



Lessard-Sams Outdoor Heritage Council

Accelerated Shallow Lakes and Wetland Enhancements Phase 13
Laws of Minnesota 2021 Accomplishment Plan

General Information

Date: 01/23/2025

Project Title: Accelerated Shallow Lakes and Wetland Enhancements Phase 13

Funds Recommended: \$2,589,000

Legislative Citation: ML 2021, First Sp. Session, Ch. 1, Art. 1, Sec. 2, subd. 4(f)

Appropriation Language: \$2,589,000 the first year is to the commissioner of natural resources to enhance and restore shallow lakes and wetland habitat statewide. A list of proposed land restorations and enhancements must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: Ricky Lien

Title: Wetland Habitat Team Supervisor

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Location Information

County Location(s): Mille Lacs, Todd, Aitkin, Lac qui Parle, Roseau, Murray, Meeker, Lyon, Jackson and Waseca.

Eco regions in which work will take place:

- Northern Forest
- Forest / Prairie Transition
- Prairie
- Metro / Urban

Activity types:

- Enhance

Priority resources addressed by activity:

- Wetlands

Narrative**Abstract**

This proposal will accomplish shallow lake and wetland enhancement and restoration work throughout Minnesota, with a focus on the prairie region. Over 4,000 acres of wetland habitat will be impacted. The proposal is comprised of two components - (1) projects to engineer, construct and/or implement shallow lake and wetland enhancement activities, including cattail control, and (2) an expansion of the Wetland Management Program to increase its capacity to identify and implement needed management work for small wetlands in the prairie region. Small wetland work will be focused on wetland complexes most valuable to waterfowl.

Design and Scope of Work

Minnesota wetlands, besides being invaluable for waterfowl, also provide other desirable functions and values - habitat for a wide range of species, groundwater recharge, water purification, flood water storage, shoreline protection, and economic benefits. An estimated 90% of Minnesota's prairie wetlands have been lost, more than 50% of our statewide wetland resource. In remaining wetlands, benefits are too often compromised by degraded habitat quality. This proposal will accomplish needed wetland habitat work throughout Minnesota, with a focus on the prairie region.

SHALLOW LAKES / WETLAND PROJECTS - This proposal seeks to engineer and construct wetland infrastructure such as dikes and water control structures, and to implement management techniques. The shallow lake and wetland projects identified in this proposal for enhancement were proposed and reviewed by DNR Area and Regional supervisors. Projects, as shown in the accompanying parcel list, include engineering feasibility and design work and replacement/renovation of wetland infrastructure to bring about improved and expanded habitat enhancement. The parcel list includes 8 projects that will improve or replace infrastructure or provide direct management of shallow lake and wetlands. These 8 projects will provide 1,500 acres of wetland enhancement. Two projects are receiving funding for needed survey and engineering services to prepare for future implementation of wetland enhancement projects. Finally, requested funding will continue the DNR's efforts to spray dense stands of monotypic hybrid cattails for an additional field season. An estimated 2,300 acres of cattail-dominated habitat will be treated on parcels that will be identified by wildlife staff each season and listed in the Final Report.

WETLAND MANAGEMENT PROGRAM (WMP) - Numerous plans pertaining to wetlands and shallow lakes call for effective management of existing habitat to provide maximum benefits for wildlife. The 2020 Minnesota Duck Action Plan notes the need to expand the WMP in Minnesota. The WMP assesses wetlands and brings about management required to produce quality wetland wildlife habitat. The WMP addresses management needed for smaller wetlands that are often overlooked on the landscape. The requested funding will allow the program to expand in the prairie region of Minnesota. Management work to be accomplished includes water levels manipulation, removal of undesirable fish and controlling invasive plants and fish, and will be focused in areas of wetland complexes. It is conservatively estimated that each Natural Resource Specialist working in the WMP impacts 225 acres of small wetlands annually.

To improve efficiency and meet mutual goals, projects may be done in cooperation with Duck Unlimited.

Note that parcels may be modified, added, or subtracted from the Parcel List as needed to address program needs. All changes shall be in keeping with the scope of the project and will be fully reported in the Final Report.

How does the plan address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species?

Roughly 50% of all federally endangered animal are wetland-related. As a measure of the importance of wetlands to Minnesota Species of Greatest Conservation Need (SGCN), the word 'wetland' appears 127 times in Minnesota's Wildlife Action Plan 2015-2025 (WAP). Conservation Focus Areas are priority areas for working with partners to identify, design, and implement conservation actions and report on the effectiveness toward achieving the goals and objectives defined in the Wildlife Action Plan. Target Habitat Complexes within Conservation Focus Areas commonly include Prairie Wetland Complexes and other wetland community types.

The protection and management of wetlands and wetland/grassland complexes are listed extensively in the discussion of Conservation Focus Area Target, Conservation Issues and Approaches. Specific management actions mentioned include reed canary grass and invasive cattail control, "natural disturbance management" (i.e. water level management, prescribed fire, woody vegetation removal). Target Habitat Complexes within Conservation Focus Areas commonly include Prairie Wetland Complexes and other wetland community types.

As noted in the WAP, wet meadows and fens typically provide optimal habitat for sedge wrens, yellow rails, Nelson's sharp-tailed sparrows and numerous other SGCN. Wetland Management Options to support SGCN include prevention of wetland degradation, restoration of wetland complexes, and management of invasives.

For shallow lakes, examples of SGCN include lesser scaup, northern pintail, common moorhen, least bitterns, American bitterns, marsh wrens, and Virginia rails. Shallow lake management actions to benefit SGCN include the restoration of large complexes of shallow lakes and wetlands, with attention to the habitat features required by SGCN, management for a natural water regime in shallow lakes, and management of invasives.

See a list of SGCN associated with wetlands included as an attachment to this proposal.

Management of wetlands and shallow lakes as noted above will be accomplished through the work described in this proposal.

Describe how the plan uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

The Minnesota Duck Recovery Plan goals include boosting the state's breeding duck population. The most productive prairie waterfowl habitat is a mix of wetland and grassland as a habitat complex. A complex could be 4 - 9 square miles and should be comprised of 10% temporary/seasonal wetlands, 10% permanent wetlands, and 40% grasslands, with the remaining 40% available for crops. In addition to mixes of grasslands and healthy wetlands, The Duck Plan also called for accelerated efforts to restore 1,800 shallow lakes, including wild rice lakes.

The Minnesota Prairie Conservation Plan, which is a plan for both uplands and wetlands in the prairie region of Minnesota, outlines focal areas (Core Areas and Habitat Complexes) where we can build on an existing base of conservation lands and improve the habitat there. The Prairie Wetland Initiative component of this OHF proposal would contribute to these identified Core Areas and Habitat Complexes by working to actively manage and improve small wetlands on public lands, especially on those lands contributing to the Minnesota Comprehensive Prairie Plan. The Status and Trends of Wetlands in Minnesota: Depressional Wetland Quality Assessment (2007 – 2012), produced by the Minnesota Pollution Control Agency, noted that while most wetlands in northern Minnesota are in good condition, the opposite is true in the central and former prairie regions of the state, where degraded vegetation communities are predominant. Vegetation communities in more than half of these depressional wetlands are in poor condition (56%), with only 17% in good condition, similar to the quality of all wetland types in the central hardwood and former prairie regions. Non-native invasive plants are having the greatest impact.

The projects and initiatives called for in this OHF proposal will directly contribute to expanded and healthy wetland complexes and increased shallow lakes work. Work will renovate existing wetland infrastructure and establish new management, especially in the critical prairie region of Minnesota. More specifically, the work done by the Wetland Management Program is targeted to identify key wetland complexes in the prairie region and bring management actions to the wetlands of those complexes.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

- H4 Restore and protect shallow lakes
- H5 Restore land, wetlands and wetland-associated watersheds

Which two other plans are addressed in this program?

- Long Range Duck Recovery Plan
- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife

Which LSOHC section priorities are addressed in this program?

Forest / Prairie Transition

- Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and nongame wildlife

Metro / Urban

- Protect, enhance, and restore remnant native prairie, Big Woods forests, and oak savanna with an emphasis on areas with high biological diversity

Northern Forest

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Prairie

- Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes

Outcomes**Programs in forest-prairie transition region:**

- Wetland and upland complexes will consist of native prairies, restored prairies, quality grasslands, and restored shallow lakes and wetlands ~ *Intensive wetland management and habitat infrastructure maintenance will provide the wetland base called for in numerous prairie, shallow lake and waterfowl plans. Area wildlife staff and/or shallow lakes staff will monitor completed projects to determine success of implementation and to assess the need for future management and/or maintenance.*

Programs in metropolitan urbanizing region:

- Other ~

Programs in the northern forest region:

- Improved availability and improved condition of habitats that have experienced substantial decline ~ *Intensive wetland management and habitat infrastructure maintenance will provide the wetland base called for in numerous prairie, shallow lake and waterfowl plans. Area wildlife staff and/or shallow lakes staff will monitor completed projects to determine success of implementation and to assess the need for future management and/or maintenance.*

Programs in prairie region:

- Protected, restored, and enhanced shallow lakes and wetlands ~ *Intensive wetland management and habitat infrastructure maintenance will provide the wetland base called for in numerous prairie, shallow lake and waterfowl plans. Area wildlife staff and/or shallow lakes staff will monitor completed projects to determine success of implementation and to assess the need for future management and/or maintenance.*

Does this program include leveraged funding?

No

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

This request is an acceleration of the Minnesota DNR's Section of Wildlife wetland habitat work to a level not attainable but for the appropriation.

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

DNR engineers, or private engineers contracted to work with oversight of DNR engineers, will design and oversee construction and renovation of infrastructure to achieve long-lasting results. A typical goal is to have water control structures, dikes and fish barriers last a minimum of 30-40 years. The management of completed infrastructure projects will fall on existing staff of the Department of Natural Resources. Periodic enhancements such as invasive species removal, supplemental vegetation planting, or water control structure installation, maintenance, or replacement, will be accomplished through annual funding requests to a variety of funding sources including, but not limited to, the Game and Fish Fund, bonding, gifts, the Environmental and Natural Resources Trust Fund, the Outdoor Heritage Fund, and federal sources such as North American Wetlands Conservation Act grants. Wetland enhancement projects such as cattail control, prescribed burns, rough fish management and the like are implemented to achieve quality, long-lasting habitat benefits lasting benefits, realistically they have variable lifespans due to conditions imposed by climate, physical factors, etc. Monitoring by area wildlife staff and shallow lakes specialists will ensure that followup management is employed as needed.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
10-12 months post-completion of engineered infrastructure	DNR	DNR engineers conduct warranty inspection of project.	-	-
1 year post-implementation of management action	DNR	Shallow Lakes Program, Wetland Management Program, and property managers evaluate management effectiveness	-	-

Activity Details

Requirements

If funded, this program will meet all applicable criteria set forth in MS 97A.056?

Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program?

Yes

Where does the activity take place?

- WMA
- WPA
- Permanently Protected Conservation Easements
- County/Municipal
- Refuge Lands
- Public Waters
- State Forests

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program, either by the proposer or the end owner of the property, outside of the initial restoration of the land?

No

Timeline

Activity Name	Estimated Completion Date
Survey and engineering-only projects	2026
Construction of infrastructure projects	2026
Assessment of small wetlands and implementation of management activities	2026
Aerial spraying of hybrid cattails	2021

Date of Final Report Submission: 11/01/2026

Availability of Appropriation: Subd. 7. Availability of Appropriation

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the accomplishment plan approved by the Lessard-Sams Outdoor Heritage Council. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. For acquiring real property, the amounts in this section are available until June 30, 2025. Money for restoration or enhancement is available until June 30, 2026. Money for restoration and enhancement of land acquired with an appropriation in this article is available for four years after the acquisition date with a maximum end date of June 30, 2029. If a project receives at least 15 percent of its funding from federal funds, the time of the appropriation may be extended to equal the availability of federal funding to a maximum of six years if the federal funding was confirmed and included in the original approved draft accomplishment plan. Money appropriated for acquiring land in fee title may be used to restore, enhance, and provide for public use of the land acquired with the appropriation. Public-use facilities must have a minimal impact on habitat in acquired lands.

Budget

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan.

Totals

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	\$1,072,000	-	-	\$1,072,000
Contracts	\$764,000	-	-	\$764,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$73,000	-	-	\$73,000
Professional Services	\$481,000	-	-	\$481,000
Direct Support Services	\$94,000	-	-	\$94,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$15,000	-	-	\$15,000
Supplies/Materials	\$90,000	-	-	\$90,000
DNR IDP	-	-	-	-
Grand Total	\$2,589,000	-	-	\$2,589,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Leverage	Leverage Source	Total
Program Supervisor	1.0	5.0	\$562,000	-	-	\$562,000
Natural Resource Specialist	2.0	3.0	\$410,000	-	-	\$410,000
Seasonal Shallow Lakes Technician	2.0	3.0	\$100,000	-	-	\$100,000

Amount of Request: \$2,589,000

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$1,166,000

As a % of the total request: 45.04%

Easement Stewardship: -

As a % of the Easement Acquisition: -

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?

The original proposal was modified by reducing the number of planned projects and by reducing the original request for 2 wetland management specialists for five years down to one specialist for 3 years.

Personnel

Has funding for these positions been requested in the past?

No

Contracts

What is included in the contracts line?

The amount budgeted in the Contracts line of the budget includes funding to hire private companies to construct wetland habitat infrastructure work or to implement wetland habitat management activities such as cattail control, sediment removal from wetland basins, and other work that promotes wetland enhancement.

Travel

Does the amount in the travel line include equipment/vehicle rental?

Yes

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

In addition to traditional travel costs of mileage, food and lodging, the amount budget in Travel may be used to cover DNR fleet costs associated with equipment used by staff. Such equipment could include MarshMasters, tractors, trailers, heavy equipment, and other equipment needed for wetland enhancement activities.

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

Yes

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?

Direct Support Services is determined by a standard DNR process taking into account the amount of funding and the number of allocations made with that funding.

Other Equipment/Tools

Give examples of the types of Equipment and Tools that will be purchased?

Equipment and tools that may be purchased would be hand and power tools, canoe/kayak/small boat and trailer, small pumps, and other items necessary for wetland management activities.

Federal Funds

Do you anticipate federal funds as a match for this program?

No

Output Tables**Acres by Resource Type (Table 1)**

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	5,149	-	-	-	5,149
Total	5,149	-	-	-	5,149

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$2,589,000	-	-	-	\$2,589,000
Total	\$2,589,000	-	-	-	\$2,589,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	10	1,339	-	3,000	800	5,149
Total	10	1,339	-	3,000	800	5,149

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	\$134,900	\$469,500	-	\$1,673,300	\$311,300	\$2,589,000
Total	\$134,900	\$469,500	-	\$1,673,300	\$311,300	\$2,589,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	\$502	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$13,490	\$350	-	\$557	\$389

Target Lake/Stream/River Feet or Miles

Parcels

Parcel Information

Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

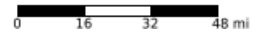
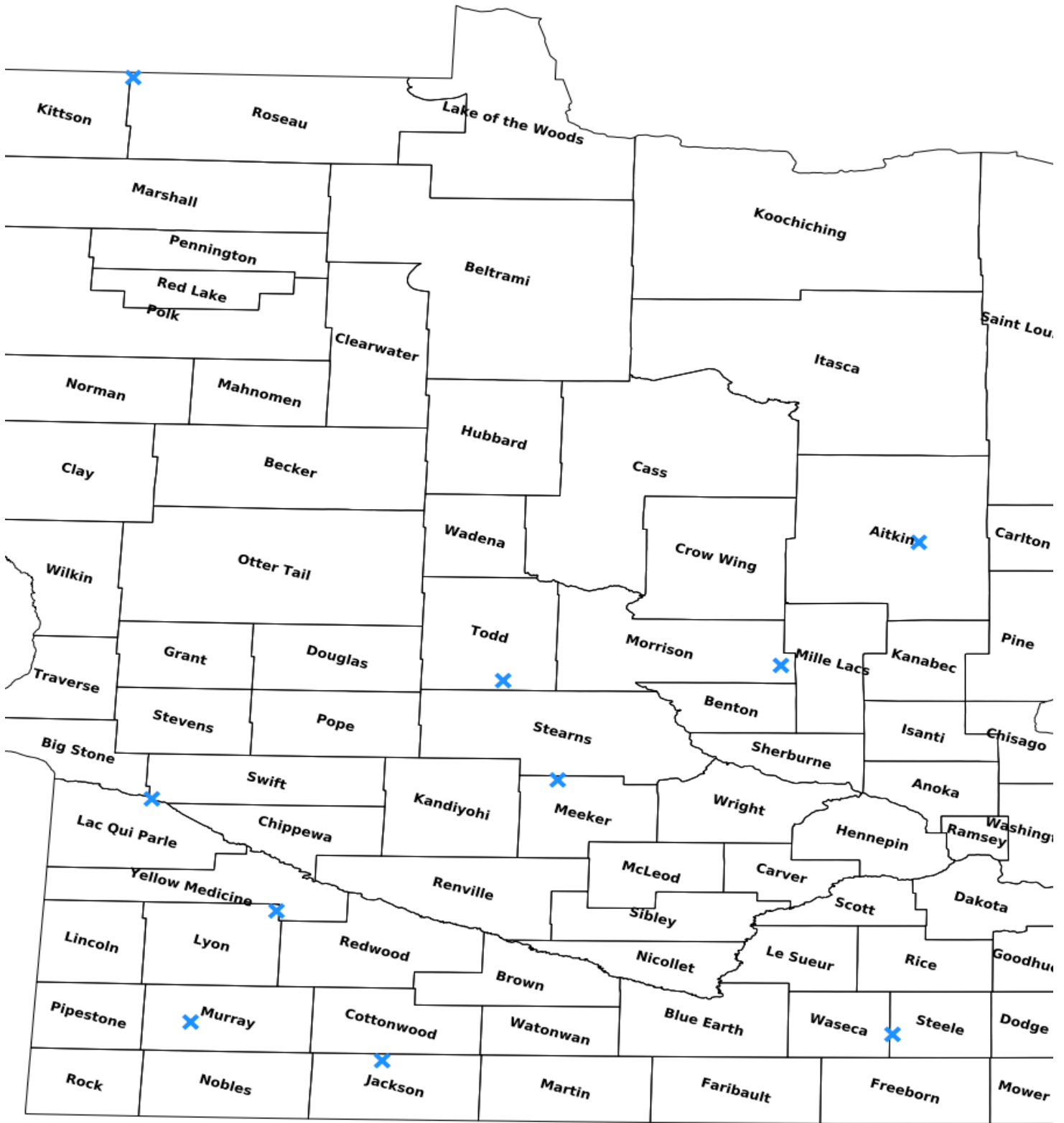
Individual projects are proposed by Minnesota DNR Area Wildlife staff or Shallow Lakes Program specialists. Projects are reviewed at both the regional and central office level for suitability and ability to contribute to strategic plans and Department Priorities.

Note that parcels may be modified, added, or subtracted from the Parcel List by the appropriation manager. The final report must show the final list of parcels that are completed with this proposal.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Kimberly WMA 2 WCS - Upper Pool Engineering	Aitkin	04724212	0	\$40,000	Yes	Construct infrastructure
Timber Lake Engineering	Jackson	10436218	0	\$40,000	Yes	Survey and engineering
Marsh Lake Fish Pond Structure and Pumping	Lac qui Parle	12043230	13	\$30,000	Yes	Construct infrastructure, implement management
Lines WCS outlet pipe	Lyon	11340213	45	\$50,000	Yes	Construct infrastructure
Teal Scurry WMA WCS design and construction	Meeker	12131207	10	\$130,000	Yes	Construct infrastructure
Water Control Structure Upgrade (2) Mille Lacs	Mille Lacs	04028234	800	\$260,000	Yes	Construct infrastructure
Peters WMA	Murray	10642209	45	\$130,000	Yes	Survey, engineering and construction
County Line Shallow Wetlands	Roseau	16344206	55	\$155,000	Yes	Construct infrastructure
Grey Eagle WMA	Todd	12733209	134	\$230,000	Yes	Survey, engineering and construction
Sliver Lake	Waseca	10621219	397	\$170,000	Yes	Construct infrastructure

Parcel Map



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other