

Final Abstract

Final Report Approved on August 17, 2023

M.L. 2021 Project Abstract

For the Period Ending June 30, 2023

Project Title: Shoreline Stabilization, Fishing, and ADA Improvements at Silverwood Park

Project Manager: Jonathan Vlaming

Affiliation: Three Rivers Park District

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Website: <https://www.threeriversparks.org/>

Funding Source:

Fiscal Year:

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 08o

Appropriation Amount: \$200,000

Amount Spent: \$168,870

Amount Remaining: \$31,130

Sound bite of Project Outcomes and Results

This project serves as a model on how to improve water quality through shoreline stabilization in combination with shoreline fishing and ADA fishing access improvements on the island in Silver Lake within Silverwood Park, St. Anthony MN.

Overall Project Outcome and Results

Silver Lake is located in St. Anthony, with much of its shoreline and an island being within Silverwood Regional Park, which is operated by Three Rivers Park District. The lake is on the MPCA's list of impaired waters. The lake has an approved water quality improvement plan that recognizes shoreline stabilization as a recommended solution. The island is connected to the mainland via a walkway bridge and is a popular shore fishing area. Heavy use of the island for fishing had resulted in devegetation, soil erosion, and shoreline erosion at several sites along the island's shoreline.

The goals of the project were to provide water quality improvements through shoreline stabilization, to provide shoreline fishing improvements and to provide ADA accessible fishing access on the island in Silver Lake.

The project combined shoreline stabilization at four heavily impacted and popular fishing sites on the island with shoreline fishing improvements. The shore itself was hardened with small rocks and logs to improve habitat while reducing erosion. Large limestone blocks were added for sitting, flat flagstone fishing pads were added, and rock stairs were constructed to provide guided access to the shoreline. The sites were then replanted with native vegetation to further reduce erosion.

In addition, the shoreline fishing sites near the bridge and on the scenic point of the island were developed to fully comply with ADA access needs.

Over 450,000 people visit Silverwood Regional Park each year. Water quality within Silver Lake will continue to improve now that the island shoreline has been stabilized, and visitors now have the opportunity for high quality shoreline fishing experiences for people of all abilities.

The project is expected to serve as a model for other projects that wish to combine water quality improvements through shoreline stabilization with shoreline fishing and access improvements.

Project Results Use and Dissemination

This project provided water quality improvements through shoreline stabilization as well as improved recreational shoreline fishing opportunities for the general public.

Water quality data for Silver Lake is collected bi-weekly during open water seasons and is uploaded to the MPCA's Environmental Quality Information System (EQulS) data base system.

The methods and resulting benefits of the project will be showcased to lake associations, watershed districts, park agencies and municipalities. The project has the potential to be featured at local, regional, and state conferences as an example of improving water quality and angling through shoreline restoration.



Environment and Natural Resources Trust Fund

M.L. 2021 Approved Final Report

General Information

Date: September 9, 2024

ID Number: 2021-322

Staff Lead: Michael Varien

Project Title: Shoreline Stabilization, Fishing, and ADA Improvements at Silverwood Park

Project Budget: \$200,000

Project Manager Information

Name: Jonathan Vlaming

Organization: Three Rivers Park District

Office Telephone: (763) 694-7632

Email: jonathan.vlaming@threeriversparks.org

Web Address: <https://www.threeriversparks.org/>

Project Reporting

Final Report Approved: August 17, 2023

Reporting Status: Project Completed

Date of Last Action: August 17, 2023

Project Completion: September 30, 2022

Legal Information

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 08o

Appropriation Language: \$200,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Three Rivers Park District to provide water quality improvements through shoreline stabilization, shoreline fishing improvements, and shoreline ADA access on the island in Silver Lake within Silverwood Park.

Appropriation End Date: June 30, 2024

Narrative

Project Summary: The Project will provide water quality improvements through shoreline stabilization, shoreline fishing improvements and shoreline ADA access on the island in Silver Lake within Silverwood Park, St. Anthony MN.

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

Silver Lake is on the MPCA's list of impaired waters. The lake's TMDL Implementation Plan identifies shoreline stabilization as a project to reduce nutrient loading to the lake and improve water quality. This project helps meet the intent of the TMDL plan through shoreline stabilization of the most heavily impacted areas located on the island within the lake, which is connected to the mainland via a bridge. The popularity of shoreline fishing on the island has resulted in devegetation and soil erosion at four primary sites, which are addressed by the project.

This project is an opportunity to resolve the shoreline erosion issues while improving the shoreline fishing access and experience for anglers. Shoreline fishing improvements at Silverwood helps provide greater equity in outdoor recreation, increasing benefits to a diverse population of Hmong, Latino and disabled anglers. Silverwood is a very busy park, with over 450,000 visits annually.

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.

Three Rivers seeks funding to do the construction work necessary for the project. Design/engineering plans have already been developed internally by professional staff. This project is shovel ready. The project will include:

- 1) Shoreline restoration at four popular shoreline fishing sites on the island in Silver Lake.
- 2) Hardening of sites and added amenities such stairs down the slope and large blocks of limestone for sitting to promote shoreline fishing while reducing erosion issues.
- 3) Revegetation of those sites to encouraged use of the hardened areas while improving the angling experience.
- 4) Development of the shoreline fishing site on the scenic point of the island to fully comply with ADA access needs, including development of an ADA path from the bridge to that site.

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?

This project is shovel ready and can be completed quickly and efficiently to provide environment and natural resources benefits to Minnesotans (Funding Priority H) .

This project will protect and improve the water quality of Silver Lake through actions identified in the lake's TMDL implementation plan (Funding Priority F1).

This project will expand and improve angling as an urban outdoor recreation opportunity for a diverse user base and which is accessible to people with disabilities (Funding Priority G7).

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 and In the Future

Activities and Milestones

Activity 1: Shoreline stabilization, shoreline fishing and ADA access improvements

Activity Budget: \$200,000

Activity Description:

The objectives of the project are to

- 1) stabilize four impacted shoreline fishing areas;
- 2) improve those sites for shoreline fishing;
- 3) develop the shoreline fishing site on the point of the island to accommodate ADA angling needs, and
- 4) develop a crushed limestone ADA accessible path from the bridge to the ADA shoreline fishing site.

Design work has been completed. Work will be done by a licensed contractor that meets all State requirements and the work will be overseen by Three River's professional staff. Work will include hardening of sites and adding amenities such as stairs down slopes, large blocks of limestone for sitting to promote shoreline fishing; revegetation to direct use to the hardened areas while improving the angling experience, adding rocks and rubble to the shore to improve aquatic habitat and help decrease erosion, and construction of an ADA accessible trail to the ADA shoreline fishing site on the point of the island.

Activity Milestones:

Description	Approximate Completion Date
Project Design	April 30, 2020
Award of Construction Contract	July 31, 2021
Completion of Construction	October 31, 2021

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.

To ensure research includes participation and awareness of entities who may benefit from the results

Three Rivers Park District conducts surveys to get a better understanding of park recreational use, quality of experience, and areas needed for improvement. This project will provide shoreline stabilization as well as improve recreational shoreline fishing opportunities for the general public. Signage will be placed in areas to educate the public about the project benefits. The project will also be featured on the Park District website. The benefits of the project will be showcased to lake associations, watershed districts, and municipalities. The survey information and public feedback will be used to make improvements on similar projects within the Park District.

To ensure results of any research are being shared with entities that can use the results to improve management of resources in Minnesota.

Water Quality data will be collected on the lake bi-weekly from early ice-off (April) through fall turnover (October) to monitor changes in lake trophic status. The monitoring data will be uploaded to the MPCA's Environmental Quality Information System (EQulS) data base system. The data is available for the public or other agencies/organizations to access. The data will also be uploaded and available through the Three Rivers Park District data base system. The data will be used to develop an annual lake report card that summarizes the lake trophic status. This data will be available to the public, lake associations, cities, and watershed districts to assist with any future management decisions.

To ensure longevity of any collections of products made possible with this source of funding

The shoreline erosion will continually be monitored on annual basis to ensure the success of the shoreline stabilization. An adaptive management approach will be implemented for any areas that have not been successfully stabilized to ensure the expected long-term life expectancy of the project.

To promote changes in behavior to better protect, conserve, or enhance Minnesota's environment and natural resources

This project is an opportunity to resolve the shoreline erosion issues while improving the shoreline fishing access and experience for anglers. Design is intended to direct anglers from erosion-prone shoreline to more attractive and accessible shoreline designed to endure impacts of shoreline angling. The shoreline stabilization will further demonstrate the water quality benefits to lake shore homeowners, municipalities, and other agencies. The benefits of the project will be showcased to further promote the implementation of other similar projects that are proposed in the future for the park district as well as the metro area.

To share with Minnesotans in an accessible way the work being accomplished with help from the Environment and Natural Resources Trust Fund

The project has the potential to be featured at local, regional, and state conferences as an example of improving water quality and angling through shoreline restoration. This project will be featured on Three Rivers Park District website and outreach such as the Park District's podcast program The Wandering Naturalist.

The Environment and Natural Resources Trust Fund will be acknowledged through the use of the Trust Fund logo or attribution on project print and electronic media, publications, signage, and other communications per ENRTF Acknowledgement Guidelines,

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?

Results will be implemented through a construction contract.

Ongoing efforts will include water-testing done by Three Rivers in conjunction with the local watershed to monitor improvements in the lake water quality. Results will help staff determine the benefits of expanding the program to other lakes in other parks.

Three Rivers maintenance and natural resource staff will maintain the improved sites.

Three Rivers conducts visitor studies every five years. Data from 2018 (pre-project) will be compared to data from 2023 (post-project) to gauge the social benefits of the project.

Three Rivers funds these ongoing programs.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
Personnel										
							Sub Total	-	-	-
Contracts and Services										
TBD	Professional or Technical Service Contract	Shoreline restoration at four popular shoreline fishing sites on the island in Silver Lake. Hardening of sites and added amenities such stairs down the slope and large blocks of limestone for sitting to promote shoreline fishing while reducing erosion issues. Revegetation of sites and development of ADA access.				3.9		\$200,000	\$168,870	\$31,130
							Sub Total	\$200,000	\$168,870	\$31,130
Equipment, Tools, and Supplies										
							Sub Total	-	-	-
Capital Expenditures										
							Sub Total	-	-	-
Acquisitions and Stewardship										
							Sub Total	-	-	-
Travel In Minnesota										
							Sub Total	-	-	-
Travel Outside Minnesota										

							Sub Total	-	-	-
Printing and Publication										
							Sub Total	-	-	-
Other Expenses										
							Sub Total	-	-	-
							Grand Total	\$200,000	\$168,870	\$31,130

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount	\$ Amount Spent	\$ Amount Remaining
State						
			State Sub Total	-	-	-
Non-State						
Cash	Three Rivers Park District General Obligation Bond funds	Three Rivers has invested over \$15 million in the acquisition and development of Silverwood, even though it is outside of the Park District's taxing jurisdiction. All project costs over the \$200,000 requested ENRTF grant will be covered by secured Three Rivers funds from cost savings on other Three Rivers projects.	Secured	\$59,000	-	\$59,000
			Non State Sub Total	\$59,000	-	\$59,000
			Funds Total	\$59,000	-	\$59,000

Attachments

Required Attachments

Visual Component

File: [cdbaf6df-366.pdf](#)

Alternate Text for Visual Component

This is Project location map that shows the eastern half of the Twin Cities Metropolitan area (located within St. Anthony within Ramsey County, MN) with an insert map showing an aerial photo of Silverwood Park, Silver Lake, and the Island which is the project location....

Financial Capacity

File: [c8826901-e72.docx](#)

Board Resolution or Letter

Title	File
Three Rivers Board Resolution in support of the Silverwood project application	df84348a-7e0.pdf

Supplemental Attachments

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

Title	File
ENRTF Background Check Certification Form Project # 2021-322	b323e1d4-c16.pdf
Completed Project Photos	185f177f-95a.pdf
Final Abstract 2022-322 ML 2021 First Special Session Chp 6 Sec 2 Subd 08o	2e26be2f-4e3.docx

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Uploaded the signed Resolution of Support. Added information in the new sections as requested.

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	Completion Date	Previous Completion Date: 07/31/2023 New Completion Date: 09/30/2022	LCCMR Completion Date change to get projects that finished prior to final reporting functionality being available in the online. See Activity Log for notes on final report approval.	May 23, 2023	Yes	May 23, 2023

Status Update Reporting

Final Status Update July 7, 2023

Date Submitted: June 15, 2023

Date Approved: August 8, 2023

Overall Update

The project has been completed successfully. The Project Abstract submitted via email as requested provides additional details.

Activity 1

The Activity objectives are now complete and have been achieved. The objectives were:

- 1) stabilize four impacted shoreline fishing areas;
- 2) improve those sites for shoreline fishing;
- 3) develop the shoreline fishing site on the point of the island to accommodate ADA angling needs, and
- 4) develop a crushed limestone ADA accessible path from the bridge to the ADA shoreline fishing site.

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

Dissemination

Water Quality data for Silver Lake is collected bi-weekly during open water seasons and is uploaded to the MPCA's Environmental Quality Information System (EQulS) data base system.

The methods and resulting benefits of the project will be showcased to lake associations, watershed districts, park agencies and municipalities. The project has the potential to be featured at local, regional, and state conferences as an example of improving water quality and angling through shoreline restoration.

Status Update Reporting

Status Update June 1, 2023

Date Submitted: June 15, 2023

Date Approved: August 8, 2023

Overall Update

The project has been completed successfully. The Project Abstract submitted via email as requested provides additional details.

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Status Update Reporting

Status Update December 1, 2022

Date Submitted: December 8, 2022

Date Approved: December 16, 2022

Overall Update

The project has been completed successfully. The Project Abstract submitted via email as requested provides additional details.

Activity 1

The Activity objectives are now complete and have been achieved. The objectives were:

- 1) stabilize four impacted shoreline fishing areas;
- 2) improve those sites for shoreline fishing;
- 3) develop the shoreline fishing site on the point of the island to accommodate ADA angling needs, and
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The methods and resulting benefits of the project will be showcased to lake associations, watershed districts, park agencies and municipalities. The project has the potential to be featured at local, regional, and state conferences as an example of improving water quality and angling through shoreline restoration.

Status Update Reporting

Status Update June 1, 2022

Date Submitted: April 28, 2022

Date Approved: April 28, 2022

Overall Update

The project started this past winter and the site work will be completed this May, followed by native plantings that will help reduce erosion. As identified in the outcomes section of the project, the project will protect and improve the water quality of Silver Lake, and will have expanded and improved angling as an urban outdoor recreation opportunity through development of sustainable shoreline fishing stations.

Activity 1

Work began during the winter. The contractor established an ice road, secured and delivered all building materials to island. All remaining site work is scheduled to be completed during the month of May, 2022. Plantings will occur upon completion of the site work. the new shoreline fishing access sites will be open upon completion of the site work. Final completion of the project should occur by the end of July, 2022.

Dissemination

The project is underway and is identified on Three River's website. Signage is on site to help park visitors understand the benefits of the project and that the project is an ENRTF funded project. Additional dissemination will begin once the project is completed.