Lessard-Sams Outdoor Heritage Council

Wetland Enhancement in the Big Woods

ML 2023 Request for Funding

General Information

Date: 05/31/2022

Proposal Title: Wetland Enhancement in the Big Woods

Funds Requested: $900,000

Manager Information

Manager's Name: Craig Hensel
Title: Volunteer Grant Manager
Organization: Scott-Le Sueur Waterfowlers
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Location Information

County Location(s): Rice and Scott.

Eco regions in which work will take place:

- Prairie
- Metro / Urban

Activity types:

- Enhance

Priority resources addressed by activity:

- Wetlands

Narrative

Abstract

Scott Le Sueur Waterfowlers is seeking to bring additional funding for wetland enhancement on 99 acres in Scott and Rice Counties. These basins will be enhanced by constructing durable, long-lasting water control structures, embankments, and/or removing sediments and invasive vegetation. The structures will allow water level management on degraded wetlands and a shallow lake. The other activities will enhance wetland habitats on small isolated wetlands that are ideal for breeding waterfowl and keep water on the landscape.

Design and Scope of Work

Scott-LeSueur Waterfowler is committed to protecting, restoring, and enhancing habitat in our area. We have also done many youth events to get kids involved in outdoor recreation. Although we have had to start a new club after the Minnesota Waterfowl Association dissolved, we have a core group of volunteers eager to put more habitat on the ground. We are nearing completion of a CPL grant for wetland restorations on a newly acquired WMA in LeSueur County. This LSOHC grant will allow our conservation group to expand our habitat enhancement activities to a larger scale.

This grant will enhance 49 acres of small to midsize wetlands and a 50 acre shallow lake.

The small wetlands on existing WMAs will be enhanced by removing sediment and invasive reed canary grass along with ditch plugs constructed in drainage ways. Once construction is done wetland seeding will take place to establish beneficial native plants and fend off invasive species. The small wetlands on existing WMAs were often overlooked for restoration when originally purchased, now that there is a better understanding of their ecological importance. This helps maximize the productivity of our limited public lands for both game and nongame species.

The midsized wetlands to be enhanced under this grant application are typically 5-15 acres in size and were restored when the parcels were originally purchased in the 70s and 80s. At that time it was common practice to build an embankment with whatever material was close. This reduced cost and worked for several decades. After several repeated 50 and 100 year rain events the embankments have deteriorated. This combined with burrowing rodent activity has caused all or portions of the embankments to erode away. This has led to partially or fully draining the wetland basins. To remedy the situation new embankments will be designed with engineered fill, wave berms or rodent walls will be installed, and spillways designed to safely pass high intensity storms so they are durable and long lasting.

Country Hollow Wetland is a shallow lake in poor ecological condition due to a population of rough fish. The current fixed crest outlet has had to be fixed with a bandage twice in the last 15 years and could wash out the spillway and embankment if a large storm comes along. A new water control structure would be designed by an engineering consultant with vast experience in natural resource bioengineering and installed by a qualified contractor who specialize in heavy civil and infrastructure construction. Once the necessary infrastructure is installed it will allow Cedar Lake Township to conduct temporary water level drawdowns. These drawdowns reset the ecology of the basin by eliminating rough fish populations, consolidating bottom sediments, and allowing new plants to germinate. Once desired results are achieved stoplogs are reinstalled into the structure to allow water to refill the shallow lake. The new vegetation will hold the bottom sediments in place and will provide habitat for invertebrates. Newly enhanced shallow lakes contain clean and clear water that is full of life.

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

The Big Woods Subsection Profile states that 33 species of greatest conservation need are dependent on quality wetland habitat, including 30 birds, 2 mammals and 1 reptile (Common Snapping Turtle). The enhanced wetlands in this proposal will provide quality foraging, resting breeding and migration habitat for these listed species. Healthy wetlands in this area typically support populations of breeding or migrating; Northern pintail, Lesser Scaup, American Bittern, Black tern, Marsh Wren, Sedge Wren, Trumpeter Swan, Black-crowned Night Heron, Greater Yellowlegs, Forster's Tern, Common Tern, Common Moorhen, Virginia Rail, and the Least Bittern.

Many other SGCN will visit shallow lakes to feed on the abundant resources including Common Nighthawk, Northern Harrier, and Bald Eagle.

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible?

Most of these wetlands have old dilapidated water control structures that are nearing the end of their useful life. Others have embankments that are nearing failure due to rodents or flooding from the frequent 100 year rainfall events of the past 15 years. If the current conditions are not addressed soon complete failure will take place which would result in unnecessary erosion and detriment to habitat.

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

Work on the WMA projects were requested by MNDNR Area Wildlife Manager and within a 3 mile radius of each other. This area of Rice County contains many lakes, WMAs, WPAs, conservation easements and private forest lands. This proposal helps to maintain the wetland component needed in the complex. The Big Woods Subsection Profile identifies these WMAs within or adjacent to key habitats.

The shallow lake in Scott County is part of a local complex of three shallow lakes and several wetlands of various sizes. One FWS Biologist identified one of these shallow lakes as the best wetland in Scott County because of its diversity and bird use. If funded the Country Hollow wetland will add another quality shallow lake to expand this local complex and provide additional habitat. Thus allowing the birds unique to this area to expand to this newly enhanced shallow lake.

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 proposal?

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

Describe how your program will advance the indicators identified in the plans selected:

Both plans have a goal of managing 1,800 shallow lakes throughout Minnesota to provide prime feeding and resting habitats for migration and breeding waterfowl. This program will add one additional managed shallow lake. While this is not the type of lake that is typically sought after for the MNDNR to actively manage because

there is no hunting and public access. We will be adding another partner to help the MNDNR achieve the goal of active management on 1,800 shallow lakes by 2056.

The Long Range Duck Recovery Plan calls for a breeding population of 1 million ducks. To achieve this goal 600,000 acres of wetlands will need to be restored in addition to existing habitat. This proposal enhances 49 acres of wetlands that will help maintain the base of existing habitat instead of losing wetland habitat.

Which LSOHC section priorities are addressed in this proposal?

Metro / Urban

- Protect, enhance, and restore riparian and littoral habitats on lakes to benefit game and nongame fish species

Prairie

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

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

This program will increase the number of enhanced shallow lakes in the metro section of Minnesota by one, and keep functioning wetlands on WMAs in the prairie section. The resulting increase in submergent and emergent vegetation will increase the productivity of the basins which will provide significant food resources for migrating and breeding waterfowl and other water birds. These projects will have other benefits that include clean water and flood retention. The clean water will result from submerged aquatic plants holding bottom sediments in place so the nutrients do not become resuspended in the water column.

The smallest wetlands of this proposal provides the biggest ecological value. Most years they will dry up in midsummer allowing a new flush of seed producing annual plants to grow. With the melting snow they hold water on the landscape rather than runoff into the lakes and rivers. The water warms up quickly in the strong spring sun and invertebrates emerge. The invertebrates and seeds provide an ideal nutritional makeup for female birds getting ready to nest. The isolated wetlands also provide areas where duck pairs can set up a territory away from others of the same species, which increases the carrying capacity of the habitat complex.

These results will be achieved by having specialized consultant engineering firms survey, design and oversee construction of durable water control structures and embankments that will have a lifespan of over 50 years.

What other fund may contribute to this proposal?

- N/A

Does this proposal include leveraged funding?

Yes

Explain the leverage:

Scott Le Sueur Waterfowlers has committed $45,000 in cash. Volunteers within our organization have committed to providing $45,000 of in-kind match to provide grant administration, project permitting, bidding, and process

payments.

Cedar Lake Township has approved a $5,000 cash leverage for contracts on Country Hollow Wetland and are the primary landowner that see great benefit to this project.

We continue to work to bring additional leverage and are in discussions with several sportsman clubs and SWCDs.

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.

Scott Le Sueur Waterfowlers desire for applying for this grant is to provide additional resources that may not be currently available and add capacity to area MNDNR staff to supplement work already taking place. This allows MNDNR to use existing funds on other important projects in the state.

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

MNDNR will continue to own and manage the wetlands located on WMA once needed infrastructure is designed and installed. Then it is ready to ensure an extended lifespan of greater than 50 years.

A lake management plan will be drafted for the shallow lake as part of the permitting process. This plan will state how and when future drawdowns will be implemented. There will be ecological triggers that need to be met in order to perform a drawdown that may include submerged aquatic vegetation density, water clarity, water quality, or presents of rough fish. These triggers will be monitored according to state standards by citizen scientist volunteers. Once a drawdown is ecologically needed, township staff will oversee the task to make sure it is done in accordance with the lake management plan.

Cedar Lake Township will also be responsible for any potential maintenance needed.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2028	Cedar Lake Township, MNDNR or citizen scientist volunteers	Monitor water quality parameters, vegetation and bird use response to shallow lake management	When ecological triggers laid out in lake management plans are met conduct the next drawdown cycle	Monitor water quality parameters, vegetation and bird use response to shallow lake management

Identify indicator species and associated quantities this habitat will typically support:

Using data from The MNDNR's Long Range Duck Recovery Plan estimates that approximately 30 pairs of ducks will be present on wetlands enhanced by this proposal.

Trumpeter swans are estimated to establish large territories so a realistic quantity would be 3 pairs of trumpeter swans could be supported by this project.

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

We intend to engage the local schools where BIPOC children attend and introduce all kids to local conservation projects. If children become excited about conservation and parents take interest, the entire family can enjoy recreating these projects.

The projects that have public access are smaller wetlands where large boats with vast amounts of equipment is required to be successful. Since a $10,000 boat with a mud motor cannot access these areas, the financial barrier to start hunting is lowered. Resulting in a new BIPOC demographic of hunters competing on a level playing field for access to quality habitat.

The Shakopee Mdewakanton Sioux Community is located 13 miles north of the Country Hollow Wetland site. They share the same goal of habitat restoration on the 500 acres of prairie wetland complex that they own. This project furthers their mission of habitat conservation in close proximity to the Shakopee Mdewakanton Sioux Community.

Activity Details

Requirements

If funded, this proposal 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?

- WMA
- Public Waters

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?
No

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC?
No

Timeline

Activity Name	Estimated Completion Date
Survey, Design and Permit Projects	2025
Construct New Water Control Structures for Wetland Enhancements	2027

Budget

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	$45,000	In-kind from Scott-Le Sueur Waterfowlers	$45,000
Contracts	$650,000	$50,000	Cedar Lake Township and Scott-Le Sueur Waterfowlers	$700,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	$250,000	-	-	$250,000
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	**$900,000**	**$95,000**	**-**	**$995,000**

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Vollenteers	0.1	5.0	-	$45,000	In-kind from Scott-Le Sueur Waterfowlers	$45,000

Amount of Request: $900,000
Amount of Leverage: $95,000
Leverage as a percent of the Request: 10.56%
DSS + Personnel: -
As a % of the total request: 0.0%
Easement Stewardship: -
As a % of the Easement Acquisition: -

Describe and explain leverage source and confirmation of funds:
Scott Le Sueur Waterfowlers has committed $45,000 in cash. Volunteers within our organization have committed to providing $45,000 of in-kind match to provide grant administration, project permitting, bidding, and process payments.
We continue to work to bring additional leverage and are in discussions with several sportsman clubs and SWCDs.

Does this proposal have the ability to be scalable?
Yes

If the project received 70% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?
If 70% of funding was awarded projects would be removed to match funding levels. These would be removed based on habitat outcomes, cost, and complexity.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?
Personnel leverage amount would be reduced because there should be less administration cost on smaller grant amounts and fewer projects. This may not be proportional but would just increase the percentage of leveraged funds.

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?
If 50% of funding was awarded, projects would be removed to match funding levels. These would be removed based on habitat outcomes, cost, and complexity.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?
Personnel leverage amount would be reduced because there should be less administration cost on smaller grant amounts and fewer projects. This may not be proportional but would just increase the percentage of leveraged funds.

Contracts

What is included in the contracts line?
Once the projects are designed, they will be sent out for a competitive bid to qualified contractors who specialize in heavy civil and infrastructure construction.

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	99	0	0	0	99
Total	**99**	**0**	**0**	**0**	**99**

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	$900,000	-	-	-	$900,000
Total	**$900,000**	**-**	**-**	**-**	**$900,000**

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	50	0	0	49	0	99
Total	**50**	**0**	**0**	**49**	**0**	**99**

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	$275,000	-	-	$625,000	-	$900,000
Total	**$275,000**	**-**	**-**	**$625,000**	**-**	**$900,000**

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	$9,090	-	-	-

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	$5,500	-	-	$12,755	-

Target Lake/Stream/River Feet or Miles

Outcomes

Programs in metropolitan urbanizing region:

- Game lakes are significant contributors of waterfowl, due to efforts to protect uplands adjacent to game lakes ~ *Citizen scientists will evaluate and document the response of enhancement on the shallow lake's productivity versus the current condition in accordance with MN DNR standards. Measurable outcomes will be high SECCHI disk readings, density and diversity of submerged aquatic vegetation, high invertebrate populations and high bird use. Secondary benefits would be reducing peak flows downstream and a shallow lake that functions in a manner that mimics nature.*

Programs in prairie region:

- Protected, restored, and enhanced shallow lakes and wetlands ~ *MNDNR staff will monitor enhancement of wetlands for waterfowl use and vegetation response.*

Parcels

Sign-up Criteria?
No

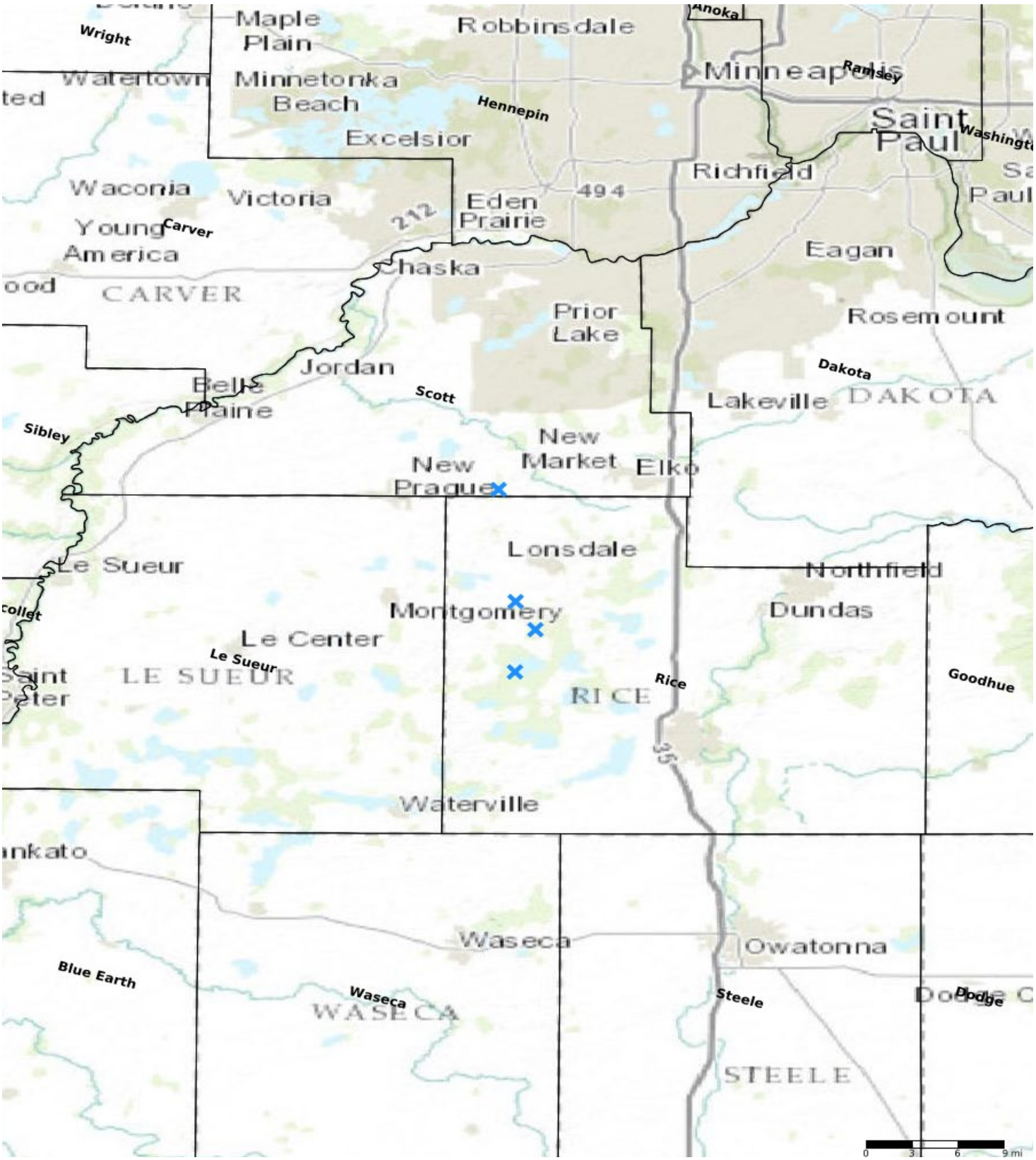
Explain the process used to identify, prioritize, and select the parcels on your list:
Projects on WMAs were identified and prioritized by local and regional MNDNR Wildlife Section Staff using an internal ranking system. Scott Le Sueur Waterfowlers simply asked if we could help deliver on a backlog of projects in our local area.

Country Hollow Wetland was identified as a wetland within a habitat complex that needed enhancement due to poor water quality. At least one other wetland in this complex also needs enhancement, but this one was selected based on being at the top of the watershed and a supportive Township Board that owns the majority of the property.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Big Woods Heritage Forest WMA	Rice	11122223	18	$155,000	Yes
Boyd Sartell WMA	Rice	11022203	29	$400,000	Yes
Robert J. Lick WMA	Rice	11122210	2	$20,000	Yes
Country Hollow Wetland	Scott	11322233	50	$300,000	Yes

Parcel Map



- Protect in Easement
- Protect in Fee with PILT
- Protect in Fee W/O PILT
- Restore
- Enhance
- Other

Wetland Enhancement in the Big Woods

Current Issues

Plugged outlets and burrowing rodents cause embankment failure, washed out spillways & partially drained wetlands

Goal: Install water control structure, repair & solve destruction issues with the embankments, & bring wetland back to historical size, depth and type

Failed section of embankment deposited sediment into adjacent recreational lake

Washed out spillway

Wetland Enhancement in the Big Woods

Scott-Le Sueur Waterfowlers is a small local conservation club started in 2019 after Minnesota Waterfowl Association was disbanded. We were one of the biggest and most successful chapters of the Minnesota Waterfowl Association and have a core group of volunteers that are dedicated and passionate about conservation and youth activities. We have helped develop youth outdoor interest by; a youth wood-duck house build day, maintaining over 100 wood-duck houses on local WMAs, supporting local high school trap teams, and supporting Woodie Camp (a week long camp for kids 13-15 years old focusing on all aspects of waterfowl conservation and hunting). Our volunteers are eager to do what it takes to put habitat on the ground in our local area. That includes administering a LSOHC Grant, doing wetland seeding after restoration, monitoring project outcomes, or other activities.

We are in the process of completing a FY 2021 Conservation Partners Legacy Grant to restore 35 acres of wetlands on the recently acquired Dora Lake WMA in Le Sueur County. We are partnering with USFWS and MNDNR to deliver this project and should be completed in July 2022. The next step to make a larger positive impact in our area is to request a LSOHC grant.

Scott Le Sueur Waterfowlers will assist Cedar Lake Township go through Minnesota State Statute 103G.408 Temporary Drawdown of Public Waters and develop a comprehensive lake management plan for the enhancement of Country Hollow Wetland. Through this process MNDNR will ensure that this shallow lake is managed for fish, wildlife or ecological purposes and are in the public's interest. Fish stocking discussions will take place with MNDNR Area Fishery Staff, as a part of this process, to determine if that is a viable option to extend the time frame between drawdowns. This could then provide a fishery open to the public in the metro area.

May 25, 2022

To: Council Members

RE: Request for funding Cedar Lake Township Country Hollows Park Ponds project to enhance water quality and improve the water control structures.

Cedar Lake Township endorse the request for funding the ponds located on the only park in Cedar Lake Township. These ponds are open to the public and are in need of help and support. We believe this work will improve the water quality and will provide years of service to the community. Cedar Lake Township is planning to invest $5000 towards the project if funding is provided.

Thank you for your consideration and support.

Sincerely,

Joe Lambrecht

Cedar Lake Township Chair