in three large and several smaller nearby Wildlife Management Areas. The Minnesota DNR works closely with Refuge staff on issues of mutual concern.

As a result of the 1985 Food Security Act, Agassiz NWR assumed additional responsibilities for a seven-county Refuge Management District (RMD). Staff duties expanded to include working with the National Resources Conservation Service (NRCS) and Farm Service Agency (FSA) on wetland determinations, Swampbuster Act provisions, and the Conservation Reserve Program (CRP). The Refuge actively collaborates on habitat restoration projects for both uplands and wetlands on private and CRP lands throughout its Management District.



Meadow vole, Agassiz NWR. USFWS

The Refuge Environment

Agassiz National Wildlife Refuge is located in the Mississippi Headwaters/Tallgrass Prairie Ecosystem as defined by the U.S. Fish and Wildlife Service. This ecosystem is primarily located in Minnesota and North Dakota with small portions extending into Wisconsin and Iowa. The three

major ecological communities within this ecosystem are the tallgrass prairie (which includes oak savanna and barrens), the northern boreal forest, and the eastern deciduous forest. Of the three major ecological communities, the tallgrass prairie is by far the most threatened, with more than 99 percent having been converted to agricultural uses.



Pitcher plants, Agassiz NWR. USFWS

Agassiz NWR is located in the eastern Red River Valley, an area with relatively flat terrain and a gentle gradient averaging 1.5 feet per mile, sloping from east to west across the Refuge. The climate is continental, with long, cold winters and relatively short, hot summers. Winter is relatively dry, and summer is the wettest season; thunderstorms are the main source of rain in the area. The major threat of flooding at Agassiz NWR is the result of spring runoff of snowmelt following wet winters. Flooding is one of the key issues affecting the Refuge – both its habitat and its facilities – as well as the neighboring region.

The Refuge includes 26 impoundments (known variously as lakes, ponds, pools, or moist soil units) and three natural lakes. Whiskey Lake and Kuriko Lake are located within the Refuge’s designated Wilderness Area and Webster Lake is located in the northeast area of the Refuge. The artificial impoundments vary widely in size, ranging from 30 acres to the approximately 9,000 acres that comprise the Agassiz Pool. Water is contained within

the impoundments by an extensive network of dikes. Water levels can be raised or lowered in any given impoundment by adjusting water control structures at pool outlets. The Refuge’s dominant geographic features are its impoundments with their marshes, mudflats, and open water. They are also the focus of the Refuge’s aquatic habitat management efforts on behalf of migratory birds.

Who We Are and What We Do

The Refuge is administered by the U.S. Fish and Wildlife Service, the primary federal agency responsible for conserving, protecting, and enhancing the nation’s fish and wildlife populations and their habitats. The Service oversees the enforcement of federal wildlife laws, management and protection of migratory bird populations, restoration of nationally significant fisheries, administration of the Endangered Species Act, and the restoration of wildlife habitat like wetlands. The Service also manages the National Wildlife Refuge System, which was founded in 1903 when President Theodore Roosevelt designated Pelican Island in Florida as a sanctuary for Brown Pelicans. Today, the System is a network of over 545 refuges covering more than 93 million acres of public lands and waters. Most of these lands (82 percent) are in Alaska, with approximately 16 million acres located in the lower 48 states and several island territories.

The National Wildlife Refuge System is the world’s largest collection of lands specifically managed for fish and wildlife. Overall, it provides habitat for more than 5,000 species of birds, mammals, fish, reptiles, amphibians, and insects. On national wildlife refuges, “Wildlife Comes First,” but they also provide people with unique opportunities for outdoor activities, when they are compatible with wildlife and habitat conservation. Refuges are places where people can enjoy wildlife-dependent recreation such as hunting, fishing, wildlife observation, photography, environmental education, and environmental interpretation. Many refuges have visitor centers, wildlife trails, observation towers

and platforms, automobile tours, and environmental education programs. Nationwide, approximately 30 million people visit national wildlife refuges each year.

Refuge Vision

Agassiz National Wildlife Refuge lies within the shallow depressional lake plains formed by the pre-historic Glacial Lake Agassiz. The Refuge is located within the aspen parkland transitional zone between the tallgrass prairie to the west and northern forest to the east. Agassiz comprises a diversity of plant and animal species, typical of ecotonal communities. Since the beginning of the 20th century, the lands within this area have been manipulated for agricultural purposes, which highly modified natural landscapes and ecosystem functions. Since its establishment, the Refuge has been intensively managed for the benefit of migratory birds and other wildlife through the construction of dikes and water control structures.

Agassiz National Wildlife Refuge and the surrounding area will be the premier natural resource of Marshall County and northwestern Minnesota. The Refuge and its seven-county management district, working with partners, will take a landscape approach to promote functional watersheds and connect natural areas. Refuge management programs and activities will emulate natural functions and processes of the different native habitats for optimal wildlife use. The resulting benefits will be showcased to demonstrate the compatibility of biological diversity, integrity, natural ecological processes and sustainable agriculture.

People will be attracted to the Refuge and northwestern Minnesota to view and enjoy the wonders of natural ecosystems. Visitors will have quality, wildlife-dependent experiences that provide personal and societal benefits, such as a sense of peace and tranquility and support of a strong conservation ethic. Refuge staff, visitors and the community will understand and appreciate a well-functioning landscape and the cultural history of the area. This vision will be the catalyst to further strengthen a positive community-Refuge relationship.

The Planning Process

Agassiz National Wildlife Refuge's CCP has been written with input and assistance from private citizens, non-governmental conservation organizations (NGOs), and employees of tribal, state, and local agencies. The participation of these stakeholders is vital and all of their ideas have been valuable in determining the future direction of the Refuge and its Management District.



Restored CRP wetland, Agassiz NWR. USFWS

On the evening of December 5, 2002, the USFWS and Agassiz staff welcomed the public to an open house and CCP/EA scoping meeting at the Heritage Center in Thief River Falls. About 30 individuals attended the meeting, most of whom were from Marshall County and all of whom were Minnesota residents. Attendees listened to an overview of the CCP and EA processes and then were given the chance to address the gathering.

Public input continued on Saturday, January 18, 2003, during a 1-day focus group or “technical working group” meeting at Northland Community and Technical College in Thief River Falls. The approximately 30 participants in this all-day event had the opportunity to discuss and explore in greater depth the various Refuge issues, goals, and opportunities in a relaxed, congenial setting. Refuge staff sent invitations to a number of stakeholders in the area. Individuals who signed up at the scoping meeting on their own, and all members of the public were welcome, provided they were willing to commit an entire Saturday to helping plan the future of the Refuge.

The Draft CCP/EA was released for public review and comment on March 3, 2005. A Draft CCP/EA or a summary of the document was sent to more than 200 individuals, organizations, and local, state and federal agencies and elected officials. An open house event was held on April 6, 2005, in Thief River Falls following release of the draft document. We received a total of 20 comment letters and e-mails during the 45-day review period. Appendix K of the CCP summarizes these comments and our responses. Several of the comments resulted in changes in the CCP.

Refuge Issues

The Planning Team organized all of the issues/concerns/opportunities received during the public scoping process into five major categories. Many of the goals, objectives and strategies presented in this draft CCP relate to one or more of the issue categories. The categories include habitat management, water management, wildlife management, public use and cultural resources.

Habitat Management

The Refuge’s major habitat management issues include the following: loss of sedge meadow (an increasingly rare habitat type in Minnesota), drawdown frequency to provide shorebird habitat, prairie restoration on old cropfields, invasive plant species, food plots for wildlife, alteration of designated Wilderness habitat due to management of impoundments, prescribed fire, forest habitats, commitment to wildlife and natural resources, and off-Refuge involvement in providing habitat.

Water Management

Water is a central fact of life at Agassiz. Managing flows and levels is critical not only to wildlife and habitat, but to minimizing on and off-Refuge impacts of floods.

Major water management issues include the following: waterfowl versus non-game water-dependent species, flood control, and maintenance of drainage ditches.

Wildlife Management

Managing wildlife populations in perpetuity for the continuing benefit of the American people is the very reason the Refuge exists. Major wildlife management issues include: nuisance wildlife control, non-game species, threatened and endangered species, and wildlife diseases.

Public Use

The Refuge provides the visiting public with opportunities to enjoy a number of wildlife-dependent recreational pursuits. Major public use issues include: deer hunting, upland game and waterfowl hunting, fishing, trapping, wildlife observation platforms and towers, miscellaneous forms of motorized and non-motorized recreation, the visitor center, visitor access, appearance of facilities, outreach, and environmental education.

Cultural Resources

The Refuge has a legal responsibility to preserve its ample cultural resources. A principal cultural resources issue is interpretation of the Mud Lake homesteads and Civilian Conservation Corps (CCC) buildings.

Management Direction

Based on the issues, concerns and opportunities we heard during the scoping process, the Planning Team developed three alternative management scenarios that could be used at Agassiz NWR. These alternatives and the consequences of adopting each were fully presented in the Environmental Assessment that was published with the draft CCP.

Alternative C, Open Landscape/Natural Watercourses, is the preferred alternative and was the basis for development of this CCP.

Alternative C – Open Landscape/Natural Watercourses (Selected Alternative)

Under the Open Landscape / Natural Watercourses Alternative (selected alternative), Agassiz NWR's water impoundments continue to be managed to provide a variety of water conditions for waterbirds (e.g., ducks, geese, shorebirds, and wading birds) during spring, summer, and fall. As in the No Action Alternative, furbearers are managed through a trapping program and hunting is used as a management tool to maintain an optimal white-tailed deer population for a quality hunt program and as a food source for gray wolves. Moose are managed for wildlife viewing and a quality hunt program, though their numbers are currently too low to permit hunting on the Refuge.



Cow moose and calf, Agassiz NWR. USFWS

The Open Landscape / Natural Watercourses Alternative focuses on setting back upland succession in the southeast corner of the Refuge and experimenting with restoring sinuosity on two interior watercourses by lowering water levels in three pools. While there is minimal management of the Refuge's designated Wilderness Area, both prescribed and wildland fires may occur there.

A large focal area of uplands is managed as a grassland/shrubland matrix. Remaining uplands are managed in a mix of aspen forest, oak savannas, open grasslands, and shrub/scrub but only as time and personnel resources allow after activities in the focus area are achieved. Refuge management designates old-growth aspen areas. Prescribed fire is used to control succession. Croplands are phased out over time as natural grassland habitats are established. This alternative's large, open-area approach benefits from partnership with adjacent Minnesota DNR lands and private landowners. Invasive plant species continue to be controlled using a variety of chemical, mechanical and biological methods.

Off-Refuge habitat activities are expanded with a primary focus on lands adjacent to the Refuge, open areas, and riparian areas district-wide. Off-Refuge habitat activities include FSA easements, Partners for Fish and Wildlife programs, CREP activities, participation on inter-agency teams, and other partnership efforts.



Snowshoe hare, Agassiz NWR. USFWS

Public use under the Open Landscape / Natural Watercourses Alternative is served by a variety of on-Refuge environmental education, seasonal auto-tour routes, annual open houses, foot trails, visitor contact station, and observation platforms. Winter wildlife viewing will be enhanced with a designated, ungrouted cross-country/snowshoe/walking trail. The hunting program includes a firearms deer and moose season, when appropriate. New hunting opportunities are provided.

During and after the deer/firearms season, archery/deer, muzzleloader/deer and Ruffed and Sharp-tail Grouse hunting will be permitted in the same areas open to deer/firearms. Following

the deer/firearms season strategic parking lots will be opened; however, this will be primarily a walk-in hunt as Refuge roads will not be plowed. A “youth” waterfowl hunt will be permitted in the Farmes Pool area in conjunction with the state youth waterfowl hunt season and regulations. The Refuge’s shallow and/or seasonal water bodies do not lend themselves to fishing, so as in the other two alternatives, there is also no fishing under this alternative. Off-Refuge outreach includes school talks, radio programs, informational kits, displays at fairs, etc. Five of the six public uses allowed on the National Wildlife Refuge System are encouraged and take place at Agassiz NWR under this alternative.

Flood waters are accommodated only prior to nesting season or when extreme events have made it uncontrollable.

Planned Refuge Program Highlights

The Comprehensive Conservation Plan, developed from the preferred alternative, identifies a number of key programs and strategies that can be implemented:

Habitat Management and Restoration

A large focal area of uplands will be managed as a grassland/shrubland matrix. We will seek to increase the area of native habitats that have declined locally and in Minnesota over the past century, such as prairie grasslands, sedge meadow, and bur oak/savanna. Simultaneously, the Refuge will aim to reduce the area now taken over by lowland shrub, aspen/mixed hardwood, and cattail or phragmites-dominated marsh, which either have lower intrinsic value for wildlife or have simply become too abundant. In turn, these habitat shifts will help those wildlife species associated with the rarer habitats.

Water Management

The Refuge proposes to restore a more natural sinuosity on two interior watercourses by lowering water levels in three pools. With that effort, the die-off of conifers in the Wilderness Area, which may be related to high water, will be studied.

Partnerships

A principal theme throughout the CCP is the tremendous potential for expanding and reinvigorating partnerships to attain the purpose, goals, and objectives of the Refuge. Existing and potential partners include nearby communities, industries, tribal, state and local governments, private citizens, and non-profit organizations. Many such partnerships already exist, but the Refuge has further potential for bringing together larger and more effective private and public partnerships for the mutual benefit of the Refuge as well as these stakeholders.

Volunteers

We hope to expand on our active pool of volunteers to assist in everything from research, habitat improvement projects, and environmental education on and off-Refuge. The goal of any Refuge volunteer program is to have staff and volunteers working side by side in the most efficient manner to accomplish the goals and objectives of the Refuge.

Expanded Public Use Opportunities

Winter wildlife viewing will be enhanced with a designated, un-groomed cross-country/snowshoe/walking trail. New hunting opportunities are proposed. During and after the deer/firearms season, archery/deer, muzzleloader/deer and Ruffed and Sharp-tailed Grouse hunting will be permitted in the same areas open to deer/firearms. A “youth” waterfowl hunt will be permitted in the Farmed Pool area in conjunction with the state youth waterfowl hunt season and regulations.



White-tailed deer, Agassiz NWR

Plan Implementation, Monitoring and Evaluation

This CCP outlines an ambitious but achievable course of action for the future management of Agassiz NWR. Pursuing and ultimately achieving goals set out in this CCP will require considerable staff and partnership commitment. Throughout the life of this CCP we will monitor our progress on achieving the goals, objectives and strategies it establishes. On a periodic basis, the Service will evaluate Refuge activities in light of the CCP. Additional “step-down” management plans will also be necessary to provide more details on Refuge programs such as visitor services, hunting, law enforcement, habitat, and fire and water management.