

Highlights

Carolina Vasconcelos/USFWS



Missisquoi River

Highlights of the Missisquoi National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment

What is the mission of the National Wildlife Refuge System?

“The mission of the System is to administer a national 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.”¹ Wildlife has first priority. Six wildlife-dependent recreational uses must receive enhanced consideration: hunting, fishing, wildlife observation and photography, and environmental education and interpretation. We may allow wildlife-dependent recreational uses or other appropriate uses only after we have determined they are compatible.²

Why does the refuge need a CCP and EA?

The purpose of the comprehensive conservation plan (CCP) is to provide management guidance for achieving the highest and best contribution of the Missisquoi refuge to wildlife conservation, management, and restoration. The environmental assessment (EA) identifies two alternatives for managing the refuge, and discusses how each affects the biological, physical, archaeological, historical, and socioeconomic environments. We believe our preferred draft management alternative will best fulfill the missions of the U.S. Fish and Wildlife Service and the Refuge System, and the purposes for which the refuge was established.

The present need for this CCP is manifold. First, the Missisquoi refuge lacks a master plan to fulfill its obligations, especially as environmental, economic, and social conditions have changed dramatically since 1943, when the refuge was first established. Both the development and the protection of land near the refuge have increased in the last few decades; the refuge completed a new headquarters and visitor contact station in 2005, providing new opportunities for education and outreach; and, the refuge staff is working with many new partners on water quality and land use issues in the Lake Champlain Basin. Given the changing face of the basin, we are responsible for clearly developing our priorities in this CCP. It is also a valuable tool in helping the natural resource agencies of the State of Vermont, Lake Champlain Basin and Missisquoi River watershed partners, other conservation organizations, local communities and the public understand and support refuge priorities.

Why is the Missisquoi refuge important?

The refuge lies on the eastern shore of Lake Champlain near the Canadian border in Franklin County, Vermont. The 6,592-acre refuge includes most of the Missisquoi River Delta, the largest wetland complex in the Lake Champlain Basin. As it flows through the refuge, the Missisquoi River is bordered by the largest and perhaps highest quality silver maple floodplain forest remaining in the state. The river meanders through extensive natural and managed emergent marshes of wild rice, buttonbush, and tussock sedge that host thousands of waterfowl during migration. That part of the river harbors rare freshwater mussels, spiny softshell turtles, and fish. Refuge lands protect the Shad Island great blue heron rookery, the largest colony in Vermont, and the entire nesting population of black terns in the state. Hunting, fishing, and viewing wildlife have long traditions in the Lake Champlain valley, and in and around the Missisquoi refuge.

What is the purpose for which the refuge was established?

The Missisquoi refuge was established in 1943 “for use as an inviolate sanctuary, or any other management purposes, for migratory birds” under the Migratory Bird Conservation Act.³

What are the goals of the refuge?

These goals reflect the mission of the Refuge System and the role of the Missisquoi refuge in that system. We have stepped down these goals from the refuge purposes and other guiding plans and laws. The goals establish management direction.

¹ National Wildlife Refuge System Improvement Act of 1997 (Public Law 105–57; 111 Stat. 1252)

² Ibid.

³ Migratory Bird Conservation Act (16 U.S.C. 715–715r; 45 Stat. 1222)

- Goal 1** Maintain the ecological integrity of the Missisquoi River Delta to ensure a healthy, diverse river ecosystem providing a full range of natural processes, community types, and native floral and faunal diversity.
- Goal 2** Provide diverse upland habitats for federal trust species, including migratory birds and other species of conservation concern in all seasons.
- Goal 3** Provide high-quality education and interpretation programs to promote understanding and appreciation for the conservation of fish and wildlife and their habitats, as well as the role of the refuge in conserving the Missisquoi River Delta.
- Goal 4** Increase appreciation and stewardship of the Missisquoi River Delta and the Lake Champlain Basin by providing positive, compatible, wildlife-dependent recreation, including wildlife observation and photography, hunting, and fishing, in accordance with the National Wildlife Refuge System Improvement Act of 1997.
- Goal 5** Preserve the cultural and historical resources on the refuge for present and future generations and to sustain an appreciation of the past.
- Goal 6** Foster cooperative partnerships and actions to promote fish and wildlife conservation in the Lake Champlain Basin and Missisquoi River Watershed.

What management issues were addressed in developing the alternatives?

- Management of the Missisquoi River Delta
- Non-Native Invasive Species
- Water Quality
- Upland Habitat Management
- Management of Fish and Wildlife “Trust Resources”
- Inventory, Monitoring, and Research Needs
- Concerns about appropriateness of wilderness questioned
- Balancing Public Uses
- Quality Refuge Experiences

What is the difference between the two alternatives?

Alternative A

“Current Management”

This alternative is the No Action alternative required by the National Environmental Policy Act. The selection of this alternative would maintain the status quo; current management practices would not change. This alternative serves as the baseline from which to compare the other alternative.

Alternative B

The Service-Preferred Alternative: “Expand Biological Monitoring and Enhance Public Awareness and Education”

This alternative represents our Proposed Action; that is, the alternative recommended for approval. The selection of this alternative would strengthen

the refuge biological program through the greater, improved collection of pertinent wildlife and habitat data to guide management decisions and actions. It would also enhance public awareness and education, and increase refuge involvement in collaborative, interagency, watershed-based planning and restoration initiatives.

What are some of the key strategies in our preferred management action (alternative B) that benefit fish, wildlife, plants, habitats, and people?

- Greater inventory, monitoring, and management of the Missisquoi River Delta wetlands (floodplain forest, lakeshore and river shore wetlands, impoundments, rivers and creeks, bays, bogs, swamps, vernal pools, and scrub-shrub habitat) to maintain their ecological integrity for the rich diversity of plants and animals on the refuge
- Better management of high-quality grasslands, shrublands, and other early successional habitats for a range of wildlife species of conservation concern
- Provide more effective long-term management in the Shad Island and Maquam Bog Research Natural Areas through development of management area plans.
- Enhanced, expanded programs of outreach, and environmental education and interpretation to raise public awareness and involvement in the protection and stewardship of refuge wildlife and habitats
- Enhanced, expanded wildlife-dependent recreational opportunities (wildlife observation and photography, hunting, fishing, boating) that provide quality experiences for refuge visitors and protect wildlife and their habitats
- Greater inventory, protection, and interpretation of the rich cultural history of the Missisquoi River delta and enhanced partnerships with the local Abenaki tribe and other interested communities
- Cooperative partnerships within the northern Lake Champlain Basin, including the Missisquoi River watershed, working toward better water quality, improved land stewardship, and greater protection of fish and wildlife resources
- A Geographical Information System (GIS) that contains current data on refuge biological resources that will more effectively and efficiently guide habitat and species management
- An inventory of aquatic and upland invasive species that tracks annual distribution and control methods, and management results of these nuisance species on the refuge and in Missisquoi Bay
- In partnership with others, the protection of additional lands and waters, particularly intact, fully functioning wetlands and associated riparian areas and lands that maintain and expand the protection of large, unfragmented blocks of upland habitat for area-sensitive wildlife species
- A new, \$1.00 Refuge Activity Fee that will raise additional funds for trail maintenance, informational kiosks, educational programs, and other actions to benefit all visitors to the refuge
- A critical new law enforcement position, to enhance staff and visitor safety, ensure compliance with regulations, and maintain communications with Homeland Security, given the refuge's proximity to the International border and active recreational community in the Missisquoi Bay and river

- Other new critical positions, including a park ranger, maintenance worker, and biological technician, to maximize the use and effectiveness of the new visitor center and associated interpretive trails, ensure safe, quality refuge experiences through well-maintained facilities, ensure our use of the best available science in conserving and managing the fish and wildlife resources and their habitats, and ensure that public uses are compatible with the *wildlife first* mission of the Refuge System