



Lessard-Sams Outdoor Heritage Council

Bone Lake South Phase 2
ML 2026 Request for Funding

General Information

Date: 06/26/2025

Proposal Title: Bone Lake South Phase 2

Funds Requested: \$1,625,000

Confirmed Leverage Funds: \$162,500

Is this proposal Scalable?: Yes

Manager Information

Manager's Name: Emily Heinz

Title: Planning Coordinator

Organization: Comfort Lake-Forest Lake Watershed District

Address: 44 Lake Street South Suite A

City: Forest Lake, MN 55025

Email: emily.heinz@clflwd.org

Office Number: 6513955856

Mobile Number:

Fax Number:

Website: www.clflwd.org

Location Information

County Location(s): Washington.

Eco regions in which work will take place:

Northern Forest

Activity types:

Enhance

Restore

Priority resources addressed by activity:

Wetlands

Prairie

Narrative

Abstract

Comfort Lake-Forest Lake Watershed District will implement a targeted habitat enhancement plan on a 236-acre property containing high priority wetland and upland habitat south of Bone Lake in northern Washington County. This proposal will enhance habitat for the Blanding's turtle and other native species, keep water on the landscape, improve water quality, and protect groundwater. These multiple potential water resource benefits make this site a high priority in the District's 10-Year Watershed Management Plan. The proposed project is the second phase of work on this site. The first phase is fee title acquisition using ML2023 Subdivision 4(i).

Design and Scope of Work

This project will restore 23 acres of wetland, restore 105 acres of prairie/oak savanna, enhance 18 acres of Tamarack Swamp wetland, and enhance 6 acres of hardwood forest in the high priority Bone Lake South Wetland area, as identified in the District's Watershed Management Plan. The 236-acre property includes an additional 84 acres of open water, marshland, etc, that benefit from the proposed projects, but are not included in the proposed project acres. The District identified this area for protection/enhancement due to the site's presence of the threatened Blanding's turtle and Rusty-patched bumblebee; native plant communities, including wet meadow/shrub carr and forested wetland; wetland habitat; water storage potential; potential for upland habitat restoration; water quality impact on Bone Lake, which is impaired for eutrophication; and high pollution sensitivity of near-surface materials.

Perpetual protection and enhancement of this land dovetails with and serves as a pilot project for the District's Greenbelt and Open Space initiative. This initiative seeks to increase habitat quality and connectivity and protect key water resources within the Comfort Lake-Forest Lake Watershed District. The District will coordinate with the City of Scandia and Washington County with respect to the proposed restoration and enhancement projects. It will engage local stakeholders primarily through the Bone Lake Association.

The District will acquire the fee title using ML2023 funds and proposes to restore the site using ML2026 funds.

Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation

The project will restore/enhance a variety of upland and wetland plant community types including an area of southern tamarack swamp (FPs63) which is rare in the State (S2/S3). The existing matrix of wetland and upland plant communities contained within the project area are known to support Blanding's turtles which are listed as threatened in Minnesota. This work will include a thorough ecological assessment and inventory of the property followed by the preparation of targeted and rigorous restoration and management plan. The District will then execute the management plan with an overarching goal of restoring high quality and diverse native species dominated plant communities. This work will maximize the potential for biodiversity within the site and provide greater opportunity to support SGCN. Proposed work would maintain, enhance, or restore habitat for up to 35 SGCN.

About 1/3 of the site is mapped as MCBS of biodiversity significance polygons (tamarack swamp, rich fen, shrub swamp) with a ranking of "below". This indicates presence of native plant communities and habitats with high potential and great need for restoration and management.

The District believes that additional SGCN or additional state-listed species may be detected within the area as a result of planned protection and restoration activities. Based on similar restoration projects within similar habitats in and around Washington County, the area has the potential to support additional rare or unique species which depend on biodiverse native plant communities. The following species could occur: *Rubus fulleri* (threatened), *Rubus semisetosus* (threatened), *Rubus stipulatus* (endangered), *Gaylussacia baccata* (threatened), *Viola lanceolata* (threatened), Red shouldered hawk (special concern). A record of *Epidemia epixanthe michiganensis*, Bog Copper is associated with a nearby southern tamarack swamp; this butterfly species is Tracked in the MN heritage database and is included as a species of greatest conservation need in Tomorrow's Habitat for the Wild and Rare. Recent aquatic plant surveys of small, shallow lakes in northern Washington County have recently observed *Potamogeton bicupulatus* (endangered) and *Najas gracillima* (special concern), as well as county records and rarities including *Nitella* spp. and *Ceratophyllum echinatum*.

What are the elements of this proposal that are critical from a timing perspective?

It is critical to protect undeveloped natural spaces while they still exist. It is particularly urgent to protect, and ultimately enhance/restore, wetland systems which improve landscape resiliency to climate change. The City of Forest Lake and Interstate 35 corridor are expected to expand in terms of population and impervious surface development between now and 2040.

Creation of floodplain storage is an urgent need in Minnesota as precipitation and storm severity increase with climate change. The proposed wetland restoration will add volume storage and mitigate flooding around Bone Lake and downstream.

Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:

The restoration/enhancement area constitutes a major portion of a Regionally Significant Ecological Area (RSEA) corridor and area with the highest priority ranking (3). This RSEA connects Bone Lake to the larger Hardwood Creek Corridor to the southwest and Big Marine Lake Corridor to the south. The MCBS polygons proposed for acquisition constitute the center of this highest priority RSEA area.

This property represents one of the last areas, especially within the Metro, with 200+ acres of contiguous habitat with a largely intact wetland habitat. The wetland resides almost entirely within the property and thus offers an excellent opportunity to enhance hydrology and impound additional water without affecting multiple adjacent landowners.

NHIS identified the presence of the threatened Blanding's turtle in the area. The District conducted a diagnostic study in 2015, collecting flow and water quality samples at the outflow of this wetland complex. Monitoring indicates this tributary contributes 75 lb/yr of phosphorus to Bone Lake. The District took wetland sediment cores, identifying areas with elevated phosphorus concentrations, likely due to historic cattle operations adjacent to the wetland.

Wetland restoration will likely entail excavation of phosphorus-laden legacy sediments, water impoundment, and targeted habitat restoration. Approximately 105 acres of cropland exist on the property, which would be restored to either prairie or oak savanna, both of which are an underrepresented habitat type for the Metro area. There are approximately 18 acres of Tamarack Swamp and 6 acres of Hardwood Forest, which the District proposes to enhance. The primary outcome of restoration/enhancement activities will be habitat enhancement, particularly for the threatened Blanding's turtle. Secondary benefits include added water storage and water quality improvement. Protection, restoration, and enhancement of the uplands directly affects the quality of the MCBS-mapped rich fens and minerotrophic tamarack swamps with regard to water quality, water temperature, and timing/frequency of water entering the wetland system via surface water runoff (rapidly) or groundwater infiltration (slowly over long

durations). This has direct implications on these groundwater-dependent wetland plant communities and habitat quality.

Which top 2 Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

Other : Lower St. Croix 1W1P 2021-2030 Comprehensive Watershed Management Plan and Comfort Lake-Forest Lake Watershed District 2022-2031 Watershed Management Plan

Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.

This proposal will restore natural resources and habitat functions, making the site more resilient to climate change. The proposed wetland restoration will increase flood storage. Restoration of prairie/oak savanna will reduce erosion and sediment loss on the landscape.

Additionally, this proposal will enhance southern rich tamarack/conifer swamp (FPs63) and northern rich fen (OPn92) from long term endangerment from invasive species (glossy buckthorn, reed canary grass, phragmites, etc.).

Indicator species benefitting from restoration/enhancement activities include monarch butterfly, Blanding's turtle, trumpeter swan, and mallards.

Which LSOHC section priorities are addressed in this proposal?

Northern Forest

Restore and enhance habitat on existing protected properties, with preference to habitat for rare, endangered, or threatened species identified by the Minnesota County Biological Survey

Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:

This site is located in northern Washington County, in the City of Scandia which does not impose hunting restrictions beyond Minnesota regulations. Once fully restored and open to the public, this site will be an excellent hunting resource for both upland bird and waterfowl.

This proposal addresses priority actions and outcomes of the above-described ecological sections, and it will produce and demonstrate significant and permanent conservation legacy and habitat outcomes for game and wildlife.

The habitat enhanced and restored for game and other wildlife through this project will be protected through public ownership by the Comfort Lake–Forest Lake Watershed District, creating a significant and permanent conservation legacy. Restoration and enhancement activities will provide benefits for the threatened Blanding's turtle and other native species. This project includes a rare type of forested wetland system: southern rich conifer swamp (FPs63), conservation rank S2/S3, which is imperiled/vulnerable to extirpation and on the southern edge of its range in Minnesota. This proposal will protect FPs63 from long term endangerment from invasive species (glossy buckthorn, reed canary grass, phragmites, etc.).

Outcomes

Programs in the northern forest region:

Healthy populations of endangered, threatened, and special concern species as well as more common species ~
Performance measures: The District will report on acreage of wetland, prairie, and forest actually restored and enhanced, including habitat created for the monarch butterfly, Blanding's turtle, trumpeter swan, mallard, white-tail deer, and Rusty-patched bumblebee.

What other dedicated funds may collaborate with or contribute to this proposal?

Clean Water Fund

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 does not supplant or substitute for any other funding.

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

Comfort Lake-Forest Lake Watershed District levies approximately \$1.8 million annually in order to support ongoing operations including a full-time permanent staff of 10 employees and regular land management inspections and maintenance actions. As part of Phase 1 of the project, the District will develop a restoration and management plan for the site, which will include a schedule for inspection and maintenance activities. The restoration and management plan will be in compliance with MS 97A.056, Subd. 13., paragraph (c), including identification of sufficient funding for implementation. The District will erect signage according to Laws 2009, chapter 172, article 5, section 10.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
Ongoing	CLFLWD Tax Levy	Annual inspection	Necessary maintenance actions identified from inspection and in accordance with site Restoration & Management Plan	-

Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:

The Comfort Lake-Forest Lake Watershed District values equity, & inclusion, and is committed to accessibility, diversity, and fairness in all actions. We seek to use diversity, equity, and inclusion as a lens in project, partner, and contractor selection. As part of its Floodplain Vulnerability Assessment, the District worked with Zan Associates to conduct an equity analysis, and equity was a major factor in the decision-making process of the Floodplain Vulnerability Assessment. The District created a custom social vulnerability layer as part of its Floodplain Vulnerability Assessment in order to prioritize projects in areas with individuals below the poverty line, renter households, lone parents, young children, people aged 75 years and older, population density, individuals without a high school diploma, and persons for whom English is a second language. Restored and enhanced lands as part of this proposal will be open to all members of the public for hiking, bird watching, hunting, and other outdoor recreational activities. The District will also implement access/information/educational signs in several languages so as to encourage use of the property by underserved/underrepresented populations. Target languages, based on communities present in the Twin Cities area, include Spanish, Hmong, and Somali.

Activity Details

Requirements

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?

Other : Watershed District owned

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

Will insecticides or fungicides (including neonicotinoid and fungicide treated seed) be used within any activities of this proposal either in the process of restoration or use as food plots?

No

Other OHF Appropriation Awards

Have you received OHF dollars through LSOHC in the past?

Yes

Are any of these past appropriations still OPEN?

Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2023	\$1,942,000	-	-	-
Totals	\$1,942,000	-	\$1,942,000	0.0%

Timeline

Activity Name	Estimated Completion Date
Activity 1 - Complete project feasibility and order project	March 2027
Activity 2 - Wetland restoration/enhancement	December 2030
Activity 3 - Prairie/Forest restoration/enhancement	December 2030

Budget**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	-	\$162,500	CLFLWD Tax Levy	\$162,500
Contracts	\$1,287,400	-	-	\$1,287,400
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	\$297,600	-	-	\$297,600
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$40,000	-	-	\$40,000
DNR IDP	-	-	-	-
Grand Total	\$1,625,000	\$162,500	-	\$1,787,500

Personnel

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
CLFLWD Staff (Outreach, Project Mgmt, Planning, Coordination)	0.21	5.0	-	\$162,500	CLFLWD Tax Levy	\$162,500

Amount of Request: \$1,625,000**Amount of Leverage:** \$162,500**Leverage as a percent of the Request:** 10.0%**DSS + Personnel:** -**As a % of the total request:** 0.0%**Easement Stewardship:** -**As a % of the Easement Acquisition:** -

Total Leverage (from above)	Amount Confirmed	% of Total Leverage	Amount Anticipated	% of Total Leverage
\$162,500	\$162,500	100.0%	-	0.0%

Detail leverage sources and confirmation of funds:

All CLFLWD staff time will be funded by local CLFLWD tax levy.

Does this proposal have the ability to be scalable?

Yes

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

We would prioritize the wetland restoration component of the project, meaning we would remove the Prairie Restoration, Wetland Enhancement, and Forest Enhancement components. We would need to scale back the wetland restoration component by 25%. Project outreach and signage would be scaled back by 50%.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Not applicable

If the project received 30% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

30% funding would be under the minimum \$500,000 LSOHC threshold.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Not applicable

Contracts

What is included in the contracts line?

Restoration and enhancement contracts.

Professional Services

What is included in the Professional Services line?

Design/Engineering

Surveys

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	23	105	0	0	128
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	18	0	6	0	24
Total	41	105	6	0	152

Restoration/Enhancement Acres Breakdown of Existing Protected Lands (Table 1a.2)

	RESTORE		ENHANCE	
	Lands acquired with OHF	Lands NOT acquired with OHF	Lands acquired with OHF	Lands NOT acquired with OHF
DNR Lands (WMA, State Forests, etc)	-	-	-	-
Non-DNR Lands (city, state, federal, etc.)	128	-	24	-
Easements	-	-	-	-
Total	128	-	24	-

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	\$991,300	\$495,400	-	-	\$1,486,700
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$76,500	-	\$61,800	-	\$138,300
Total	\$1,067,800	\$495,400	\$61,800	-	\$1,625,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	0	128	128
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	0	0	0	0	24	24
Total	0	0	0	0	152	152

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	\$1,486,700	\$1,486,700
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	\$138,300	\$138,300
Total	-	-	-	-	\$1,625,000	\$1,625,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	\$43,100	\$4,718	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	\$4,250	-	\$10,300	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	\$11,614
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	\$5,762

Target Lake/Stream/River Feet or Miles

Parcels

Sign-up Criteria?

No

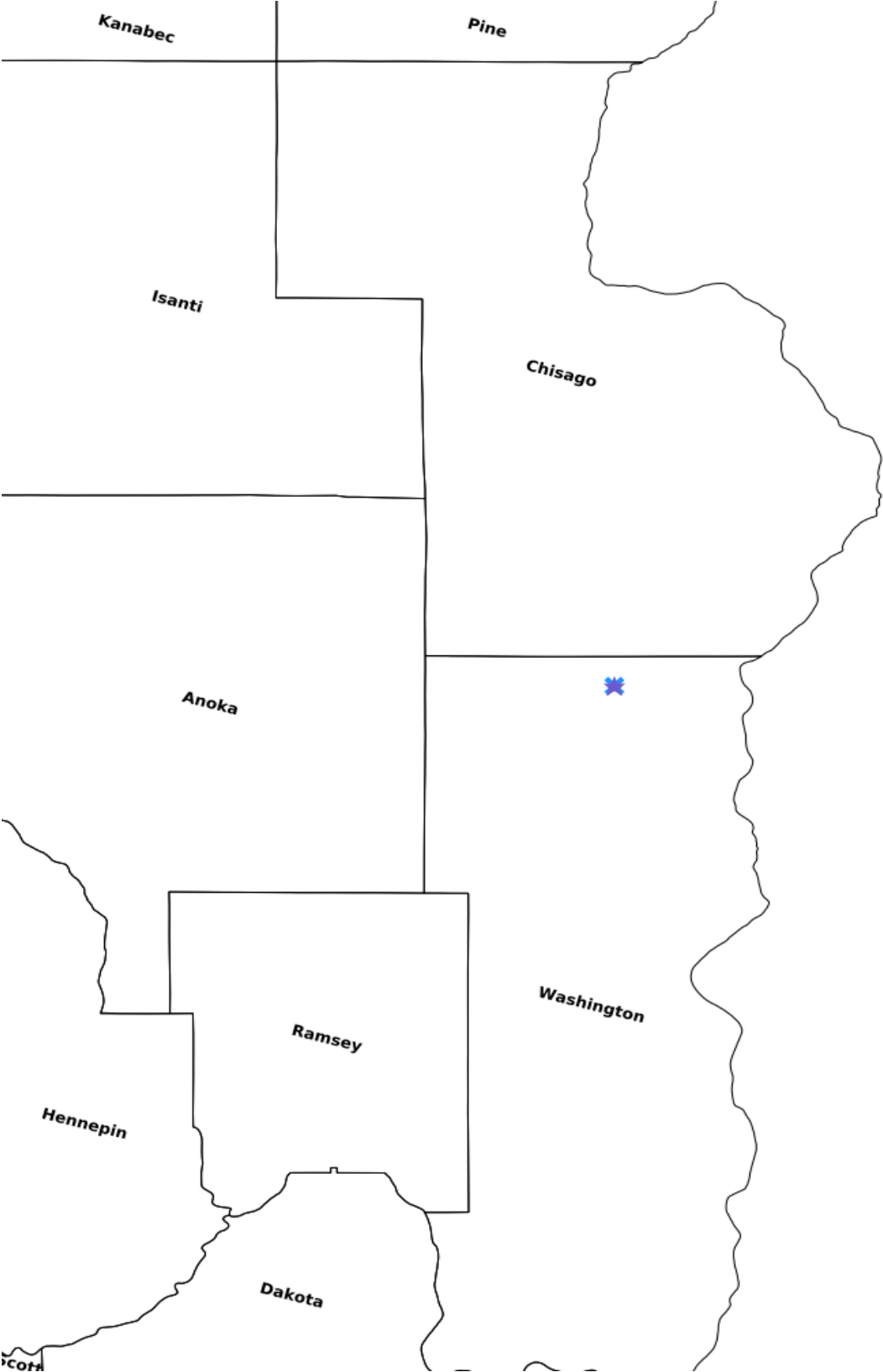
Explain the process used to identify, prioritize, and select the parcels on your list:

These parcels are located within the high priority Bone Lake South Wetland area, which is identified in the District's 2022-2031 Watershed Management Plan. The District identified this high priority area for protection/enhancement due to the site's presence of the threatened Blanding's turtle; presence of native plant communities connected with groundwater, including wet meadow/shrub carr and forested wetland; presence of wetland habitat and water storage potential; potential for prairie habitat restoration; proximity to Bone Lake, which is impaired for aquatic recreation due to eutrophication; and high pollution sensitivity of near-surface materials. MCBS native plant communities include shrub swamp, rich fen (transition), and tamarack swamp minerotrophic subtype. The project will permanently protect and enhance a variety of upland and wetland plant community types including an area of southern tamarack swamp (FPs63) which is rare in the State (S2/S3).

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Bone Lake South Property	Washington	03220208	24	\$138,331	Yes	Enhancement acres
Bone Lake South Property	Washington	03220208	128	\$1,486,669	Yes	Restoration acres

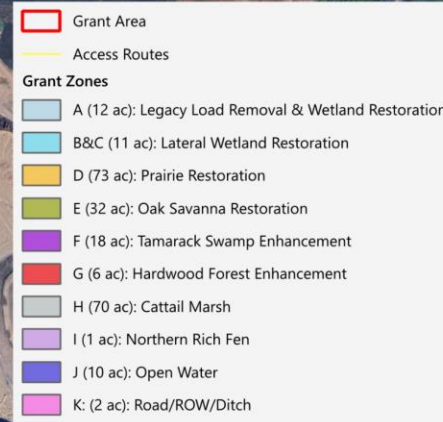
Parcel Map



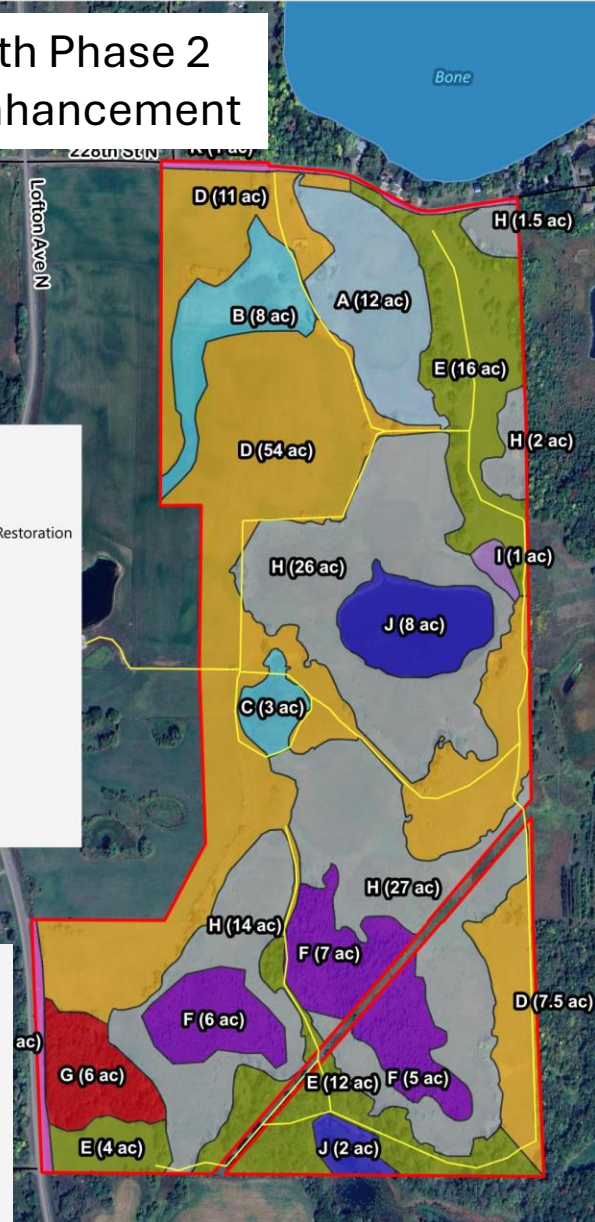
- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✱ Enhance
- ✚ Other

Bone Lake South Phase 2 Restoration & Enhancement

Date: 2025-05-07T13:51:53.344 Author: Nick Hayden Layout: RM Stuehlig
Document Path: postgis\\gisdata\\services\\com\\c:\\s322\\auth\\g=ecord\\s3mode=required\\name=project\\s3schema=00376_0214_m\\s3project=working_2025_grant



Total Area: 236 acres
Wetland Restoration: 23 acres
Prairie/Savanna Restoration: 105 acres
Wetland Enhancement: 18 acres
Forest Enhancement: 6 acres
Non-Grant Area (e.g., existing open water): 84 acres



**Bone Lake South
Restoration**

May 2025 LSOHC Grant Application
5/7/2025

