



Lessard-Sams Outdoor Heritage Council

Shallow Lakes and Wetlands Enhancements Phase 11

Laws of Minnesota 2019 Accomplishment Plan

General Information

Date: 10/10/2022

Project Title: Shallow Lakes and Wetlands Enhancements Phase 11

Funds Recommended: \$3,541,000

Legislative Citation: ML 2019, 1st Sp. Session, Ch. 2, Art. 1, Sec. 2, subd, 4(e)

Appropriation Language: \$3,541,000 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

Organization: Minnesota DNR

Address: 500 Layette

City: St. Paul, MN 55155

Email: ricky.lien@state.mn.us

Office Number: 651-259-5227

Mobile Number:

Fax Number:

Website: dnr.state.mn.us

Location Information

County Location(s): Chippewa, Cass, Polk, Rice, Wadena, Sibley, Chisago, Hubbard, Big Stone, Lyon and Wright.

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 habitat work throughout Minnesota, with a focus on the prairie region. The proposal is comprised of four components: (1) projects to engineer and construct or renovate wetland infrastructure and to enhance wetlands; (2) funding to continue wetland habitat enhancement work by the existing Roving Habitat Crew in Region 1; (3) continued funding of three Shallow Lakes Program specialists, and; (4) creation of a new Prairie Wetland Initiative to address unmet management needs of small wetlands in Minnesota prairies.

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 due to excessive runoff and invasive plants and fish.

This proposal will accomplish needed wetland habitat work throughout Minnesota, with a focus on the prairie region.

ROVING HABITAT CREW - Numerous plans pertaining to wetlands and shallow lakes call for effective management of existing habitat to provide maximum benefits for wildlife. Past Outdoor Heritage Fund (OHF) monies were used to establish regional Roving Habitat Crews to address needed upland and wetland habitat management work on state wildlife properties. We have seen remarkable recoveries of both habitat quality and wildlife use of wetlands when we have invested in active management. The funding requested in this proposal will be targeted to continuing the wetland habitat work of the existing Region 4 Roving Habitat Crew. Crew work will include, but not be limited to, managing water levels, maintaining fish barriers and other wetland infrastructure, inducing winterkill of fish, and and controlling invasive plants and fish.

SHALLOW LAKES / WETLAND PROJECTS -The habitat quality of the shallow lakes/wetlands still on the landscape can be markedly improved by implementing active management to bring about habitat objectives. This proposal seeks to engineer and construct wetland infrastructure such as dikes, water control structures, and fish barriers, and to implement management techniques such as prescribed burns, rough fish control and water level manipulation. 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, replacement/renovation of wetland infrastructure to bring about habitat enhancement, and direct wetland management activities.

SHALLOW LAKES PROGRAM - Shallow Lakes specialists perform critical roles in assessing shallow lakes and initiating needed management. Many shallow lakes projects currently being implemented or completed in the past are the result of work by the shallow lakes program. Requested funding will continue OHF funding for three shallow lakes positions.

PRAIRIE WETLAND INITIATIVE - Only 1 of 5 Minnesota prairie wetlands is in good condition. While we have a highly successful Shallow Lakes program that assesses and initiates management on shallow lakes, similar attention is needed for smaller wetlands. This component of the proposal seeks funding to place two wetland specialists in the prairie to assess small wetlands and implement management. These specialists would work with Area wildlife staff, roving habitat crews, and private contractors to initiate needed management. Such management could include vegetation control, water level manipulation, and the removal of undesirable fish.

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?

Minnesota has lost almost half of its original presettlement wetlands, with some regions of the state having lost more than 90% of their original wetlands. A statewide review of Species of Greatest Conservation Need (SGCN) found that wetlands are one of the three habitat types (along with prairies and rivers) most used by these species. This request includes wetland management actions identified to support SGCN: prevention of wetland degradation, wetland restoration, and control of invasives. In the Minnesota County Biological Survey description of the marsh community, special attention is given to two issues faced in Minnesota marshes - stable high water levels that reduce species diversity, often to a point at which a monotypic system evolves, and the "invasion of marshes by the non-native species narrow-leaved cattail" and its hybrids. Both of these issues will be addressed by projects named within this proposal. Nationwide, 43% of threatened or endangered plants and animals live in or depend on wetlands.

Shallow lakes and non-forested prairie wetlands are identified as critical habitats for many "Species of Greatest Conservation Need" listed in Minnesota's "Tomorrow's Habitat for the Wild & Rare: An Action Plan for Minnesota Wildlife." Species listed in the Action Plan as requiring shallow lakes include lesser scaup, northern pintail, common moorhen, least bittern, American bittern, marsh wren, and Virginia rail, along with being "important for many other species". Specific species listed in the Action Plan as requiring emergent marshes are the least bittern, American bittern, marsh wren, and Virginia rail. Forster's terns are listed as requiring large deep-water marshes.

A MN County Biological Survey database search of endangered and threatened birds and amphibians is provided in the proposal attachments.

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:

Shallow Lakes staff provide standardized, rigorous assessments of shallow lakes to determine management needs and document habitat management effectiveness. Shallow lakes research has proven the effectiveness of management practices being employed

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 grant 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.

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
- Minnesota Prairie Conservation Plan

Which LSOHC section priorities are addressed in this program?

Forest / Prairie Transition

- Protect, enhance, and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success

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, and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success

Does this program include leveraged funding?

-

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 design and oversee construction and renovation of infrastructure to achieve long-lasting results. A typical goal is to have constructed 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-construction	DNR	Engineering staff warranty review	-	-
1 year post-drawdown or fish	DNR	Fish surey, secchi disk readings, vegetation	-	-

control		survey and sampling	
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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
- Refuge Lands
- Public Waters
- State Forests

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?

No

Timeline

Activity Name	Estimated Completion Date
Feasibility projects	June 30, 2022
Construction projects	June 30, 2023
Roving Habitat Crews, Shallow Lakes Specialists, Small Wetland Specialists	June 30, 2024

Date of Final Report Submission: 09/30/2024

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. Unless otherwise provided, the amounts in this section are available until June 30, 2022. For acquisition of real property, the amounts in this section are available until June 30, 2023, if a binding agreement with a landowner or purchase agreement is entered into by June 30, 2022, and closed no later than June 30, 2023. Funds for restoration or enhancement are available until June 30, 2024, or five years after acquisition, whichever is later, in order to complete initial restoration or enhancement work. 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 that federal funding was confirmed and included in the original draft accomplishment plan. Funds appropriated for fee title acquisition of land 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	Antic. Leverage	Leverage Source	Total
Personnel	\$1,956,000	-	-	\$1,956,000
Contracts	\$614,000	-	-	\$614,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$300,000	-	-	\$300,000
Professional Services	\$215,000	-	-	\$215,000
Direct Support Services	\$228,000	-	-	\$228,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$73,000	-	-	\$73,000
Supplies/Materials	\$155,000	-	-	\$155,000
DNR IDP	-	-	-	-
Grand Total	\$3,541,000	-	-	\$3,541,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Nat. Resource Specialists - Shallow Lakes Program	3.0	4.0	\$949,000	-	-	\$949,000
Seasonal Nat. Resource Technician - Shallow Lakes Program	2.0	4.0	\$136,000	-	-	\$136,000
Laborer - Roving Habitat Crew	2.0	3.0	\$319,000	-	-	\$319,000
Natural Resource Specialists - Small Prairie Wetland Program	2.0	4.0	\$552,000	-	-	\$552,000

Amount of Request: \$3,541,000

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$2,184,000

As a % of the total request: 61.68%

Easement Stewardship: -

As a % of the Easement Acquisition: -

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

Funding will not be used for a new Roving Habitat Crew. The existing Roving Habitat Crew will be funded for 3 years instead of 5. Shallow Lakes Specialists and Small Prairie Wetland Specialists will only be funded for 4 years. Two projects were delayed until future funding can be found.

Contracts

What is included in the contracts line?

Four individual projects funded through this appropriation will use funding from the contract line. These projects - Dry Sand WMA, Jacobson WMA, Shakopee Lake (Wright Co.), and Silver Lake (Sibley Co.) - involve infrastructure projects that will be designed by DNR engineers, with the work subsequently done by contractors.

Travel

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

No

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

\$347,000 is shown in the Travel line of the budget. In addition to traditional travel costs of mileage, food, and lodging, this funding will be used to cover DNR fleet costs associated with equipment used by DNR staff funded through this appropriation. Such equipment could include ATV's, UTV's, MarshMasters, tractors, trailers, and other equipment needed for critical habitat management activities.

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

No

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.

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	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	3,616	0	0	0	3,616
Total	3,616	0	0	0	3,616

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	\$3,541,000	-	-	-	\$3,541,000
Total	\$3,541,000	-	-	-	\$3,541,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	922	600	0	1,750	344	3,616
Total	922	600	0	1,750	344	3,616

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	\$433,900	\$689,600	-	\$1,646,200	\$771,300	\$3,541,000
Total	\$433,900	\$689,600	-	\$1,646,200	\$771,300	\$3,541,000

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	\$979	-	-	-

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	\$470	\$1,149	-	\$940	\$2,242

Target Lake/Stream/River Feet or Miles

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:

- Protected habitats will hold wetlands and shallow lakes open to public recreation and hunting ~ *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 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.*

Parcels

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Parcel Information

Sign-up Criteria?

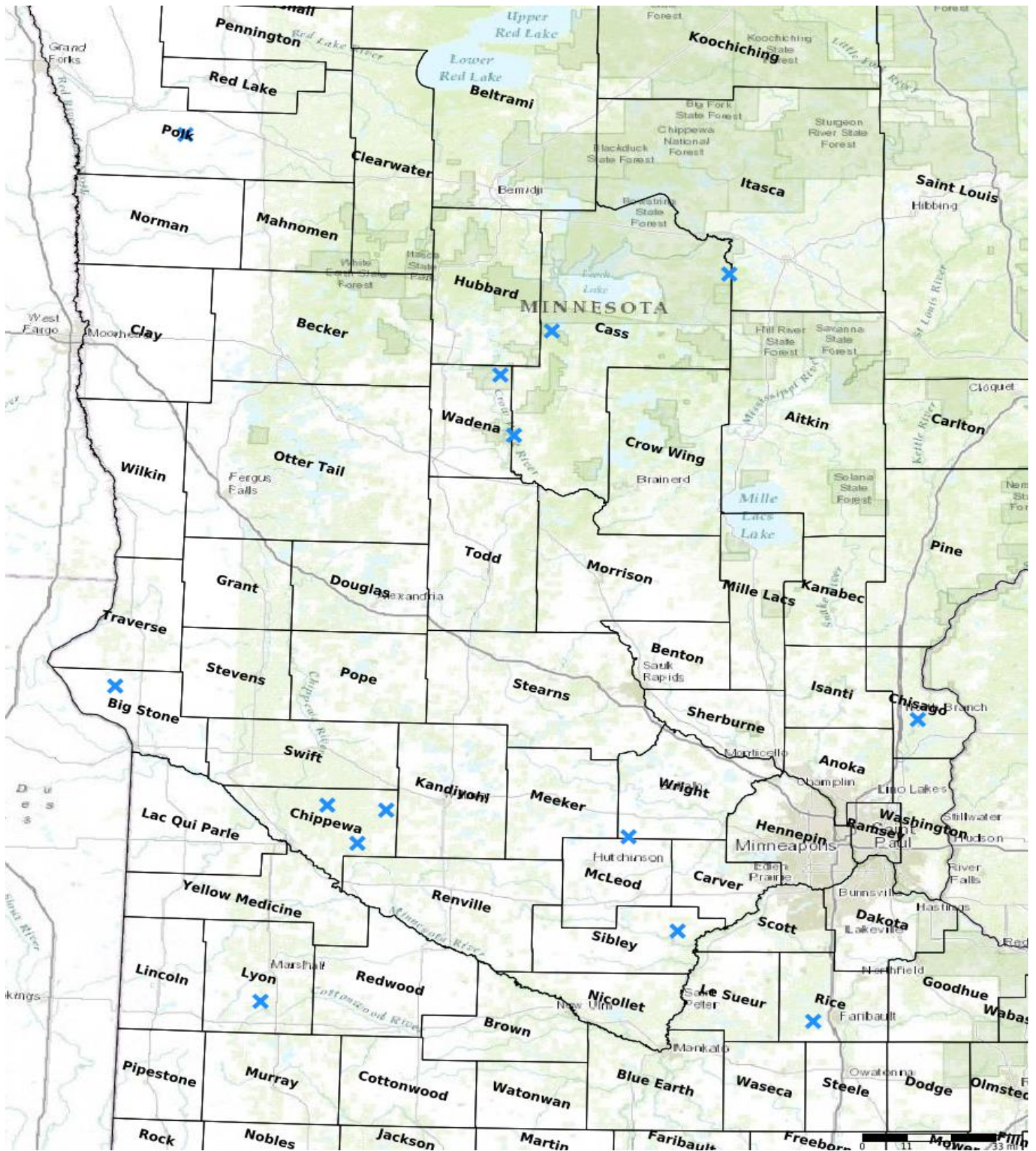
No

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

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Taffe WMA Rotenone treatment	Big Stone	12447227	60	\$15,000	Yes
Dry Sand WMA Dike Repair	Cass	13532206	200	\$28,000	Yes
Foothills SF WCS Feasibility	Cass	14031216	0	\$15,000	Yes
Cuka WMA WCS Feasibility	Chippewa	11937234	0	\$15,000	Yes
Franko WMA WCS Feasibility	Chippewa	11738215	0	\$15,000	Yes
Grace Marshes WMA WCS	Chippewa	11939228	0	\$15,000	Yes
Carlos Avery WMA Sunrise Unit	Chisago	03421212	0	\$30,000	Yes
Huntersville WMA WCS Feasibility	Hubbard	13833215	0	\$15,000	Yes
Jacobson WCS Construction	Lyon	11041219	30	\$115,000	Yes
Burnham Creek WMA wildlife pool WCS	Polk	14845202	60	\$19,500	Yes
Dwyer Water Bank Wetland WCS	Rice	10921205	0	\$1,500	Yes
Silver Lake Phase II WCS Design/Construction	Sibley	11326205	722	\$201,000	Yes
Kabekona WMA WCS Feasibility	Wadena	14325225	0	\$15,000	Yes
Shakopee Lake Fish Barrier	Wright	11828233	200	\$145,000	Yes

Parcel Map



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