

**Environment and Natural Resources Trust Fund
2019 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 267-G

Cannon Valley Trail Erosion Control/Water Quality Improvements

Category: G. Land Acquisition for Habitat and Recreation

Sub-Category:

Total Project Budget: \$ 1,586,200

Proposed Project Time Period for the Funding Requested: June 30, 2021 (2 yrs)

Summary:

The project improves Cannon Valley Trail water conveyance infrastructure to reduce sediments entering wetlands and the Cannon River. Improvements include erosion control, repair of failing slopes, and improved sediment capture.

Name: Scott Roepke

Sponsoring Organization: Cannon Valley Trail Joint Powers Board

Title: Trail Manager

Department: _____

Address: 825 Cannon River Avenue

Cannon Falls MN 55009

Telephone Number: (507) 263-0508

Email trailmanager@cannonvalleytrail.com

Web Address www.cannonvalleytrail.com

Location

Region: Southeast

County Name: Goodhue

City / Township:

Alternate Text for Visual:

The map communicates the locations of Activities 2, 3, and 4 (fourteen sites total) along CVT between Cannon Falls and Red Wing, MN.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity	_____ Readiness	_____ Leverage	_____ TOTAL _____%
_____ If under \$200,000, waive presentation?			

Cannon Valley Trail Erosion Control/Water Quality Improvements

Cannon Valley Trail – Location and Governance

The Cannon Valley Trail (CVT) is a 19.7 mile long trail connecting the cities of Cannon Falls, Welch and Red Wing in Goodhue County. The CVT parallels the Cannon River its entire length. The Trail is open year round and serves 100,000 visitors annually. The CVT is governed by a local Joint Powers Board (Cities of Cannon Falls and Red Wing; Goodhue County).



Cannon Valley Trail Location

I. Project Statement: Overview, Goals, Methods, and Need/Benefits

Unique Topographical Setting: CVT generally occupies the toe of the Cannon River valley north-facing bluff slopes as it parallels the Cannon River. Surface water flows from the south must pass under, over or through CVT to reach the Cannon River. With this location, combined with more frequent intense rainfall events and extreme topography, enormous volumes of storm water runoff and sediment severely impact CVT and natural resources. However, this positions CVT to effectively address the more chronic locations resulting in public benefit.

Overview/Goals: This Project is a comprehensive erosion control/storm water management effort at numerous locations to effectively reduce massive erosion, manage storm water and sediments to improve water quality of the Cannon River, reduce negative impact to wetlands, and protect CVT infrastructure. The improvements are for the most chronic locations as determined by extensive analysis and itemized in the recently completed 2017 CVT Comprehensive Plan Update.

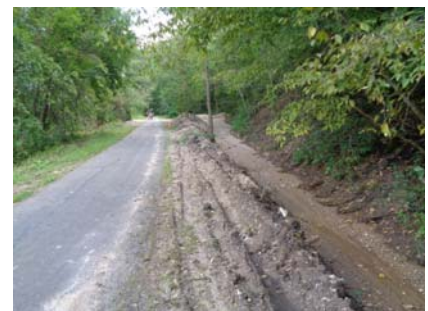
Methods: The Project will meet the goals through a combination of efforts, including upstream storm water infrastructure, ditch and culvert improvements to accommodate flows and sediments (followed by removal by CVT as required), and stabilization of Cannon River bank erosion at about four locations.

Need/Benefits: Following completion, there will be immediate benefit as erosion will be reduced; more sediments will be captured, and removed, before entering the Cannon River, wetlands, and floodplain forest; and CVT will be less negatively impacted. CVT hosts about 100,000 annual visitations and these users will benefit from protected infrastructure and fewer closures due to unsafe conditions.

II. Project Activities and Outcomes

This Project proposes extensive erosion control and improvement of storm water conveyance/sediment management infrastructure at about fifteen locations and includes:

Activity 1: Culvert/Ditch/Sediment Management Improvements: Extensive improvement of approximately 1500' linear feet to create room for sediment deposition before reaching wetlands or the Cannon River; enlarging five culverts including two new box culverts, to manage and direct storm water and sediments to less damaging locations. Accumulated sediments can be routinely excavated as required by CVT.



Typical toe-of-slope location, with sediments

Outcomes:

- Sediment capture/improved Cannon River water quality
- Reduced damage to CVT infrastructure
- Reduced maintenance cost

Activity 2: Sand Washout Remediation: Comprehensively controlling massive amounts of sand that are washed onto CVT and into adjacent wetlands from four ravines. Improvements include implementing upstream ponds and piping, and bank stabilization.

Outcomes:

- Sediment capture/reduced negative impact to high quality wetlands/improved water quality
- Reduced damage to CVT infrastructure
- Reduced maintenance cost



Sand deposition on CVT and into adjacent wetlands

Activity 3: Cannon River Bank Stabilization: Stabilize approximately 300-400' of failing Cannon River bank slope that is threatening the integrity of CVT and releasing sediments into the Cannon River. Solutions such as geo-engineering and/or gabion baskets are expected to be required.

Outcomes:

- Reduced bank erosion/improved Cannon River water quality
- Reduced damage to CVT infrastructure
- Reduced maintenance cost



Slope failure releases large sediment loads into the Cannon River. The Cannon River ((not visible) is at the base of the slope on the left.

Outcome	Completion Dates
ENRTF Funds will be the predominate funding source for all activities.	
1. Culvert/Ditch/Sediment Management Improvements - \$463,100: Final engineering and substantial improvement of approximately 1500' linear feet of ditch; enlarging five culverts including two box culverts. Includes some trail raising and bituminous replacement to accomplish.	Final Engineering Completion: March 2020 Construction: Substantial Completion June 2021
2. Sand Washout Remediation - \$555,660: Final engineering and effective remediation of massive sand erosion from four ravines.	Final Engineering Completion: March 2020 Construction: Substantial Completion June 2021
3. Cannon River Bank Stabilization - \$567,440: Final engineering and geo-engineered solutions. Some bituminous replacement will be required.	Final Engineering Completion: March 2020 Construction: Substantial Completion June 2021
Project Total: \$1,586,150	

2019 Proposal Budget Spreadsheet

Project Title: Cannon Valley Trail Erosion Control/Water Quality Improvements

IV. TOTAL ENRTF REQUEST BUDGET *[Insert # of years for project] years*

BUDGET ITEM (See "Guidance on Allowable Expenses")		AMOUNT
Personnel: personnel costs are proposed	No	\$ -
Professional/Technical/Service Contracts: To Be Determined - Competitive bid for Final Engineering - \$151,000 and Construction Administration - \$50,450. Estimate 2-3 contracts for construction activities (most cost effective approach to be determined in final engineering process) - \$1,384,750.		\$ 1,586,200
Equipment/Tools/Supplies: costs are proposed	No	\$ -
Acquisition (Fee Title or Permanent Easements): acquisition required	No	\$ -
Travel: travel expenses required	No	\$ -
Additional Budget Items: None.		\$ -
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =		\$ 1,586,200

V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: None	\$ -	N/A
Other State \$ To Be Applied To Project During Project Period: None	\$ -	N/A
In-kind Services To Be Applied To Project During Project Period: Cannon Valley Trail Manager as Project Manager - \$10,000. Other staff to manage interface with public regarding trail closures, construction activities, etc. - \$5,000.	\$ 15,000	Secured
Past and Current ENRTF Appropriation: 2005 CVT received \$300,000 of LCCMR funding for construction of a new bridge	In \$ 300,000	Completed
Other Funding History:	\$ -	N/A

Attachment C:
Environment and Natural Resources Trust Fund
M.L. 2019 Acquisition/Restoration Parcel List Spreadsheet
Project Title: Cannon Valley Trail Erosion Control/Water Quality Improvements
Legal Citation:
Project Manager: Scott Roepke
Organization: Cannon Valley Trail Joint Powers Board
College/Department/Division:
M.L. 2019 ENRTF Appropriation:
Project Length and Completion Date: 2 Years - June 2021
Today's Date: April 9, 2018



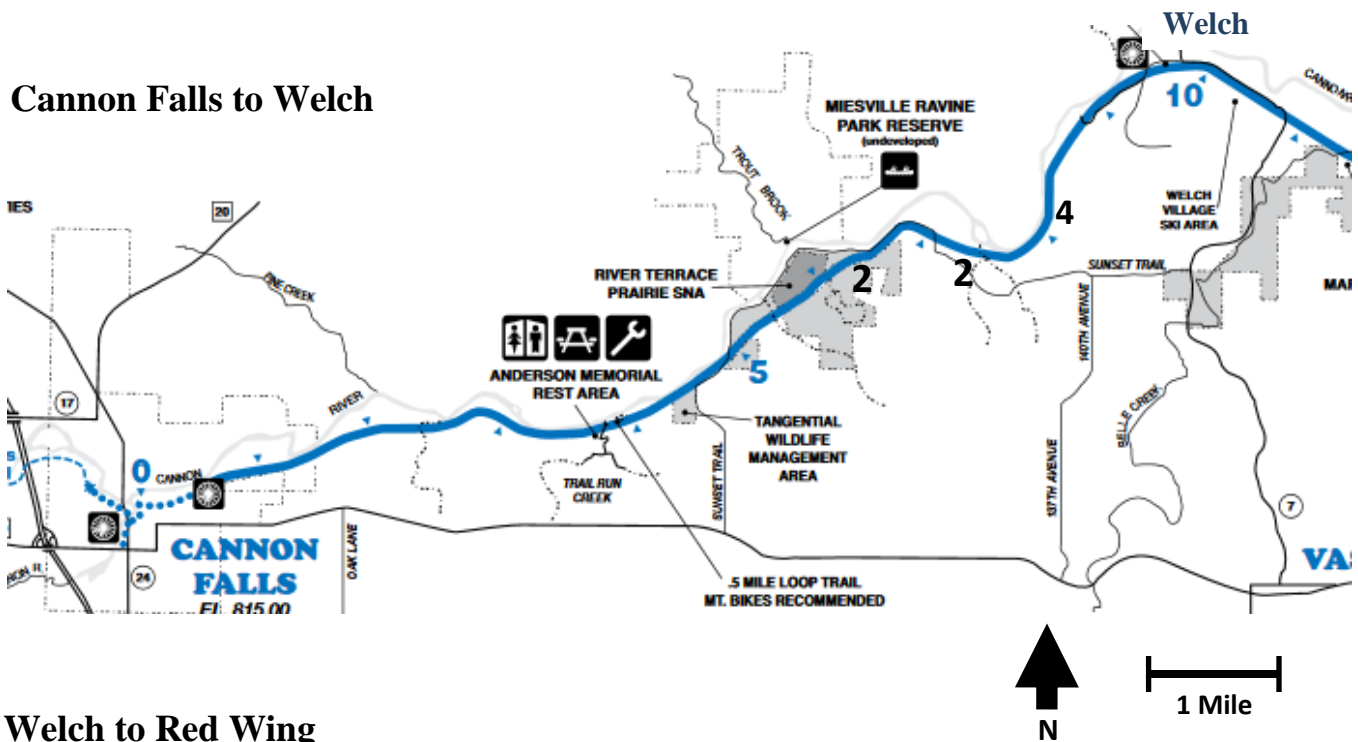
#	Acquisition or Restoration Parcel Name	Geographic Coordinates (preferably from the center of the parcel) Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance (please include what ecosystem (e.g., prairie, forest, wetland, savanna) is represented as well as the ecological significance, site importance, conservation value, and public benefits)	Activity Description (e.g. fee title acquisition, conservation easement acquisition, site preparation, restoration)	# of Acres	# of Shoreline Miles	Type of Landowner (private individual or trust, non-profit organization, for-profit entity)	Proposed Fee Title or Easement Holder (if applicable)	Status of work (e.g. engaged in landowner negotiations, no longer in consideration, restoration activities underway)
		Latitude	Longitude										
1	Vaillant, Dennis	44 34' 23.38"N	92 36' 53.30' W	\$0	\$50	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.1	0	Private		Engaged in negotiations
2	Anderson, Shirley	44 34' 21.05"N	92 36' 52.88"W	\$0	\$100	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.2	0	Private		Engaged in negotiations
3	Burke, Gary	44 34' 20.92" N	92 36' 42.81' W	\$0	\$50	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.05	0	Private		Engaged in negotiations
4	MnDOT	44 34' 16.57" N	92 36' 42.23" W	\$0	\$0	Goodhue	Site is highway right-of-way and is highly disturbed with low ecological significance.	Restoration for erosion control	0.1	0	State		Engaged in negotiations
5	Wolpers, Arliss	44 34' 15.94" N	92 37' 02.56"W	\$0	\$100	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.2	0	Private		Engaged in negotiations
6	Platson, Nadine	44 34' 17.23" N	92 36' 56.09" W	\$0	\$100	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.1	0	Private		Engaged in negotiations
7	Miller, Cody	44 34' 13.19" N	92 36' 59.95" W	\$0	\$50	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.05	0	Private		Engaged in negotiations
8	Goodhue County	44 34' 17.52" N	92 37' 17.52" W	\$0	\$100	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.2	0	County		Land owner is the applicant
9	Anderson Center	44 34' 19.89" N	92 38' 12.39" W	\$0	\$50	Goodhue	Site is highly disturbed with low ecological significance.	Restoration for erosion control	0.2	0	Non-Profit		Engaged in negotiations
10	Cannon Valley Trail	44 33' 47.44" N	92 44' 23.06" W	\$0	\$500	Goodhue	Sites are highly disturbed with low ecological significance.	Restoration for erosion control	5	0	County		Land owner is the applicant

NOTES:

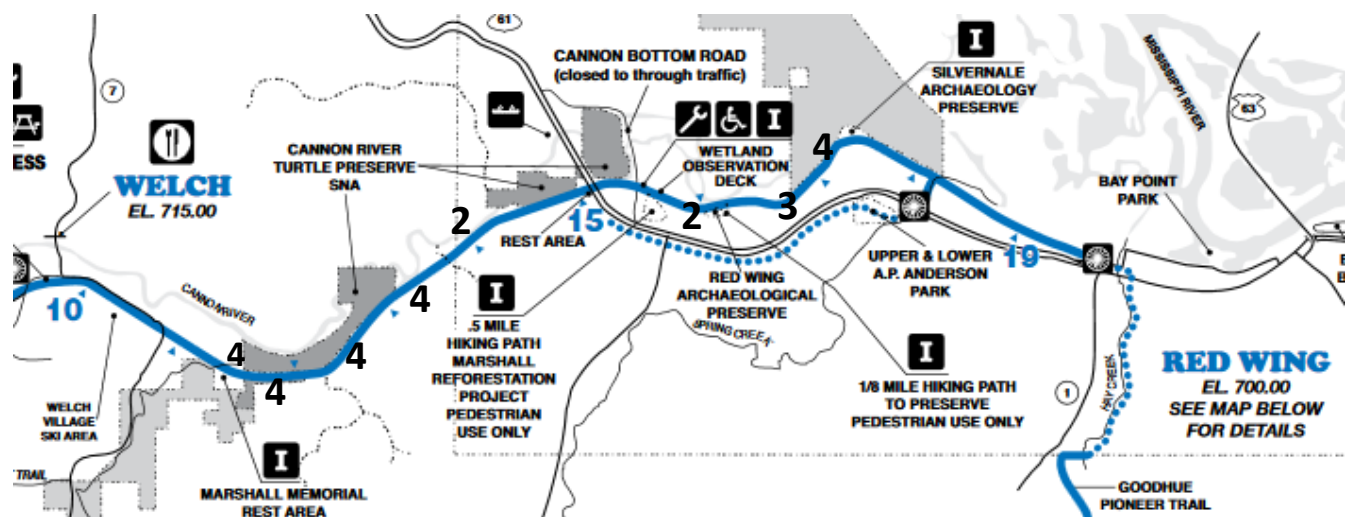
Cannon Valley Trail – Project Locations

Activity 1: Final Engineering – All Locations

- 2 Activity 2: Cannon River Water Quality Improvements – Repair of failing slopes
- 3 Activity 3: Wetland Protection – Sand washout remediation (Note: There are four separate but immediately adjacent locations at this site)
- 4 Activity 4: Floodplain Forest Protection – Increased storm water management and sediment capture capacity



Welch to Red Wing



Attachment D. Additional Work Plan Information for Acquisition, Easements, and Restoration

Acquisition/Restoration Information:

Restoration

1. *Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.*

Restoration work is entirely on lands currently owned by Goodhue County as part of the Cannon Valley Trail. Activity 3: Wetland Protection involves construction of erosion control elements (e.g. piping, rock checks, etc.) on private land and necessary construction and maintenance agreements will be negotiated with the landowners.

2. *Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.*

About five acres of Cannon Valley Trail property will be disturbed by Activity 2: Cannon River Water Quality Improvement; Activity 3: Wetland Protection; and Activity 4: Floodplain Forest Protection. Outcomes include:

- Improved Cannon River water quality through stabilizing failing slopes
- Improved wetland protection by substantial reduction of sand deposition
- Reduced negative impact to floodplain forest through sediment capture and removal
- Improved recreational experience with fewer and shorter trail closures required
- Cleaner trail tread for a safer and more enjoyable experience
- Reduced damage to CVT infrastructure
- Reduced regular maintenance cost

All documents, plans, other records of the project are kept primarily electronically at the Cannon Valley Trail Office, Cannon Falls, MN. Furthermore engineering studies, plans and products are kept on file with the City of Red Wing Engineer, Red Wing, MN.

This project funding provides for completion of the itemized work locations. The final engineering design process will provide direction on long term maintenance.

3. *Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" in order to ensure ecological integrity and pollinator enhancement.*

Cannon Valley Trail is familiar with the BSWR vegetation requirements and always seeks to provide ecological compatibility and integrity in existing natural resource management and restoration activities. Restoration activities as part of this project will meet BSWR native vegetation guidelines.

4. *Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.*

The CVT operational budget is derived from contributions from three local units of government (Cities of Cannon Falls, Red Wing; and Goodhue County), revenue from a user fee (Wheel Pass) required for those age 18 and older using the trail on bicycles and in-line skates, and private donations. CVT has 32 years of operational experience and has financially met the operational and maintenance needs and challenges and is committed to in the future. This project is anticipated to result in reduced maintenance costs for the sites proposed for remediation. Currently these sites require frequent, and expensive, maintenance inputs to keep the trail open and safe.

5. *Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.*

CVT is familiar with the capabilities of the CCM. CVT will initiate a conversation with CCM about providing labor intensive services for the restoration activities suited for their program.

6. *Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.*

CVT commits to providing project evaluations initially after completion as well as three years later.

Cannon Valley Trail

Project Manager Qualifications and Organization Description

Project Manager

Mr. Scott Roepke

597.263.0508

trailmanager@cannonvalleytrail.com

Mr. Roepke has supervised the operation, maintenance, programs, development and staff of the Cannon Valley Trail for 19 years. These responsibilities are performed in accordance with the policies, priorities and direction established by the Joint Powers Board.

Mr. Roepke has managed numerous Cannon Valley Trail construction projects including Belle Creek Bridge Replacement, Mile 16 Trail Realignment and Asphalt Restoration. He provided oversight including application details, securing contracts, implementation, reimbursement and closure. He has successfully completed 10 substantial construction projects involving numerous grant and other funding sources.

Mr. Roepke received a Bachelor of Science degree in Park and Land Management from the University of Wisconsin in 1993.

Organization Description

Cannon Valley Trail is governed by a local Joint Powers Board (JPB) comprised of three members each from the Cities of Cannon Falls and Red Wing; and Goodhue County. The City Councils and County Board of Commissioners each appoint at least one elected official and one citizen to the JPB, while the third position can be either at the governing body's discretion. The responsibilities of the JPB are defined in a founding document. The three units of government financially contribute to the operations budget.

In a cooperative arrangement, the City of Red Wing serves as the Trails fiscal agent while Goodhue County owns the property. The Joint Powers Board is assisted by a full time trail manager, part-time office assistant, seasonal staff, and volunteers and professional services provided by staff of the three units of government.

CVT was founded through citizen action and opened in 1986. It now hosts 100,000 annual visitations, with 60% from outside Goodhue County. Developed for non-motorized use, hikers, bicyclists, inline skaters and cross country skiers enjoy a quiet, nature immersed experience through the Cannon River valley. CVT is a vital regional trail connection to the Mill Towns State Trail at Cannon Falls via City Trail and to the Goodhue Pioneer State Trail in Red Wing via the City Hay Creek Trail, as well as to downtown Red Wing via the City Riverfront Trail. Significant trail connections are being planned by other agencies from Red Wing south to Lake City and north to Hastings.

