



Lessard-Sams Outdoor Heritage Council

DNR Accelerated Shallow Lakes and Wetland Enhancements Phase 14 Laws of Minnesota 2022 Accomplishment Plan

General Information

Date: 06/20/2022

Project Title: DNR Accelerated Shallow Lakes and Wetland Enhancements Phase 14

Funds Recommended: \$2,301,000

Legislative Citation: ML 2022, Ch. 77, Art. 1, Sec. 2, subd. 4(g)

Appropriation Language: \$2,301,000 the second year is to the commissioner of natural resources to enhance and restore shallow lakes and wetland habitat statewide. A list of proposed shallow lake and wetland 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

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Location Information

County Location(s): Steele, Mille Lacs, Douglas, Martin, Redwood, Kandiyohi, Yellow Medicine, Lincoln, Lyon, Freeborn, Rice and St. Louis.

Eco regions in which work will take place:

- Northern Forest
- Prairie
- Forest / Prairie Transition

Activity types:

- Enhance

- Restore

Priority resources addressed by activity:

- Wetlands

Narrative

Abstract

This programmatic proposal will accomplish 6,195 acres of shallow lake and wetland enhancement and restoration work. The proposal is comprised of two components - (1) INDIVIDUAL PROJECTS: Nine projects to implement shallow lake and wetland restoration and enhancement through engineering and construction of infrastructure, three engineering only projects, and three management action projects (wild rice seeding and management, cattail control, and water level manipulation); (2) INCREASING PROJECT MANAGEMENT CAPACITY: Hiring a wetland project manager to coordinate and speed implementation of wetland and shallow lake habitat projects.

Design and Scope of Work

Minnesota wetlands and shallow lakes, besides being critical 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 and more than 50% of our statewide wetlands. In the wetlands that remain, benefits are often compromised by degraded quality. This proposal will accomplish wetland habitat work throughout Minnesota, with a focus on the prairie region.

Shallow Lake / Wetland Enhancement Restoration - This proposal seeks to engineer and construct wetland infrastructure, such as dikes and water control structures, and to implement management techniques such as wetland restoration, water-level manipulation and sediment removal. The shallow lake and wetland projects identified on the parcel list were proposed and reviewed by DNR Area and Regional supervisors. Projects include engineering feasibility and design work, replacement/renovation of wetland infrastructure to bring about habitat enhancement, wetland restorations, and direct wetland management activities. Two projects will provide restoration work, both in the prairie region. Another 3 projects will use funding for surveys and engineering to prepare for future implementation of wetland enhancement projects. Funding will be used to continue efforts to spray dense stands of monotypic hybrid cattails. 4,600 acres will be treated over two field seasons on parcels that will be identified by wildlife staff and listed in the Final Report. OHF funds will be used to expand wild rice enhancement activities which are extremely valuable to waterfowl and other wetland wildlife. Funding will be targeted to wild rice enhancement work such as seeding and channel cleanouts to manage water-levels. DNR will collaborate with tribal biologists to identify, plan and initiate wild rice enhancement projects. One project will be undertaken to perform a drawdown through pumping.

Wetland Project Management - Numerous plans pertaining to wetlands/shallow lakes call for an increase and acceleration of wetland management activities for wildlife. The Minnesota Duck Action Plan notes the need to expand the Wetland Management Program (WMP) in Minnesota. The WMP assesses wetlands and initiates management to produce quality wetland habitat. It is conservatively estimated that each Natural Resource Specialist working in the WMP will impact 1,125 acres of small wetlands over the life of an appropriation. With the addition of two additional wetland management specialists planned for summer 2021, bringing total number to four, the quantity of projects initiated by these specialists has presented a challenge for DNR engineering and business office functions. It is recommended that a project manager be hired to address this workload and expand

capacity. The project manager would oversee implementation of complex wetland and shallow lakes infrastructure projects, acting as a focal point between field biologists, engineers, and business office staff.

The parcel list may be modified as needed by the program manager. The Final Report must reflect an accurate and complete parcel list.

To improve efficiency and meet mutual goals, projects may be done cooperatively with Ducks Unlimited.

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
- Other : Minnesota Duck Action Plan

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

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

Does this program include leveraged funding?

Yes

Explain the leverage:

Projects completed through this proposals will often be leveraged against a variety of funding sources, including Minnesota duck stamp funds, NGO resources, DNR funding sources such as Game and Fish funding, and other funding sources. Leveraging amounts and sources are often not know when proposals are prepared making it impossible to detail specific amounts.

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 follow-up management is employed as needed.

Actions to Maintain Project Outcomes

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

How will the program directly involve, engage, and benefit BIPOC (Black, Indigenous, People of Color) and diverse communities:

The DNR Acceleration Shallow Lakes and Wetlands Enhancements Ph. 14 has the following specific ties to BIPOC and diverse communities:

- Wild rice seeding has tribal support to re-establish culturally valuable wild rice. A potential partnership regarding this effort is being discussed.
- The Pat Zakovek project noted in the parcel list will result in improved management of wild rice habitat. Tribal support has been expressed for this project.

DNR's OHF projects aim to serve all Minnesotans. At the same time, we are bringing more focus in all our work to BIPOC and diverse communities. The Minnesota DNR has adopted advancing diversity, equity and inclusion (DEI) as a key priority in its 2020-22 strategic plan. The plan focuses on increasing the cultural competence of our staff, creating a workforce that is reflective of Minnesota, continuing to strengthen tribal consultation and building partnerships with diverse communities.

The OHF funds high quality habitat projects that provide ecosystem services like clean water and carbon sequestration that support environmental justice. OHF also supports public access and recreational opportunities on these lands. OHF projects and outcomes benefit BIPOC and diverse communities through recreational opportunities that are close-to-home, culturally responsive and accessible to Minnesotans with disabilities.

The DNR has diversity, equity and inclusion strategies that benefit all OHF projects:

- Multilingual and culturally specific hunting and fishing education programs take place on public lands.
- All hiring is equal opportunity, affirmative action, and veteran-friendly. Contracting seeks out Targeted Group, Economically Disadvantaged and Veteran-Owned businesses.
- Public engagement seeks out BIPOC voices and involves diverse communities. Outreach and marketing of projects has this focus as well.
- Partnerships are at the center of all projects. Tribes in particular are consulted in all pertinent areas of the DNR's work, under EO 19-24.

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?

Yes

Where does the activity take place?

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

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
aerial spraying of cattails	2026
Shallow lake and wetland management actions	2027
Construction of infrastructure projects	2027
Survey and engineer only projects	2027

Date of Final Report Submission: 11/01/2027

Availability of Appropriation: Subd. 7. Availability of Appropriation

(a) 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. Money appropriated to acquire land in fee 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.

(b) Money appropriated in this section is available as follows:

(1) money appropriated for acquiring real property is available until June 30, 2026;

(2) money appropriated for restoring and enhancing land acquired with an appropriation in this act is available for four years after the acquisition date with a maximum end date of June 30, 2030;

(3) money appropriated for restoring or enhancing other land is available until June 30, 2027;

(4) notwithstanding clauses (1) to (3), money appropriated for a project that receives at least 15 percent of its funding from federal funds is available until a date sufficient to match 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; and

(5) money appropriated for other projects is available until the end of the fiscal year in which it is appropriated.

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	\$340,600	-	-	\$340,600
Contracts	\$1,172,800	-	-	\$1,172,800
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$15,000	-	-	\$15,000
Professional Services	\$620,600	-	-	\$620,600
Direct Support Services	\$50,000	-	-	\$50,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$1,000	-	-	\$1,000
Supplies/Materials	\$101,000	-	-	\$101,000
DNR IDP	-	-	-	-
Grand Total	\$2,301,000	-	-	\$2,301,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
NR Program Consultant	1.0	3.0	\$340,600	-	-	\$340,600

Amount of Request: \$2,301,000

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$390,600

As a % of the total request: 16.98%

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 a NR Wetland Consultant position from 5 years down to 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. Engineering consultants may be contracted.

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	48	-	-	-	48
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	6,147	-	-	-	6,147
Total	6,195	-	-	-	6,195

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	\$230,000	-	-	-	\$230,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$2,071,000	-	-	-	\$2,071,000
Total	\$2,301,000	-	-	-	\$2,301,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	-	-	-	48	-	48
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	2,300	-	2,600	1,247	6,147
Total	-	2,300	-	2,648	1,247	6,195

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	\$230,000	-	\$230,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	\$138,000	-	\$1,279,000	\$654,000	\$2,071,000
Total	-	\$138,000	-	\$1,509,000	\$654,000	\$2,301,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	\$4,791	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	\$336	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	\$4,791	-
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	\$60	-	\$491	\$524

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 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:

Proposals for individual projects are submitted by DNR Area Wildlife Staff and Shallow Lake Specialists. Projects are reviewed at the regional and central office and appropriate projects are selected for inclusion in this OHF proposal. The parcel list may be modified by the program manager as needed and the Final Report must reflect an accurate and complete parcel list. In addition to the projects shown on the parcel list, additional projects will be selected for aerial cattail spraying using the attached "Guidelines Aerial Cattail Spraying.docx." Wild rice enhancement projects will be determined annually. Consultation will be conducted with tribal biologists will utilized to find quality projects that are mutually beneficial and/or provide opportunities for partnership.

Parcels may be added to, removed from, or modified in the list to make efficient use of funding, but must be consistent with program goals of wetland and shallow lake enhancement and restoration.

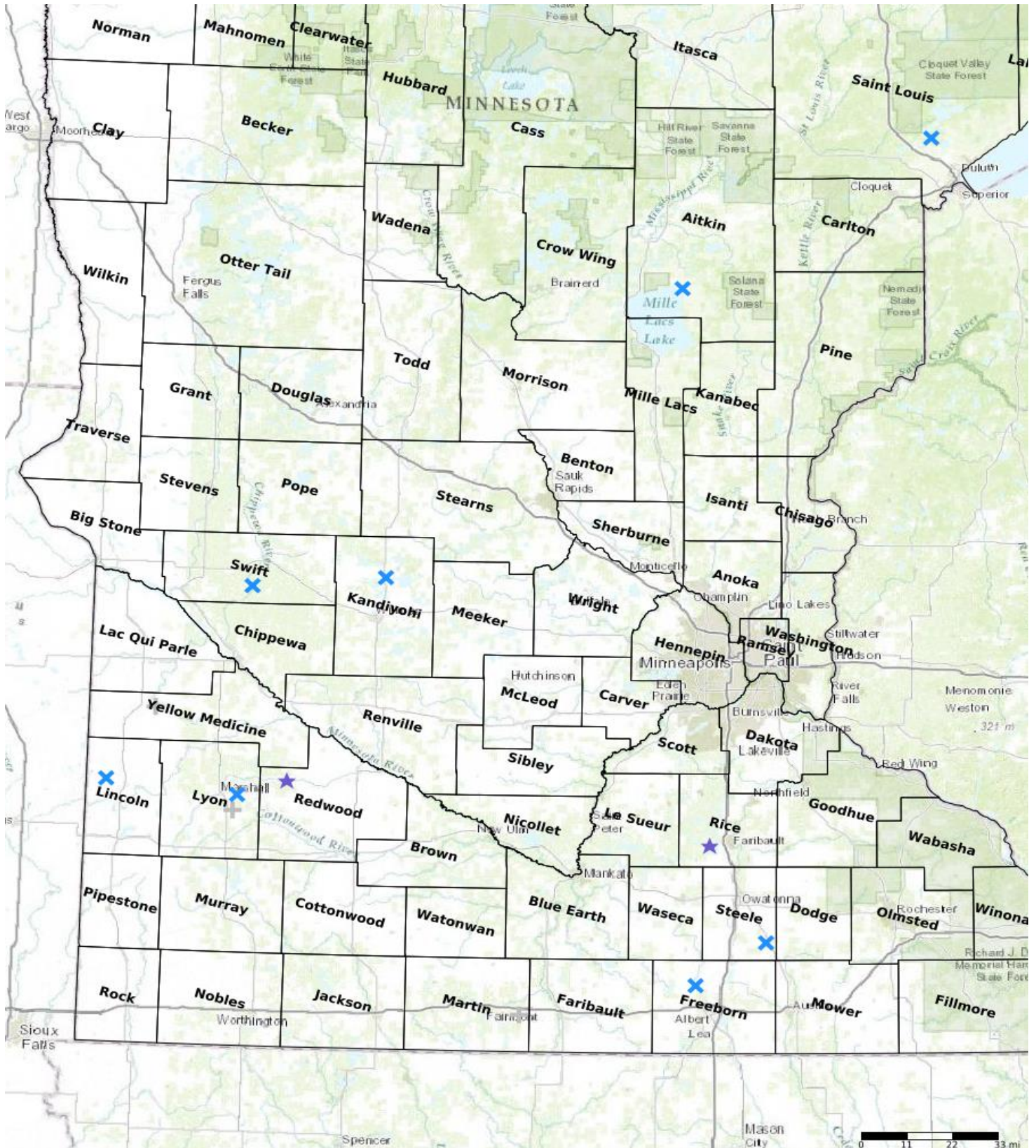
Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Urness WMA WCS	Douglas	12040210	30	\$118,800	Yes
Manchester Water Control Structure	Freeborn	10322202	63	\$140,000	Yes
Ringo-Nest WMA Dike	Kandiyohi	12134230	113	\$93,000	Yes
Legacy WMA WCS Construction	Lincoln	11246226	9	\$65,000	Yes
Clifton WMA Pump Drawdown	Lyon	11140207	60	\$14,000	Yes
Mille Lacs WMA Mikkelson Pool Water Control Structures	Mille Lacs	04525229	400	\$160,000	Yes
Voosen WMA Wetland Restoration	Redwood	11238219	15	\$60,000	Yes
Dwyer Wetland Restoration	Rice	10921205	33	\$165,000	Yes
Canosia WMA Water Control Structure	St. Louis	05115209	447	\$280,000	Yes
Rickert Lake	Steele	10519210	25	\$95,600	Yes

Other Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Lake Marshall WCS Engineering	Lyon	11141236	0	\$60,000	Yes
Leudtke WMA WCS/embankment rebuild Engineering	Martin	10229215	0	\$50,000	Yes
Oshkosh WMA Wetland Engineering	Yellow Medicine	11544223	0	\$60,000	Yes

Parcel Map



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