

# Final Abstract

Final Report Approved on October 3, 2024

## M.L. 2020 Project Abstract

For the Period Ending June 30, 2024

**Project Title:** Elm Creek Restoration - Phase IV

**Project Manager:** Heather Nelson

**Affiliation:** City of Champlin

**Mailing Address:** 11955 Champlin Drive

**City/State/Zip:** Champlin, MN 55316

**Phone:** (763) 923-7120

**E-mail:** hnelson@ci.champlin.mn.us

**Website:** <https://ci.champlin.mn.us/>

**Funding Source:**

**Fiscal Year:**

**Legal Citation:** M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 09j

**Appropriation Amount:** \$500,000

**Amount Spent:** \$373,830

**Amount Remaining:** \$126,170

### Sound bite of Project Outcomes and Results

Elm Creek Restoration Phase IV was an in-stream habitat restoration project that included 5,300 linear feet of stream bank restoration upstream of Mill Pond in the City of Champlin. The project spanned from the Josephine Nunn pedestrian bridge to just passed the Elm Creek Crossings Bridge.

### Overall Project Outcome and Results

Elm Creek is an impaired water with low dissolved oxygen. This project restored existing eroded stream banks, which will reduce downstream sedimentation, and constructed improvements to provide habitat structure. Construction crews used large equipment during frozen conditions to construct features for this project that included root wads, boulder vanes, toewood, boulder clusters, rock weirs and riffles. These features were designed to enhance aquatic species' habitat, including sensitive species such as Blanding's Turtle. The riparian areas of the creek were restored with native planting buffer using native seeding that will filter sediments and nutrients from direct runoff. Overall, the project reduced the amount of total suspended solids and total phosphorus deposited into the Elm Creek and ultimately Mill Pond. Additionally, installation of features like the rock riffles introduce oxygen to the stream which improves dissolved

oxygen. This project has preserved the habitat along the Elm Creek and provided an amenity for the community to access for recreation.

### **Project Results Use and Dissemination**

Project updates were provided to the public using the city's social media, quarterly Champlin Chronical newsletter, through staff updates at City Council work session meetings and Environment Resources Commission meetings. Dissemination information is provided in the attachment tab. A sign depicting funding by the LCCMR was posted near the Elm Creek Crossing Bridge.



## Environment and Natural Resources Trust Fund

M.L. 2020 Approved Final Report

### General Information

**Date:** November 8, 2024

**ID Number:** 2020-019

**Staff Lead:** Mike Campana

**Project Title:** Elm Creek Restoration - Phase IV

**Project Budget:** \$500,000

### Project Manager Information

**Name:** Heather Nelson

**Organization:** City of Champlin

**Office Telephone:** (763) 923-7120

**Email:** hnelson@ci.champlin.mn.us

**Web Address:** <https://ci.champlin.mn.us/>

### Project Reporting

**Final Report Approved:** October 3, 2024

**Reporting Status:** Project Completed

**Date of Last Action:** October 3, 2024

**Project Completion:** June 30, 2024

### Legal Information

**Legal Citation:** M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 09j

**Appropriation Language:** \$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Champlin to conduct habitat and stream restoration of approximately 0.7 miles of Elm Creek shoreline above Mill Pond Lake and through the Elm Creek Protection Area.

**Appropriation End Date:** June 30, 2024

## Narrative

**Project Summary:** Elm Creek Restoration Phase IV is a in-stream habitat restoration project that includes 3,670 linear feet of stream bank restoration upstream of Mill Pond Lake

**Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Elm Creek Stream Restoration is the fourth phase of high priority phased projects working to restore the habitat in the Elm Creek. Champlin is working with the Elm Creek Watershed Management Commission, BWSR, DNR and Hennepin County to restore water resources that within the Elm Creek Natural Area. Elm Creek is an impaired water with low dissolved oxygen, restoring the stream banks and providing habitat structure will reduce downstream sedimentation and provide native habitat improvements. The City of Champlin Management Plan developed in 2008 has identified goals for accelerating programs and projects for improved habitat, water quality and flood control through a variety of conservation measures in Elm Creek and Mill Pond Lake. In preparing the Habitat Restoration Plan, the City of Champlin utilized all available data which includes hydrologic assessments and completed field surveys of Elm Creek Phase IV project based on standards in the Minnesota Department of Natural Resources (MNDNR) Fisheries Stream Survey Manual, Rosgen Channel Characterization. Our experience in completing previous phases of habitat restoration projects we have effectively reduced costs on the project, achieved overall project goals and allows effectively efficient project completion schedules. Previous phases included Mill Pond Lake Restoration.

**What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

Phase IV is a continuation of the Elm Creek habitat restoration project. This project includes 5,300 linear feet of stream bank restoration of Elm Creek upgradient of the Mill Pond Lake. Preliminary design plans have been completed in cooperation with the MNDNR, Elm Creek Management Commission and BWSR. Elm Creek is impaired water with low dissolved oxygen, restoring the stream banks and providing habitat structure will reduce downstream sedimentation and provide native habitat improvements including root wads, boulder vanes, toewood, boulder clusters, rock weirs and riffles with varied substrate to enhance aquatic species habitat including sensitive species such as Blandings Turtle. The riparian areas of the creek will be restored with native planting buffer using native seeding that will filter sediments and nutrients from direct runoff. Our current water plan specifically identifies goals for accelerating projects for improved habitat, water quality and flood control. The project allows the City of Champlin to meet these goals and open opportunities for the public that includes recreation, fishing and educational experiences. Long term goals of the project are to restore aquatic habitat and restore structural elements. Placement of aquatic structures including rock vanes and riffle pools will optimize oxygen in the water.

**What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

The habitat restoration project is designed for long-term ecological and hydraulic stability. Once the project is completed and vegetation well established, no significant maintenance is will be required to sustain the designed habitat outcomes. The increase in wildlife, amphibian and fish populations are gains which are sustainable long-term through natural reproduction. The goal for timeline requirements of overall project is approximately 1.0 year. Phase IV which we are requesting funding timeline requirements is approximately 1.5 years. We anticipate that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring.

## Project Location

**What is the best scale for describing where your work will take place?**

Region(s): Metro

**What is the best scale to describe the area impacted by your work?**

Region(s): Metro

**When will the work impact occur?**

During the Project

## Activities and Milestones

### Activity 1: Final Design, Engineering, Permitting Project Supervision

**Activity Budget:** \$105,000

**Activity Description:**

The City of Champlin utilizes all available data which includes hydrologic assessments and completed field surveys of Elm Creek Phase IV project based on standards in the Minnesota Department of Natural Resources (MNDNR) Fisheries Stream Survey Manual, Rosgen Channel Characterization. Our experience in completing previous phases of the Elm Creek habitat restoration projects we have effectively reduced costs on the project, achieved overall project goals and allows effective and efficient project completion schedule. The design team will be required to assess the existing stream conditions and attributes. Due to the loss of stream habitat and structure, the redesign of these features will meet specific goals Elm Creek is impaired water with low dissolved oxygen, restoring the stream banks and providing habitat structure will reduce downstream sedimentation and provide native habitat improvements including root wads, boulder vanes, toewood, boulder clusters, rock weirs and riffles with varied substrate to enhance aquatic species habitat including sensitive species such as Blandings Turtle. The riparian areas of the creek will be restored with native planting buffer using native seeding that will filter sediment and nutrients from direct runoff. Our water plan specifically identifies goals for accelerating projects for improved habitat, water quality and flood.

**Activity Milestones:**

Description	Approximate Completion Date
Obtain permits from MPCA, MNDNR, USCOE, ECWMC, & Champlin	September 30, 2021
Survey, Engineer Plans- Specifications and Bid	July 31, 2022

### Activity 2: Phase IV Elm Creek Habitat Restoration and Construction

**Activity Budget:** \$395,000

**Activity Description:**

The Activity 2 will include the implementation of the Phase IV design of the Elm Creek restoration. The restoration construction will include the stabilization of the stream bank and construction of instream habitat including: root wads, boulder vanes, toewood, boulder clusters, rock weirs and riffles. This work will be supervised closely with experienced inspection team. The work will include the construction of varied substrate in the stream channel to provide and enhanced aquatic species habitat. The riparian areas of the creek will be restored with native planting buffer using native seeding that will filter sediments and nutrients from direct runoff. The habitat restoration project is designed for long-term ecological and hydraulic stability. Once the project is completed and vegetation well established, no significant maintenance is will be required to sustain the designed habitat outcomes. The increase in wildlife, amphibian and fish populations are gains which are sustainable long-term through natural reproduction. Post construction surveys will be completed, along with Project Summary Reports and will comply project permits. The length of this phase of stream restoration is 5,300 feet.

**Activity Milestones:**

Description	Approximate Completion Date
Streambank and instream construction and the development of instream habitat features and natural restoration	September 30, 2022
Construction Materials, Erosion Control, Native Seeding	September 30, 2022
Construction Supervision: Permit Compliance Inspections, Construction Supervision	September 30, 2022
Post Construction Stream Survey and Project Summary Report	May 31, 2023



## Dissemination

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**

The City of Champlin will recognize the LCCMR and ENRTF through publication of the Champlin Chronical and City WEB Site updates through the course of the project and upon completion. Additional signage will be placed at Trail Head locations along the Elm Creek Trail System. As part of Citizen Science efforts, the City will distribute environmental education information with acknowledgment of LCCMR and ENRTF. The City will engage the public on the City cable network with informative news segments with acknowledgement of the project funding efforts by the ENRTF.

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**

Long-term monitoring of the integrity of the improvements and biological monitoring conducted by local MNDNR staff, volunteers from local and the City of Champlin as appropriate. This monitoring and maintenance will not require separate funding. In the event that there are other maintenance costs, volunteer labor and other funds sources will be obtained to complete the required maintenance.. The improvements described above will be incorporated in Phase IV and will require future funding request for Phase V. A long-term monitoring/maintenance plan will be implemented to assure all constructed habitat restoration measures are adequately functioning as designed for the project.

## Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Champlin Mill Pond Shoreland Restoration	M.L. 2016, Chp. 186, Sec. 2, Subd. 08i	\$2,000,000



## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
<b>Personnel</b>										
							<b>Sub Total</b>	-	-	-
<b>Contracts and Services</b>										
WSB Engineering	Professional or Technical Service Contract	The consultant will provide: Surveys, Final Design Engineering, Permitting, Construction Supervision, Construction Plans, Permits		X		3,013.5		\$105,000	\$29,600	\$75,400
Minnesota Native Landscapes	Professional or Technical Service Contract	Construction Contractor installing instream habitat structures and restoring riparian areas to restore the native habitat and stream biota and providing water quality improvements.				0		\$395,000	\$344,230	\$50,770
							<b>Sub Total</b>	<b>\$500,000</b>	<b>\$373,830</b>	<b>\$126,170</b>
<b>Equipment, Tools, and Supplies</b>										
							<b>Sub Total</b>	-	-	-
<b>Capital Expenditures</b>										
							<b>Sub Total</b>	-	-	-
<b>Acquisitions and Stewardship</b>										
							<b>Sub Total</b>	-	-	-
<b>Travel In Minnesota</b>										
							<b>Sub Total</b>	-	-	-
<b>Travel Outside Minnesota</b>										

							Sub Total	-	-	-
Printing and Publication										
							Sub Total	-	-	-
Other Expenses										
							Sub Total	-	-	-
							Grand Total	\$500,000	\$373,830	\$126,170

## Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
<b>Contracts and Services</b> - WSB Engineering	Professional or Technical Service Contract	The consultant will provide: Surveys, Final Design Engineering, Permitting, Construction Supervision, Construction Plans, Permits	WSB is the in house City Engineers for the City of Champlin

## Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount	\$ Amount Spent	\$ Amount Remaining
State						
			State Sub Total	-	-	-
Non-State						
			Non State Sub Total	-	-	-
			Funds Total	-	-	-

## Attachments

### Required Attachments

#### *Visual Component*

File: [9d420d8a-d58.pdf](#)

#### *Alternate Text for Visual Component*

Map of Elm Creek Phase IV...

#### *Board Resolution or Letter*

Title	File
Elm Creek Phase IV Maps	<a href="#">cbb4f7c8-698.pdf</a>
Back Ground Check Certification	<a href="#">e7c25185-3c2.pdf</a>

### Supplemental Attachments

#### *Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other*

Title	File
Champlin Spring Newsletter	<a href="#">654b02ef-c05.pdf</a>
Elm Creek Restoration Phase IV Final Report	<a href="#">5def25ad-380.pdf</a>
Elm Creek Restoration Phase IV - As Builts	<a href="#">69b13a38-3de.pdf</a>
Dissemination Efforts	<a href="#">cc2a807e-9cb.pdf</a>

### Difference between Proposal and Work Plan

#### *Describe changes from Proposal to Work Plan Stage*

Added new completion date of June 31, 2023 and Back Ground Check Certification

## Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

**Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?**

N/A

**Do you agree travel expenses must follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**

N/A

**Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

## Work Plan Amendments

Amendment ID	Request Type	Changes made on the following pages	Explanation & justification for Amendment Request (word limit 75)	Date Submitted	Approved	Date of LCCMR Action
1	Amendment Request	<ul style="list-style-type: none"> <li>• Project Collaborators - Project Manager Info</li> <li>• Budget - Capital, Equipment, Tools, and Supplies</li> <li>• Activities and Milestones</li> <li>• Budget - Professional / Technical Contracts</li> </ul>	Amendment is needed to update milestone dates for the project. One plan was designed, bid and constructed, but due to favorable bids on that project we are in the process of designing additional features to incorporate into the overall project.	May 19, 2022	Yes	June 7, 2022
2	Completion Date	Previous Completion Date: 07/31/2023 New Completion Date: 06/30/2024	Work was delayed in certain areas of the project due to spring high water condition in the spring of 2023 this caused a delay in vegetative enhancements and restoration establishment.	November 2, 2023	Yes	December 11, 2023
3	Amendment Request	<ul style="list-style-type: none"> <li>• Narrative</li> <li>• Other</li> <li>• Activities and Milestones</li> <li>• Attachments</li> </ul>	Amendment was needed to edit the workplan narrative to reflect the correct lineal feet or stream restored. Additionally, the site map was updated to reflect the correct lineal footage of stream restored.	July 24, 2024	Yes	August 13, 2024

# Status Update Reporting

## Final Status Update August 14, 2024

**Date Submitted:** July 24, 2024

**Date Approved:** August 13, 2024

### Overall Update

This is the fourth phase of stream restoration along Elm Creek through the City of Champlin. This restoration includes 5,300 lineal feet of stream. The project to establish vegetation and habitat and increase wildlife, amphibian and fish populations along the Creek is 100% complete. Find as-built project information in the attached drawings.

### Activity 1

This activity was previously marked complete.

*(This activity marked as complete as of this status update)*

### Activity 2

Work was completed for stream bank restoration and floodplain enhancement areas of the project. Vegetation management was complete during this reporting period. The contractor removed invasive and noxious vegetation from the floodplain and riparian areas. The post construction survey (as-built) has been complete and is included in the attachments.

*(This activity marked as complete as of this status update)*

### Dissemination

Project updates were provided to City Council and the City's Environmental Resources Commission during this reporting period. A sign has been installed along the trail near the Elm Creek Crossing Bridge indicating the project was funded through LCCMR funding. A photo of the site can be found in the attached final report.



# Status Update Reporting

## Status Update April 1, 2024

**Date Submitted:** July 24, 2024

**Date Approved:** August 13, 2024

### Overall Update

This is the fourth phase of stream restoration along Elm Creek through the City of Champlin. This restoration includes 5,300 lineal feet of stream. To date, the project to establish vegetation and habitat and increase wildlife, amphibian and fish populations along the Creek is 99% complete. During this reporting period stream bank restoration work continued with the contractor working onsite to remove invasive and noxious plantings which will encourage growth of native plantings.

### Activity 1

This activity was previously marked complete.

*(This activity marked as complete as of this status update)*

### Activity 2

Work continued this reporting period on stream bank restoration and floodplain enhancement areas of the project. Vegetation management occurred during this reporting period. The contractor removed invasive and noxious vegetation from the floodplain and riparian areas.

### Dissemination

Project updates were provided to City Council and the City's Environmental Resources Commission during this reporting period.

# Additional Status Update Reporting

## Additional Status Update September 14, 2023

**Date Submitted:** September 14, 2023

**Date Approved:** December 11, 2023

### Overall Update

This is the fourth phase of stream restoration along Elm Creek through the City of Champlin. This restoration includes 3,670 lineal feet of stream. To date, the project which will establish vegetation and habitat and increase wildlife, amphibian and fish populations along the Creek is 95% complete. During this reporting period stream bank restoration work continued with the contractor working onsite to remove invasive and noxious plantings which will encourage growth of native plantings.

### Activity 1

This activity was previously marked complete.

*(This activity marked as complete as of this status update)*

### Activity 2

Work continued this reporting period on stream bank restoration and floodplain enhancement areas of the project. The areas were seeded, and vegetation maintained during this reporting period. The contractor removed invasive and noxious vegetation from the floodplain and riparian areas.

### Dissemination

Project updates were provided to City Council and the City's Environmental Resources Commission during this reporting period.

# Status Update Reporting

## Status Update April 1, 2023

**Date Submitted:** March 16, 2023

**Date Approved:** March 28, 2023

### Overall Update

This is the fourth phase of stream restoration along Elm Creek through the city of Champlin. This restoration includes 3,670 lineal feet of stream. To date, the project which will establish vegetation and habitat and increase wildlife, amphibian and fish populations along the Creek is 95% complete. During this reporting period stream bank restoration work continued with enhancements to the bankful bench and toe wood areas of the project. The contractor worked onsite to remove invasive species which will encourage growth of native plantings.

### Activity 1

This activity was previously marked complete.

*(This activity marked as complete as of this status update)*

### Activity 2

Construction continued this reporting period on stream bank restoration and floodplain enhancement areas of the project. The toe wood areas were enhanced with additional plantings and protective materials to further reduce the potential for scour and erosion. The contractor removed invasive and noxious vegetation from the floodplain and riparian areas. Due to timing, the areas were not seeded but will be seeded in the spring. Additionally, the post construction as-built survey was completed.

### Dissemination

Project updates were provided to City Council and the City's Environmental Resources Commission during this reporting period.

# Status Update Reporting

## Status Update October 1, 2022

**Date Submitted:** November 22, 2022

**Date Approved:** November 23, 2022

### Overall Update

This is the fourth phase of stream restoration along Elm Creek through the city of Champlin. This restoration includes 3,670 lineal feet of stream. To date, the project which will establish vegetation and habitat and increase wildlife, amphibian and fish populations along the Creek is 80% complete.

### Activity 1

Final Design, Engineering, Permitting Project Supervision. Progress during this time period includes the design of vegetative enhancements to the stream restoration. These enhancements were needed to further reduce the amount of scour and erosion after observing the performance of the features during high flows this spring. Additionally, a plan was created to restore floodplain areas. A permit extension was obtained from the DNR in order to complete the work. This phase of work is now complete.

*(This activity marked as complete as of this status update)*

### Activity 2

Restoration and Construction. Progress during this period included the construction work needed to implement the instream features for the stream enhancements, this included the addition of 300 lineal feet of toe rock in critical areas of the stream. Restoration of floodplain areas occurred in September 2022. Restoration included grading, removal of invasive plants, and planting native pollinator mixes.

### Dissemination

The City of Champlin used our quarterly newsletters, web page, and social media pages to provide updates to the public on the project. These updates recognize the LCCMR and ENRTF. Signage will be placed at Trail Head locations along the Elm Creek Trail System. An article was placed in the City's spring newsletter informing residents about the project and the features that were installed, this newsletter is distributed to all residents. Additionally, we posted a project update to the city's facebook page regarding the project.

# Status Update Reporting

## Status Update April 1, 2022

**Date Submitted:** May 19, 2022

**Date Approved:** June 7, 2022

### Overall Update

Elm Creek Stream Restoration is the fourth phase of high priority phased projects working to restore the habitat in the Elm Creek. The project was designed with habitat and water quality improvement features in mind. The design includes installation of rock riffles, segments of toewood, boulder vanes, boulder clusters, and toe rock. The native habitat improvements will enhance aquatic species habitat including sensitive species such as the Blanding's Turtle. The main project was bid in May 2021 and the contract awarded in July 2022. Construction for a majority of the work began in January 2022. Following one season of construction additional construction work will add features where necessary to prevent future erosion issues.

### Activity 1

The design team has utilized available data which included hydrologic assessments and field surveys of Elm Creek Phase IV project based on standards in the Minnesota Department of Natural Resources (MNDNR) Fisheries Stream Survey Manual, Rosgen Channel Characterization. Additionally, the design team's experience in completing previous phases of the Elm Creek habitat restoration projects was used when deciding where to place design features for segments of the stream that achieve overall project goals. Milestones including field survey, engineering plans and specifications, and bidding was completed in May 2021 for a majority of the project. Permits for the project included, MPCA-NPDES, WCA, and DNR permit for work in public waters was obtained by September 2021. The design team is working on adding restoration improvements to this corridor both within the stream as well as in the riparian floodplain areas. The additional features will enhance the overall project. We are able to add features because we received very favorable bid prices in May 2021.

### Activity 2

The restoration construction included the stabilization of the stream bank and construction of instream habitat which included root wads, boulder vanes, toewood, boulder clusters, and rock riffles. Work for major stream restoration items began in January 2022 and much of the work was completed in March 2022. Because we received such favorable bid pricing on this project, we have the opportunity to add additional features both in stream as well as within the riparian floodplain area. A preliminary plan has been prepared for these additional features and construction of these will be completed in the fall of 2022. The length of this phase of stream restoration is 5,350 feet. To date, approximately 75% of this phase has been restored.

### Dissemination

The City of Champlin is committed to the long term maintenance of the Elm Creek Stream Restoration natural habitat. The City has provided information to the public throughout the duration of the project via the mailings to residents directly adjacent to the project area, City of Champlin's website, City of Champlin's Facebook page, presentations to the public, project progress presentations at Environmental Resource Commission and City Council meetings and onsite public project progress/event presentations. The City of Champlin will include an interpretive sign of the project and recognition of the ENRTF.