

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

Attachment B

Revision: 20191104

Data Date: April 27, 2022

PROJECT CONTACT

Project Name: Arbor Lakes Wildlife Habitat Enhancement
Organization Name: City of Maple Grove
Organization Type: Government
Mailing Address 1: 9030 Forestview Ln N.
City, State ZIP Code: Maple Grove, MN 55369

Project Manager: Rob Heitke
Title: Park Maintenance Supervisor
Phone: 763-600-4223
Email: rheitke@maplegrovern.gov

PROJECT OVERVIEW

Sites / Location

County Name: Hennepin
Project Site Name: Maple Grove Arbor Lakes
Total Project Sites: 8
Total Project Acres: 50

Land Ownership

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

Habitat

Primary Type: Fish, Game or Wildlife Habitat
Additional Types: (N/A)

Activities

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

PROJECT FUNDING SUMMARY

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

Total Grant Amount Requested:	\$143,196
Total Match Amount Pledged:	\$15,000
Additional Funding Amount:	\$9,000
Total Project Cost:	\$167,196

PROJECT SUMMARY

The Maple Grove Arbor Lakes Wildlife Habitat Enhancement Project seeks to enhance approximately 50 acres of primarily grassland habitat in parks surrounding several lakes and storm water basins in the downtown district of Maple Grove. The project area consists of naturalized park land and over 3.75 miles of shoreline around five lakes, collectively referred to as the Arbor Lakes. The lakes are nested within a diverse complex of parks, open spaces, community facilities, businesses, and residential buildings. An extensive paved trail system connects all of the project areas, including loops around each lake for outdoor recreation and wildlife observation. The vegetation in the project area currently provides relatively poor wildlife habitat due to dominant cover by nonnative grasses and invasive species, with lesser cover by planted prairie, shrubs, and trees. The City of Maple Grove is striving to improve wildlife habitat and water quality protection by increasing the native prairie vegetation cover surrounding each waterbody. A 5-Year Natural Resources Management Plan (NRMP) was developed in 2021 to identify the specific ecological restoration activities, tasks, methods, and schedule for the project site. This project is envisioned to be Phase I (Years 1-3) of longer-term efforts to manage the invasive plants in the project area and begin the process of restoring native prairie and enhancing the lake shorelines. We are looking forward to accelerating our efforts to support wildlife habitat and protect natural resources in the city through incorporating native prairie and wetland vegetation in these exceptionally visible and publicly accessible park areas.

PROBLEM STATEMENT

The City of Maple Grove Parks and Recreation System Plan (2018) states several goals for Maple Grove, including caring for and managing natural resources within parks and open space and educating residents to be stewards of the natural environment. This project represents an important opportunity to accelerate care and enhancement of wildlife habitat that would otherwise be delayed due to insufficient traditional funding for park natural resources management. In addition to improving wildlife habitat within an otherwise highly developed location, this project was identified by park staff for improving the overall

PROBLEM STATEMENT *(Continued)*

sustainability and resilience of the park vegetation in the face of our changing climate as well as protecting water quality in the Arbor Lakes. The project affects wildlife habitat quality, reduces soil erosion, promotes soil health, and offers visitor opportunities for wildlife observation, peaceful contemplation, and nature appreciation.

The naturalized vegetation of the Arbor Lakes project occurs on moderate slopes around each lake, often on either side of a loop trail that provides nearly unobstructed lake and shoreline views. Apart from water access near the amphitheater at West Arbor Lake, foot traffic is generally confined to the paved trails, leaving shoreline vegetation intact. Vegetation cover is currently dominated by nonnative grasses (such as smooth brome and Kentucky bluegrass) and invasive plants, with scattered shrub and tree plantings and patches of prairie vegetation or scattered prairie plants. Invasive species such as leafy spurge, crown vetch, Canada thistle, and birds-foot trefoil are common in upland areas, while purple loosestrife, nonnative cattails, and European common reed occur along the shorelines. Amur maple, white mulberry, black locust, Siberian elm, and common buckthorn occur occasionally as well. As part of development of the 2021 NRMP, areas with higher concentrations and cover by invasive species were mapped to aid in determining the scope of control needs. Pockets of native prairie vegetation and areas with scattered prairie plants were also mapped to preserve and avoid during herbicide applications. Photo points were established in June of 2021 to document pre-project conditions throughout the project areas.

PROJECT OBJECTIVES

Expected project results include significantly increasing native prairie cover from about 4 acres to approximately 30 acres, reducing invasive species cover by over 75% on 50 acres, eliminating woody invasive species, and expanding areas with leafy spurge biocontrol. The project is anticipated to increase the resilience and sustainability of the park vegetation in the face of changing climate and weather conditions. Long-term maintenance costs are expected to be reduced through the establishment of a healthy prairie sod that will be more resistant to invasion by nonnative plants. The project offers multiple benefits ranging from improving wildlife habitat, stopover habitat for migrating waterfowl and songbirds, songbird nesting and foraging habitat, and pollinator resources, to water quality protection and improved near-shore habitat for shorebirds, amphibians, and more. Osprey have been observed grabbing fish from West Arbor Lake and bald eagles frequent the project site as well. The project site overall provides stepping stones of wildlife habitat in relative proximity to one another in an otherwise densely developed portion of Maple Grove.

METHODS

Integrated vegetation management will include prescribed fire, herbicide applications and mowing for invasive species control, biocontrol, supplemental seeding/planting native prairie species, and grow-in maintenance mowing/spot treatments. Prescribed burns in spring 2023 will remove thatch, invigorate existing prairie plants, and improve herbicide contact with invasive plants. Target invasives and treatment methods are in the 2021 NRMP. Due to extensive invasive cover, herbicide applications will initially involve a combination of boom spraying in areas with equipment accessibility and spot-spraying with backpack sprayers near water, sensitive vegetation, and areas only accessible on foot. Herbicide selection will provide the most targeted impact (i.e. broadleaf versus nonselective), appropriate for use near water, and applied at the lowest rate recommended for the target species. Applications will be timed for greatest impact to the target species while avoiding peak pollinator activity. Multiple applications are planned per year to target re-growth or misses. Mowing will be used to prevent seed production by annual and biennial weeds, and to prep areas for herbicide applications. Trained volunteers or staff may manage leafy spurge biocontrol insects in the project area by collecting/spreading them as needed.

Seeding will focus on using native prairie grasses that will establish quickly and provide ground cover and weed competition. The native grasses will allow for flexibility with follow-up invasive treatments using broad-leaf specific herbicides. Seeded areas will be spot mowed to aid establishment and spot sprayed as needed for problematic weeds. Volunteers will be invited to plant plugs in the spring of 2025 to supplement forb and sedge diversity.

An ecological restoration contractor will conduct the proposed invasive species management, prescribed burns, acquire seed, supplemental seed, and conduct grow-in maintenance. City staff plan to assist with spot mowing, biocontrol coordination, woody vegetation management of shrubs and trees in the project area and involving volunteers in plug planting.

A Phase 2 for the project site includes continuation of invasive species management, enhancement seeding with native prairie forbs and sedges, converting nonnative grass-dominated areas to prairie, supplemental seeding/planting shorelines, and periodic prescribed burns (or dormant season mowing) for prairie grow-in establishment.

EXPERIENCE / ABILITIES

We are well poised to successfully complete this proposed Phase I project through administration of the grant, contracting services with an ecological restoration firm, and coordinating and directing field tasks that can be completed by city staff and equipment. We have worked with an ecological restoration contractor on management of invasive species over the last two

EXPERIENCE / ABILITIES *(Continued)*

years. With this project, we are striving to leverage our administrative and project management experience to further expand and accelerate our natural resources management progress beyond what we have the capacity to complete in-house with existing field staff. The City of Maple Grove has experience with the planning, construction and management of several large multi-million dollar park projects. In the planning of these, we have incorporated natural landscapes such as native prairie plantings around storm water ponds and run off areas, low maintenance turf plantings, new ponds and wildlife habitat. The City also manages two large native forest preservation areas. Staff have direct experience implementing responsible methods of control for invasive species such as buckthorn and Canada thistle. This project provides an opportunity to more closely align management of city park areas with city goals for thoughtful management of natural areas and enhancing areas with naturalized habitat.

PROJECT TIMELINE

Time Frame	Goal
Summer 2022 - Summer 2025	Herbaceous invasive control (50 ac)
Winter 2023, 2024	Woody invasive control (3 ac)
Winter 2023	Seed acquisition (25 ac)
Spring 2023	Prescribed Burn (50 ac)
Spring 2023	Supplemental seeding (25 ac)
Summer 2023 - Summer 2025	Grow-in maintenance (25 ac)
Spring 2025	Volunteers plant 1,200 prairie plugs
2023, 2024, 2025	Biocontrol

Estimated Project Completion Date: 2025-06-30

PROJECT INFORMATION

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

This project has been identified as a high priority for the Maple Grove Parks and Recreation Department, with support from the City Director and Park Board. The project will be a collaboration between contracted ecological restoration professionals and City Maintenance Staff. With increasing development, diversity and a changing climate, many residents desire environmentally friendly and sustainable practices for, managing stormwater, and designing landscapes. Green alternatives to standard practices, such as rain gardens, native landscaping, natural resource preservation, and shoreline restorations have become popular by our residents in recent years.

2. Describe any urgency associated with this project.

Several of the invasive species documented at the project site are noxious weeds with the capacity to produce hundreds of thousands of seeds each year. If invasive species management is not conducted soon, future management costs will be significantly higher due to expanding cover and an increasing soil seedbank. In addition, the prairie vegetation that is currently present will continue to decline.

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.

The City has an existing budget for natural resource restoration. We have also requested additional funding in support of this effort. CPL Grant funds will be a key component, providing a majority of funds needed.

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

The project site does not have public access for hunting and fishing. However, the project sites close proximity to residences and businesses, park amenities (such as playgrounds, picnic shelters, and ball fields) and an extensive paved trail system provide excellent outdoor recreation and wildlife-viewing opportunities. Public fishing access and fishing piers are available at several parks in Maple Grove.

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

Expanding native vegetation cover is the primary goal for enhancing wildlife and fish habitat and protecting water quality in the lakes. Project activities are specifically designed to invigorate the existing prairie vegetation and to replace invasive species cover with native prairie vegetation. Seed sourcing for the project site will be guided by DNR local ecotype recommendations where possible and sourced from vendors who can identify seed provenance.

PROJECT INFORMATION *(Continued)*

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

The proposed budget for this Phase I project scope was developed through comprehensive and detailed vegetation management planning for the project sites 5-year NRMP, including field mapping and photo-documentation of existing conditions. The NRMP identified cost estimates for each activity and task recommended in the integrated vegetation management approach for this site. This project was scoped specifically to achieve an economy of scale and cost effectiveness based on the similarities in restoration objectives identified and the restoration activities needed across the parks within the project site. The proposed \$3,160 cost per acre reflects the extent of invasive species control needed across the 50 acres of the project site, a robust seed budget, and the grow-in maintenance required for prairie plantings. The overall budget reflects the typical costs for contracting restoration services in the Twin Cities and should allow for inflation as well.

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.

The City of Maple Grove strives to provide safe and well-kept park and natural area environments for residents to enjoy. We work alongside active organizations to meet conservation goals, such as the Maple Grove Arbor Committee, a citizen advisory committee that focuses on the beautification of the city through tree planting and the preservation of our forests and other natural resources. We also frequently work with the Maple Grove Lions and Rotary Club on projects such as tree planting, invasive species removal, and projects like pollinator gardens. We seek and involve volunteers each year to assist with other projects such as park clean up.

BUDGET INFORMATION

Organization's Fiscal Contact Information

Name: Ben Jaszewski
Title: Superintendent of Parks & Planning
Email: bjaszewski@maplegrovmn.gov
Phone: 763-494-6503

Street Address 1: 12951 Weaver Lake Rd

City, State ZIP Code: Maple Grove, MN 55369

Budget Details

Contracts

<u>Contractor Name</u>	<u>Contracted Work</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
City of Maple Grove	Native seed/plug acquisition	\$15,000	Match	Cash
TBD	Prescribed burns	\$24,750	Grant	(N/A)
TBD	Herbaceous species control	\$98,633	Grant	(N/A)
TBD	Supplemental native seeding	\$9,563	Grant	(N/A)
TBD	Grow-in maintenance	\$10,250	Grant	(N/A)

Additional Funding

Additional Funding Amount: \$9,000

Budget Overview

<u>Item Type</u>	<u>Grant</u>	<u>Match</u>	<u>Total</u>
Personnel	-	-	-
Contracts	\$143,196	\$15,000	\$158,196
Fee Acquisition with PILT	-	-	-
Fee Acquisition without PILT	-	-	-
Easement Acquisition	-	-	-
Easement Stewardship	-	-	-
Travel (in-state)	-	-	-
Professional Services	-	-	-
DNR Land Acquisition Cost	-	-	-
Equipment/Tools/Supplies	-	-	-

BUDGET INFORMATION *(Continued)*

Budget Overview *(Continued)*

<u>Item Type</u>	<u>Grant</u>	<u>Match</u>	<u>Total</u>
Additional Budget Items	-	-	-
Totals:	\$143,196	\$15,000	\$158,196

SITE INFORMATION

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: Ben Jaszewski
Organization: City of Maple Grove
Title: Superintended of Parks and Planning

Phone: 763-494-6503
Email: bjaszewski@maplegrovern.gov

Site Information

<u>Habitat:</u>	<u>Activity:</u>	<u>Land Ownership:</u>
Fish, Game or Wildlife Habitat	Enhancement	Local Government
(1) Site Name: Arbor Lake Area DOW Lake #: (N/A) Acres: 11 PLS Section: Township - 119, Range - 22W, Section - 23		Open to Public Hunting? No Open to Public Fishing? No
(2) Site Name: Byerly's Pond DOW Lake #: (N/A) Acres: 1 PLS Section: Township - 119, Range - 22W, Section - 22		Open to Public Hunting? No Open to Public Fishing? No
(3) Site Name: Central Park Pond DOW Lake #: (N/A) Acres: 5 PLS Section: Township - 119, Range - 22W, Section - 23		Open to Public Hunting? No Open to Public Fishing? No
(4) Site Name: Maple Lakes Park DOW Lake #: (N/A) Acres: 9 PLS Section: Township - 119, Range - 22W, Section - 23		Open to Public Hunting? No Open to Public Fishing? No
(5) Site Name: North Arbor Lake Area DOW Lake #: (N/A) Acres: 12 PLS Section: Township - 119, Range - 22W, Section - 23		Open to Public Hunting? No Open to Public Fishing? No
(6) Site Name: West Arbor Lake DOW Lake #: (N/A) Acres: 11 PLS Section: Township - 119, Range - 22W, Section - 22		Open to Public Hunting? No Open to Public Fishing? No

Site Information

<u>Habitat:</u>	<u>Activity:</u>	<u>Land Ownership:</u>
Fish, Game or Wildlife Habitat	Enhancement	Private
(1) Site Name: West Arbor Lakes Area- Private DOW Lake #: (N/A) Acres: 5 PLS Section: Township - 119, Range - 22W, Section - 22		Open to Public Hunting? No Open to Public Fishing? No

NATURAL HERITAGE DATABASE REVIEW

NATURAL HERITAGE DATABASE REVIEW *(Continued)*

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: Pugnose Shiner (*Notropis anogenus*) was the only Element Occurrence found within one mile of the project site per a review of Natural Heritage data as of October 25, 2020 (LA#971). This fish species was last observed in the 1940s in Fish Lake, southwest of the project site. Vegetation management activities in the project area will not impact the shiner. In addition, there are no DNR Native Plant Communities or Minnesota Biological Survey Sites of Biodiversity Significance mapped within one mile of the project site. Project site does occur within a Low Potential Zone for the federally-listed rusty patch bumble bee (*Bombus affinis*) (USFWS 2021). It is currently unknown whether the bee is present, but there is suitable habitat and foraging resources. Strategies to avoid impacts to the bee from project activities include but are not limited to: (1) following the MN DNR Best Practices for Pollinators guidance for all project activities; (2) limiting herbicide applications to selective chemicals, spot treatments, and avoiding applications during peak bee diurnal activity; and (3) preventing any use of neonicotinoid insecticides within the project area. Colonial Waterbird Nesting Area.

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.

Restoration Plan

File Name

Description

[Final_Maple_Grove_Arbor_Lakes_CPL_Grant_Budget.pdf](#)
[MapleGroveArborLakes_NRMP_2021.pdf](#)

Supplemental Document

File Name

Description

[Maple_Grove_Ponds_NRMP_NHIS_Review.pdf](#)
[Park-and-trail-map-PDF.pdf](#)

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.

FINAL APPLICATION SUBMISSION *(Continued)*

P I am aware that by typing my name in the box below, I am applying my signature to this online document.

Signature: Rob Heitke

Organization / Agency: City of Maple Grove

Title: Park Supervisor

Date Signed: February 17, 2022

(CPL Grant Application ID = 1990)