



Environment and Natural Resources Trust Fund (ENRTF)

M.L. 2019 ENRTF Work Plan (Main Document)

Today's Date: October 17, 2018

Date of Next Status Update Report: November 1, 2019

Date of Work Plan Approval: TBD

Project Completion Date: June 30, 2022

Does this submission include an amendment request? NO

PROJECT TITLE: Sauk River Dam Removal and Rock Rapids Replacement

Project Manager: Michael Brethorst

Organization: City of Melrose

College/Department/Division: Administration

Mailing Address: 225 1st ST NE

City/State/Zip Code: Melrose, MN 56352

Telephone Number: 320-256-4278

Email Address: admin@cityofmelrose.com & mbrethorst@cityofmelrose.com

Web Address: www.cityofmelrose.com

Location: 225 1st St NE, Melrose, MN 56352 (vicinity - Intersection of 5th Ave NE / 1st Street)

Total Project Budget: \$ 2,768,000

Amount Spent: \$0

Balance: \$2,768,000

Legal Citation: M.L. 2019, Chp. xx, Sec. xx, Subd. xx

Appropriation Language: TBD

I. PROJECT STATEMENT:

The Sauk River is a major perennial stream in central Minnesota with a watershed that is 667,200 acres in size.

Our project consists of habitat restoration, water quality and fish passage improvements through removal of the existing fixed elevation dam, construction of a rock arch rapids structure and stream habitat restoration. This project will have watershed wide impacts and reconnect a 72-mile large-scale river in a major watershed. Sauk River Dam currently entraps suspended sediment from all surface water flowing from Sauk Lake located in Sauk Centre, Minnesota to the Dam in Melrose, Minnesota. The Dam is a fixed site dam with two associated slues gates and allows for minimal fish passage. An assessment was completed for the Sauk River Dam by the MNDNR Dam and Safety. The results of the assessment define the dam a “Significant Hazard” dam. Dam failure would cause catastrophic environmental and flood impact within the watershed. Currently the Sauk River Dam is on the MNDNR stream restoration priority list.

Removal of the existing dam in conjunction with the rock arch rapids and habitat restoration will provide refuge for fish and aquatic organisms. During low flow conditions the rapids provide longer duration of flow through the fish ladder which benefits the river with lower water temperature and increase oxygen levels downstream. Greater spillway length, removes existing fragmented aquatic habitat particularly during frequent storm events translates to increased stream habitat, fish passage and biodiversity in Sauk River. Riffle-pool design will support productivity for both fish and invertebrates compared to the existing dam structure and tail water. Sport fish species such as channel catfish, walleye, northern pike, and crappie populations will be capable of recolonizing waters upstream. The project will provide greater access to seasonal habitats for many species. Preferred habitats include areas upstream from the existing dam such as headwaters areas for northern pike spawning and downstream during low flow conditions for improved oxygen levels.

This project supports health of the watershed as it will create a more naturally flowing ecosystem. Project funding will restore approximately 1,000 liner feet of stream habitat, replace and modify a decades old dam that is classified as a “Significant Hazard” by the Minnesota DNR Dam Safety Unit Inspection Team with a rock arch rapids that will allow fish to migrate upstream restoring a more natural hydraulic condition and improve biology within the stream. In addition, the project will improve recreational recourses and become a regional draw for public use.

II. OVERALL PROJECT STATUS UPDATES: (See below)

III. PROJECT ACTIVITIES AND OUTCOMES:

<p>1. <i>Sauk River Dam Removal and Replacement with Rock Arch Dam Construction, Shoreland Restoration Construction and Native Vegetation Plantings.</i></p>
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ACTIVITY 1 Title: Design, Construction of Rock Arch and In-Stream Habitat Restoration

Description The final project will be a fully restored natural rock arch river and associated stream bank restoration. Natural fish habitat will be restored, stream banks will be restored to original conceptual state. Hydrology to the river will be improved and eliminating dangerous spillway.

ENRTF BUDGET: \$2,768,000

Outcome	Completion Date
1. Engineering/Construction Plans and Specifications	December 2019
2. Permit Requirements: PMCA, MNDNR, USCOE, SWCD, City and County	May 2020
3. <i>Sauk River Dam Removal</i>	<i>March 2020</i>
4. <i>Replacement with Rock Arch Dam Construction</i>	<i>November 2021</i>
5. <i>Shoreland Restoration Construction</i>	<i>November 2021</i>
6. <i>Native Vegetation Plantings (June 2022 all planting complete project will be complete and closed out/plantings will be fulling mature June 2024)</i>	<i>June 2024</i>

- First Update March 1, 2020 - TBD
- Second Update September 1, 2021 - TBD
- Third Update March 1, 2021- TBD
- Fourth Update September 1, 2022 - TBD
- Fifth Update March 1, 2022 - TBD
- Final Report between project end (June 30) and August 15, 2022 - TBD

IV. DISSEMINATION:

Description:

Press release will be made relating to funding and some sort of official commissioning ceremony will be held. All stake holders to include ENRTF will be invited. The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the [ENRTF Acknowledgement Guidelines](#)

- First Update March 1, 2020 - TBD
- Second Update September 1, 2021- TBD
- Third Update March 1, 2021- TBD
- Fourth Update September 1, 2022- TBD
- Fifth Update March 1, 2022- TBD
- Final Report between project end (June 30) and August 15, 2022- TBD

V. ADDITIONAL BUDGET INFORMATION:

A. Personnel and Capital Expenditures

Explanation of Capital Expenditures Greater Than \$5,000:

The final design and build will become part of the natural landscape and not able to be moved. A maintenance plan for the continued upkeep and stabilization of the Rock Arch and associated stream backs will be in place to ensure stability and safety to the rock arch and associated improvements.

Explanation of Use of Classified Staff: NA

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:

Enter Total Estimated Personnel Hours for entire duration of project:	Divide total personnel hours by 2,080 hours in 1 yr = TOTAL FTE:
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Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:

Enter Total Estimated Contract Personnel Hours for entire duration of project: 650 hours / 10 hours per week 18 months	Divide total contract hours by 2,080 hours in 1 yr = TOTAL FTE: 0.25
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VI. PROJECT PARTNERS:

A. Partners outside of project manager’s organization receiving ENRTF funding

Name	Title	Affiliation	Role
Michael Brethorst	City Administrator	City of Melrose	Project Manager

B. Partners outside of project manager’s organization NOT receiving ENRTF funding

Name	Title	Affiliation	Role
Dennis Fuchs	Administrator	Stearns County SWCD	Review Board/Permits
Scott Henderson	Administrator	Sauk River Watershed District	Review Board/Permit
Jodi Teich	Director	Stearns County Highway Department	Review Board

VII. LONG-TERM- IMPLEMENTATION AND FUNDING:

Long term goals of the project are to restore aquatic habitat, fish passage and structural elements on the Sauk River. Stearns County has received full funding for replacement of CSAH 13 Bridge construction is scheduled for 2020. The City of Melrose is also currently seeking project funding from other state sources. The second phase of the project is habitat restoration between the proposed rock arch structure and CSAH 13 Bridge reconstruction, the project will require future funding request. A long-term monitoring/maintenance plan will be implemented to assure all constructed habitat restoration measures are adequately functioning as designed for the project.

VIII. REPORTING REQUIREMENTS:

- Project status update reports will be submitted March 1 and September 1 each year of the project
- A final report and associated products will be submitted between June 30 and August 15, 2022. Vegetation will require up to two years to fully mature from the close out of the project.

IX. SEE ADDITIONAL WORK PLAN COMPONENTS:

- A. Budget Spreadsheet
- B. Visual Component or Map
- C. Parcel List Spreadsheet
- D. Acquisition, Easements, and Restoration Requirements
- E. Research Addendum

Attachment A:
 Environment and Natural Resources Trust Fund

M.L. 2019 Budget Spreadsheet

Legal Citation:

Project Manager: Michael Brethorst

Project Title: Sauk River Dam Removal and Rock Rapids Replacement

Organization: City of Melrose

Project Budget: \$2,768,000

Project Length and Completion Date: 3 Years / June 2022 - plantings mature June 2024

Today's Date: July 2018



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Budget	Amount Spent	Balance
BUDGET ITEM			
Personnel (Wages and Benefits)			
Professional/Technical/Service Contracts			
Professional Contract RFQ - Final Design, Engineering, Permitting, Construction Supervision (City of Melrose Contribution)	\$ 510,000	\$ -	\$ 510,000
Service Contract RFP-Construction Contractor/Seeding Contractor	\$ 1,126,800	\$ -	\$ 1,126,800
Equipment/Tools/Supplies			
Native Planting and Associated Stabilization	\$ 155,000	\$ -	\$ 155,000
Habitat Structures	\$ 150,000	\$ -	\$ 150,000
Streambank Stabilization	\$ 250,000	\$ -	\$ 250,000
Channel Stabilization and Diversion Techniques for Construction (i.e. Sheet Piling, etc)	\$ 275,000	\$ -	\$ 275,000
Rock Boulders for Rapids	\$ 300,000	\$ -	\$ 300,000
Capital Expenditures Over \$5,000			
Fee Title Acquisition			
Easement Acquisition			
Professional Services for Acquisition			
Printing			
Mailings, Design Plans, Permit Reports, Maps, Project Specifications, Progress Reports, etc. (.25 cents per page)	\$ 1,200	\$ -	\$ 1,200
Travel expenses in Minnesota			
Other			
COLUMN TOTAL	\$ 2,768,000	\$ -	\$ 2,768,000

OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)	Budget	Spent	Balance
Non-State: City of Melrose General Fund (monies spent: preliminary engineering, environmental review)	Secured	\$ 650,000	\$ 150,000	\$ 500,000
State: Lessard Sams Outdoor Heritage	Pending	\$ 737,000	\$ -	\$ 737,000
In kind: City of Melrose - Construction management, materials,	Secured	\$ 75,000	\$ -	\$ 75,000
Total		\$ 1,462,000	\$ 150,000	\$ 1,312,000

PAST AND CURRENT ENRTF APPROPRIATIONS	Amount legally obligated but not yet spent	Budget	Spent	Balance
Current appropriation:	\$ -	\$ -	\$ -	\$ -
Past appropriations:	\$ -	\$ -	\$ -	\$ -