

**DIVISION OF FISH AND WILDLIFE
CONSERVATION PARTNERS LEGACY GRANT**

Revision: 20191104

Data Date: December 30, 2024

PROJECT CONTACT

Project Name: Rotary Nature Preserve Wetland Restoration
Organization Name: Vadnais Lake Area Water Management Organization
Organization Type: Government
Mailing Address 1: 800 East County Road E
City, State ZIP Code: Vadnais Heights, MN 55127

Project Manager: Dawn Tanner
Title: Program Development Coordinator
Phone: 612-859-2925
Email: dawn.tanner@vlawmo.org

PROJECT OVERVIEWSites / Location

County Name: Ramsey
Project Site Name: Rotary Park Nature Preserve
Total Project Sites: 1
Total Project Acres: 21

Land Ownership

Primary Land Ownership: Local Government
Additional Land Ownerships: (N/A)

Habitat

Primary Type: Wetland
Additional Types: (N/A)

Activities

Primary Activity: Restoration
Additional Activities: (N/A)

PROJECT FUNDING SUMMARY

Grant Type: Metro
Grant Request Level: Over \$25,000

Total Grant Amount Requested: \$110,250
Total Match Amount Pledged: \$12,250
Additional Funding Amount: \$0

Total Project Cost: \$122,500

PROJECT SUMMARY

The Rotary Park Nature Preserve is a 36-acre City Park, adjacent to Birch Lake. Birch Lake has been the focus of shoreline restoration projects, an iron-enhanced sand filter, and adjacent woodland restoration. Restoration of the woodland was facilitated by expedited CPL grants for seeding and enhancement. All completed projects are currently being maintained either by Natural Shore Technologies or by VLAWMO staff.

Rotary Park Nature Preserve has been part of a priority upland restoration multi-year project in partnership between the City of White Bear Lake, VLAWMO, and the Rotary Club. Upland areas are currently in phase 3 (of 3) and nearing completion, upon which those areas will transition into a maintenance regime.

In preparation for upland restoration completion and planning for continuation of restoration in the park, VLAWMO and the City of White Bear Lake worked with Natural Shore Technologies to prepare a prioritization plan for wetland restoration. That prioritization plan is included as an attachment to this application. The plan provides a phased and adaptive approach for restoration of the 21 acres of wetland in the park. Once restoration is complete, the project will transition into the ongoing maintenance program. This proposal is requesting support for years 1-4 (2025-2028) of the project work. Project partners will include year 5 in their proposed budgets for 2029.

Preserving and encouraging the expansion of remnant stands of native vegetation is imperative for maintaining the biodiversity and ecological health of the Rotary Nature Preserve wetland. Strategic invasive weed control is an important component of this work that includes implementing a host of efficient and economical management approaches and a site-wide prioritization scheme. Following invasive treatment, native seed and plants will be added. Active and passive ecological restoration are

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PROJECT SUMMARY *(Continued)*

included in the plan. Throughout the project, monitoring and use of an adaptive management framework will be implemented to allow for real-time adjustments, based on plant community response and evolving site conditions. Highlighted areas with education and increased forb diversity will be featured close to pathways and boardwalks that allows for easy access and observation. These focal areas will facilitate educational opportunities and promote community engagement.

PROBLEM STATEMENT

Prior to current and upcoming restoration efforts with project partners, Rotary Park had become highly infested with buckthorn, honeysuckle, amur maple, reed canary grass, purple loosestrife, hybrid cattail, and others. Native species are also present at the site, and their expansion will be facilitated with this project. Upland areas and nearby priority areas around the lake have been the focus of previous and current restoration efforts. The wetland area was identified as a priority for restoration, following completion of the upland areas. A network of trails, boardwalk, and viewing areas are features of the park that are highly used by residents and visitors. Education signage is already part of the trail network and will have an opportunity for expansion with this wetland restoration effort.

This Preserve has a rich history and is a local destination for walkers, hikers, birders, and other outdoor enthusiasts. Popular trails and a boardwalk provide easy access to plant and wildlife viewing. A link to naturalist observations can be found on iNaturalist. A log pavilion is available for neighborhood gatherings. In 2022, White Bear Lake began an effort to remove invasive woody plant species and restore wetland buffers on the eastern portion of the system adjacent to the walking path (White Bear Lake Plan). This wetland restoration will build on and complement prior restoration efforts, providing guidance on how to effectively preserve and enhance the native plant communities that are present in this unique ecological system.

Fieldwork to conduct wetland plant community assessments took place on three separate occasions between May and October, 2023. The main goal of this effort was to characterize and map existing plant community types throughout the wetland complex. A global positioning system (GPS) was used to delineate distinct vegetation types, and then later, these data sets were compiled to generate maps that clearly describe and georeference the vegetation found in the Rotary Nature Preserve wetland.

The 36-acre nature preserve was surveyed, and 11 unique plant cover types were identified: 7 wetland and 4 upland communities. A focus was included on invasive-dominated areas to inform treatment practices. The entire site was mapped to determine the distribution of these cover types (see prioritization study for more details regarding pre-project site description).

PROJECT OBJECTIVES

Expected results of the project include restored habitat for water quality and wildlife habitat that is accessible and interpreted for the public. Measurable results will include number of acres restored, plant diversity change pre vs. post project, and potential water-quality changes in connected waterbodies.

The budget is cost-effective because VLAWMO and the City of White Bear Lake have experience working with Natural Shore Technologies (NST) and NST demonstrates habitat support and improvements annually on completed watershed projects. The prioritization study has been provided to identify needs and steps for the restoration, recognizing that an adaptive approach is necessary to allow response to changing conditions throughout the project. Staff time and administration is minimized to use existing procedures and logistics within VLAWMO and focus funds on fieldwork, translating to maximized results in reduction of invasive species, addition and expansion of native-species dominated areas, and increased resources for pollinators. Community involvement is also included to improve understanding regarding the restoration process and highlight species diversity found within the preserve.

Adjacent areas are part of this overall project vision. Previously completed projects in the immediate area include shoreline restoration, neighboring cost-share residential grants, the iron-enhanced sand filter and adjacent restoration area, and invasive species reduction through handpulling within Birch Lake. The overall area includes a suite of projects that function as a matrix of high-quality habitat to improve water quality, support wildlife, and provide educational and recreational opportunities for people. The network of stakeholder already working on this area provide a solid baseline of support to continue expanding educational efforts and including onsite signage and involvement of the local school(s).

METHODS

VLAWMO, the City of WBL, and Natural Shore Technologies (NST) are planning to work together to conduct the work. VLAWMO and the City anticipate working with NST to do the work (RFQs have not been requested at this time), as described

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METHODS *(Continued)*

in more detail in the attached prioritization study. Activities will include:

- 1) Control Outlier Weeds within High Quality Wetland Areas
 - a) Why: minimize the expansion of invasive weed species within stands
 - b) Target WMn82b and MRn93 stands
 - c) Spot mow (weed whip) early in the growing season to reduce seed production
 - d) Cut small patches of invasive cattail below the water
 - e) Wick individual plants with herbicide in late summer-early fall

- 2) Treat the Perimeter of High Quality Wet Meadow Areas
 - a) Why: Expand the coverage of native wet meadow areas
 - b) Target RCG/PL and RCG/PL/CT areas around WMn82b stands
 - c) Treat adjoining outer bands of invasive weeds with glyphosate-type herbicide
 - d) This approach has proven to be successful in wetland areas on the MN Arboretum Campus
 - e) Closely monitor treated areas to determine if native species recolonize without seeding or planting (passive restoration)
 - f) If native plant establishment does not take place, develop and implement a revegetation plan for the treated areas (active restoration)

- 3) Restore and Manage Emergent Marsh and Wet Meadow by the Boardwalk
 - a) Why: Reduce invasive weed cover and increase native plant diversity
 - b) Target both MRn93 and WMn82b1 areas
 - c) Spot treat cattail and RCG with a glyphosate-type herbicide
 - d) Intensively plant area with aggressive wetland and emergent plant species
 - e) Explore interpretive signage and volunteer planting

- 4) Investigate Purple Loosestrife Beetle Rearing
 - a) Why: Reduce purple loosestrife cover sitewide
 - b) Determine if leaf-eating beetle populations are low
 - c) If so, research the possibility of beetle rearing and release with volunteers

- 5) Treat RCG Areas Adjacent to Buffer Restoration Areas
 - a) Why: Restore highly visible RCG wetland areas on the east side of the wetland, by the walking paths and adjoining newly installed upland buffer areas
 - b) Broadcast spray highly degraded RCG areas on the east side of the wetland
 - c) Closely monitor response - multiple treatments will likely be required
 - d) Actively restore these areas with a combination of seeding/planting - introduce aggressive native wetland species

EXPERIENCE / ABILITIES

VLAWMO and the City of WBL have been working with NST on a variety of restoration projects in the watershed and City of White Bear Lake. Projects have been completed on time, within budget, and transitioned smoothly into our suite of projects included in our annual maintenance contract. A previous 2.0-acre restoration site is adjacent to the iron-enhanced sand filter that is the last stop before water flows into Birch Lake on the north side. That restoration is in its 5th year and has high native woodland plant diversity. Plants are successfully reseeding the area with a high coverage of natives in 2024. VLAWMO staff conduct ongoing maintenance, including spot treatment and removal of buckthorn, Japanese hedge parsley, and garlic mustard. NST maintains the filter site and shoreline restoration.

A current project in North Oaks involves VLAWMO and NST conducting wetland-plant enhancement for a recently completed (fall 2023) constructed deep-water wetland. The enhancement effort is in high gear during fall 2024. Maintenance will continue for 10+ years, as established in that grant.

Recent grants include expedited CPL, MPCA small priority watershed 16-year program, MPCA/319 project-based meander construction (completed 2021), BWSR watershed-based funding ongoing grants, MDA invasive species removal grants, and an AIS removal grant in Birch Lake. All grants are successfully completed, and a pre-planning/feasibility process is utilized prior to grants.

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PROJECT TIMELINE

Time Frame	Goal
Spring through fall 2025	Spot herbicide, Target RCG/PL and RCG/PL/CT
Spring through fall 2026	Spot herb., target inv's, seed, plant
Spring through fall 2027	Site prep., seed, plant, erosion control
Spring through fall 2028	Site prep., seed, plant, erosion control

Estimated Project Completion Date: 2028-06-30

PROJECT INFORMATION

1. Describe the degree of collaboration and local support for this project.

VLAWMO, the City of White Bear Lake, the Rotary Club, and NST are all collaborating closely on this project. Collaboration has included site investigation and prioritization, annual MOUs, field days with Birch Lake Elementary, and restoration of the upland sites that is currently being completed. Partners have been engaged and involved over multiple years in preparation for this wetland restoration multi-year project.

2. Describe any urgency associated with this project.

The upland restoration is currently being completed. The wetland areas are critical in supporting water quality improvement, native species present, to maintain momentum currently underway in restoration, and to support gains made in completed restoration areas (e.g., not allowing invasive species present in the wetland areas to recolonize completed areas).

3. Discuss if there is full funding secured for this project, the sources of that funding and if CPL Grant funds will supplement or supplant existing funding.

VLAWMO and the City of White Bear Lake have been budgeting for support of restoration in the park in their annual budgets. Planning is included for the wetland portion of restoration. Budgets have not been approved for the duration of the project. Grant support is critical toward completion of the multi-year goals and objectives.

4. Describe public access at project site for hunting and fishing, identifying all open seasons.

Public access includes a network of trails, boardwalk, viewing platform, shelters for picnic/gathering, and restrooms. There is no hunting in the park. Fishing access occurs at walk-in spots on adjacent Birch Lake.

5. Discuss use of native vegetation (if applicable).

Highlighted species planned for restoration are included in the attached prioritization study and include: Bolboschoenus fluviatilis River bulrush (Calamagrostis canadensis) Canada bluejoint, (Carex atherodes) Slough sedge, (Carex lacustris) Lake sedge, (Carex vulpinoidea) Fox sedge, (Carex stricta) Tussock sedge, (Eleocharis spp.) Spikerush, (Schoenoplectus tabernaemontani) Softstem bulrush, (Scirpus cyperinus) Woolgrass, (Spartina pectinata) Prairie cordgrass, (Acorus americanus) Sweet flag, (Asclepias incarnata) Swamp milkweed, (Eutrochium maculatum) Joe-pye weed, (Iris versicolor) Blue flag iris, (Mimulus ringens) Monkey flower, (Sagittaria latifolia) Arrowhead, (Scutellaria galericulata) Marsh skullcap, (Silphium perfoliatum) Cup plant, (Sparganium americanum) Bur-reed, (Verbena hastata) Blue vervain, (Pteridophyta Onoclea sensibilis) Sensitive fern, (Thelypteris palustris) Northern marsh fern

6. Discuss your budget and why it is cost effective.

The restoration prioritization scheme that takes into account: 1) the preservation and expansion of remnant patches of native vegetation, 2) the distribution and abundance of invasive weed species cover, 3) the ease and potential effectiveness of management, and 4) the logistics related to public engagement opportunities. Below, we outline a broad approach that optimizes the use of limited resources, maximizes the overall impact of restoration activities, and fosters the sustained functionality of this wetland system. This is a starting point for developing a long-term management plan. Additionally, we believe that the viability of a management plan, in part, is determined by integrating education and public outreach into the prioritization scheme. This ensures that restoration efforts actively engage and educate local communities, creating a more informed and committed constituency for ongoing conservation efforts.

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PROJECT INFORMATION *(Continued)*

7. Provide information on how your organization encourages a local conservation culture. This includes your organization's history of promoting conservation in the local area, visibility of work to the public and any activities and outreach your organization has completed in the local area.

We have a network of highly visible demonstration sites for different types of restorations and to support pollinators. This includes a 15+-acre wooded wetland restoration project at Vadnais Heights City Hall, a pocket prairie, a tended native species garden at the Commons Event Center, in addition to the projects previously mentioned in this proposal. VLAWMO also provides internal cost-share grants to support the addition of raingardens, native species to support pollinators, and partnership with municipal street projects to include residential habitat/water-quality projects. The cost-share grant program is very popular. Funds are often expended early in the year and increased to support resident interest. Neighborhood tours highlight residential completed grants and highlight their beauty, feasibility, and partnership/mentorship by connecting interested residents with those who have completed projects. We provide a high level of support for projects and emphasize maintenance.

BUDGET INFORMATION

Organization's Fiscal Contact Information

Name: Dawn Tanner
Title: Program Development Coordinator
Email: dawn.tanner@vlawmo.org
Phone: 612-859-2925

Street Address 1: 800 East County Road E
Street Address 2: Attn: VLAWMO
City, State ZIP Code: Vadnais Heights, MN 55127

Budget Details

Personnel

<u>Name</u>	<u>Title / Work to be completed</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Dawn Tanner	PM, admin, site visits	\$2,500	Match	In-Kind

Contracts

<u>Contractor Name</u>	<u>Contracted Work</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Natural Shore Technologies	See attached budget document	\$110,250	Grant	(N/A)
Natural Shore Technologies	See attached budget document	\$9,750	Match	Cash

Additional Funding

Additional Funding Amount: \$0

Budget Overview

<u>Item Type</u>	<u>Grant</u>	<u>Match</u>	<u>Total</u>
Personnel	-	\$2,500	\$2,500
Contracts	\$110,250	\$9,750	\$120,000
Fee Acquisition with PILT	-	-	-
Fee Acquisition without PILT	-	-	-
Easement Acquisition	-	-	-
Easement Stewardship	-	-	-
Travel (in-state)	-	-	-
Professional Services	-	-	-
DNR Land Acquisition Cost	-	-	-
Equipment/Tools/Supplies	-	-	-
Additional Budget Items	-	-	-
Totals:	\$110,250	\$12,250	\$122,500

SITE INFORMATION

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SITE INFORMATION *(Continued)*

You may group your project sites together as long as land ownership, activity and habitat information is the same for the land manager.

Land Manager

Name: [Lindy Crawford](#)

Organization: [City of White Bear Lake](#)

Title: [City Manager](#)

Phone: [651-429-8516](#)

Email: lcrawford@whitebearlake.org

Site Information

Habitat: [Wetland](#)

Activity: [Restoration](#)

Land Ownership: [Local Government](#)

(1) **Site Name:** [Rotary Nature Preserve](#)

DOW Lake #: [\(N/A\)](#)

Acres: [21](#)

PLS Section: [Township - 30, Range - 22W, Section - 15](#)

Open to Public Hunting? [No](#)

Open to Public Fishing? [Yes - some](#)

NATURAL HERITAGE DATABASE REVIEW

Natural Heritage elements were found within my project site(s): [Yes](#)

Natural Heritage Sites and Managers: [\(N/A\)](#)

Natural Heritage Elements: [\(N/A\)](#)

Natural Heritage Mitigation: [Blandings turtle \(Emydoidea blandingii\)](#) have been documented in the area but not in the park.

[Rusty-patched bumble bee \(Bombus affinis\)](#) is listed on the northern edge of Rotary Park.

[Trumpeter swans \(Cygnus buccinator\)](#) are listed within 1 mile. We have not seen Trumpeter swans in the park, but they are widely present in the watershed, especially at Sucker Channel and Pleasant Lake in the winter. There is a nest site at Wilkinson Lake in the watershed.

Habitat will be improved for all species of conservation concern. Invasive plant treatment will not negatively impact these species.

ATTACHMENTS

Additional Documentation

Attach additional documentation as applicable using the appropriate categories below. If you exceed the size limit while uploading, contact CPL Grant staff to discuss your options.

Letter of Support

File Name

Description

[Letter_of_Support_cpl_signed.pdf](#)

Restoration Plan

File Name

Description

[NST_-_Rotary_Nature_Preserve_Assessment_compressed.pdf](#)

Supplemental Document

File Name

Description

[CPL_Public_Waters_Project_-_pub-water-project_-_Rotary_Nature_Preserve.pdf](#)

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ATTACHMENTS *(Continued)*

Supplemental Document *(Continued)*

File Name	Description
Rotary_Park_Budget-NST-12-23_adjusted_to_start_in_2025.doc	Budget and activity description

FINAL APPLICATION SUBMISSION

- P I certify that I have read the Conservation Partners Legacy Grants Program Request for Proposal, Program Manual and other program documents, and have discussed this project with the appropriate public land manager, or private landowner and easement holder.
- P I certify I am authorized to apply for and manage these grant and match funds, and the project work by the organization or agency listed below. I certify this organization to have the financial capability to complete this project and that it will comply with all applicable laws and regulations.
- P I certify that all of the information contained in this application is correct as of the time of the submission. If anything should change, I will contact CPL Grant staff immediately to make corrections.
- P I certify that if funded I will give consideration to and make timely written contact to Minnesota Conservation Corps or its successor for consideration of possible use of their services to contract for restoration and enhancement services. I will provide CPL Grant staff a copy of that written contact within 10 days after the execution of my grant, should I be awarded.
- P I certify that I am aware at least one Land Manager Review and Approval form is required for every application and at least one Public Waters Contact form is required for all public waters work. I am aware I must submit all completed forms by uploading them into this application. I have attached the required type and number of forms as necessary for this project.
- P I am aware that by typing my name in the box below, I am applying my signature to this online document.

Signature: [Dawn Tanner](#)

Organization / Agency: [Vadnais Lake Area Water Management Organization](#)

Title: [Program Development Coordinator](#)

Date Signed: [September 17, 2024](#)

(CPL Grant Application ID = 2476)