

# **Appendix F: Priority Refuge and District Operational and Maintenance Needs**



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The CCP directs an ambitious course for the future management of Agassiz National Wildlife Refuge. The following provides a brief description of some of the second-highest priority Refuge projects, or Tier II. The highest priority, or Tier I, projects are described in Chapter 5 of the plan. Each project description also includes the number(s) of a corresponding objective or strategy; linking it to the Goals/Objectives/Strategies section of Chapter 4. Most of these projects are listed in the Refuge Operating Needs System (RONS); the Service's national database of unfunded operational activities. The RONS was established in 1990 as a planning, budgeting, and communication tool to enhance identification of funding and staffing needs for the National Wildlife Refuge System. RONS projects describe the need for new or expanded activities in order to implement plans, attain goals, or satisfy legal mandates. Data within RONS are used regularly in budget justifications presented to the Department of the Interior, the Office of Management and Budget, and Congress.

### Refuge Operating Needs System

Complete an Extensive Flora Inventory of Agassiz Refuge including the Wilderness Area. Contract a botanist to survey the refuge for rare or unique plant species; priority areas are wilderness, bog and oak savannah habitat. The Aspen Parkland Biome on Agassiz is essential habitat for northwestern Minnesota. This botanical information is needed so that refuge management activities do not adversely affect plants or plant communities. Voucher specimens would be prepared and added to the refuge herbarium. Herbarium storage facilities will be improved. This project will support a GIS database and provide needed botanical information. Objective 2.11. Estimated cost: \$42,000

Improve understanding of habitat management effects on grebes. Initiate a 3-year study on grebe ecology and the effects of refuge water management activities. The refuge will contract through a cooperative agreement to implement a study (3 years) that will provide techniques that can be used for grebe management at Agassiz NWR. Five species of grebes nest at the Agassiz NWR. Grebe populations have fluctuated greatly over the last 15 years. It has not been determined whether management techniques used to benefit waterfowl compliment grebe production. This project will supplement an independent study initiated in 1997 by a University of Nebraska professor on refuge grebes. Objective 1.7; Strategies 2.7.3 and 4. Estimated cost: \$36,000

Survey water gauges and pool capacities in 20 impoundments. Purchase a Total Station Survey unit and software to facilitate conservation of 61,500 acres of Agassiz and the 7,000 acres of easements by accurately documenting boundaries, impoundments, pool capacities, sedimentation effects, location of unique features with GPS locations. Changes in impoundment size and spillway levels over the years make this necessary to plan or implement water management. This equipment will be used to survey elevations and accurately place gauges to improve water management and storage analysis and document easement storage needs. The conservation of the refuge and 7,000 acres of easements is critical to migrating/nesting migratory birds. Refuge pools have the capacity to hold 61,432 acre feet at the spillways and 116,036 acre feet of ungated storage. This large storage capacity is constantly under demand for use as flood control. This project will provide the needed information to factually inform watershed districts, county commissioners, and the public about refuge management strategies. Objectives 1.4, 5, and 6; and 2.4, 7, and 12. Estimated cost: \$60,000

Habitat restoration through brush reduction. The project will purchase a hydromower that will be used to implement a 5-year mowing rotation to set back woody vegetation. Due to the lack of natural fires, prairie habitat has been degraded by willow and other woody brush encroachment. Because of the number of years without intensive management, the old willows and trees need to be mowed with a heavy duty mower to assist with the recovery process. Refuge and easement areas provide essential aspen parkland habitat to many wildlife species in Northwestern Minnesota. Strategies 2.1 and 3; 2.3.2; 2.8.1; Estimated cost: \$300,000

Monitor species of emphasis. This project will implement monitoring /surveys for gray wolf, black terns, bitterns, marsh birds, point counts for neotropical migrants, amphibians, bio-control agents for invasive weeds, and quantitative vegetation response to prescribed burning, and water management. This will be done by a 4-year term appointment. The refuge has an active biological/habitat management program that currently conducts 10 wildlife surveys and weekly migration counts for waterfowl and air photo interpretation for vegetation monitoring. Initial studies have been done by graduate students to obtain base line data. Capabilities to perform follow up monitoring, GIS data entry, and long-term response to management are not available. Strategies 1.3.2; 2.5.2; 2.6.6; 2.7.3 and 4; 2.10.3; Objectives 1.6; 1.7; 2.1 Estimated cost: \$146,000

Increase aerial surveys. Annually acquire satellite imagery for ecosystem analysis of on refuge management activities and off refuge changes effecting the environment. Satellite imagery would aid with the surveillance of refuge easement, 7,000 acres, in a 7-county district. Illegal activities and threats to the integrity of the easements and wildlife use and response to management will be assessed. Agassiz NWR is often described as an island surrounded by a sea of agriculture. This condition warrants not only a constant visual assessment of the integrity of the refuge, but also close monitoring of wildlife response to threats to their habitats. These threats exist both on the 61,500 acre Refuge and throughout the 4.5 million acre management district. Strategies 2.2.4; 2.4.2; 2.6.6; 2.7.3 and 4; 2.9.1; 2.10.3; 2.12.4 Estimated cost: \$48,000

Develop refuge video, TV clips, interactive computer display. Develop refuge videos that will enhance visitor's enjoyment and understanding of the refuge. These videos will contribute to online visitors as well as on-site visitors. The Service has declared understanding the Refuge System, the Service mission, nature and its processes and the interaction with the public as major goals. Development of a refuge specific video, public service announcements, use of new technological devices in displays and improvement of the HomePage are efficient and effective methods to disseminate information to the general public and educational institutes. This would be developed through NCTC, regional public use experts and contracted vendors. Objectives 3.6, 7, 8, 9 and 10. \$135,000

Develop Station Health & Safety Plans to meet new standards. Develop and implement a variety of safety management plans i.e. Wellhead Protection Program, Sanitary survey, Hazardous Communications Plan, Contingency Plan for Hazardous Wastes, Spill Prevention Control and Counter Measure plan, Medical Waste Plan to protect the well being of 10 full time employees and 6-10 residential volunteers/students. This project would also complete Job Hazard Analysis forms for all activities and/or jobs conducted on the Refuge and/or Management District. 2-year term position will be hired- responsibilities include: asbestos survey, quarterly monitoring of water supplies, monthly interstitial fuel tank security, develop a computer accounting system. General Refuge Management – Employee and Public Safety. \$129,000.

Volunteer Program Enhancement. This project will fund a cooperative agreement with the University of Minnesota - Crookston to develop a program to recruit, train, and supervise refuge volunteers (including recruitment of a Senior Volunteers Corps) and for assisting partner organizations in developing , coordinating and executing projects and programs under cooperative agreements with partner organizations. Supports implementation of Sections 4(b) and (c), 5(d)(2)

and 6(e) of the Volunteer and Community Partnership Enhancement Act of 1998. Objectives 1.7; 3.6, 7, and 8. Estimated cost: \$24,000

Provide Public Safety, Security and Resource Protection (Law Enforcement Officer). Provide a full time refuge law enforcement officer to increase resource protection and provide for public safety on the 61,500-acre Agassiz NWR. Visitation at the refuge exceeds 25,000 annually. There are no law enforcement personnel currently on staff, although the Detroit Lakes WMD does provide limited coverage. The refuge is dependent on the state for much of its law enforcement needs. Objectives 2.12; 3.1,4,5, and 6. Estimated cost: \$136,000

## Maintenance Management System

The Maintenance Management System (MMS) is a database used by the Service to document Equipment Replacement, Deferred Maintenance and New Construction projects. Maintenance projects are structured around property items where repair or replacement is less than \$750,000. New Construction is for constructing new facilities or repairing / replacing existing property where costs exceed \$750,000. The following is an example list of the 115 projects identified in the 2003 database.

Project	Estimated Cost
Replacement of Bunkhouse	\$451,000
Replace Madson Pool Water Control Structure	\$164,000
Replace damaged sheetpile weir – Mud River	\$ 81,000
Repair Madsen Dike/Ditch 11	\$492,000
Repair Parker Dike/Ditch 11 slopes	\$1,500,000
Replace underground electric cable at shop	\$95,000
Repair east Ditch 11/north dike	\$150,000
Rehabilitate Lab/Envt. Ed. Ctr/5 stall	\$ 30,000
Replace 5-stall storage garage	\$148,400
Replace 3-stall storage garage	\$67,200
Resurface road on Parker Dike	\$30,000
Replace deteriorated South Pool water control structure	\$185,000
Construct accessible hiking trails and wildlife interpretive facilities	\$500,000
Replace worn out International dump truck	\$74,000
Replace worn-out John Deere 2630 Ag. Tractor, 58 hp	\$91,000
Replace worn out Champion 715A Road Grader	\$168,000

