

**Environment and Natural Resources Trust Fund**

# 2023 Request for Proposal

## **General Information**

**Proposal ID:** 2023-129

**Proposal Title:** Brightsdale Dam Channel Restoration

## **Project Manager Information**

**Name:** Anne Koliha

**Organization:** Fillmore County Soil and Water Conservation District

**Office Telephone:** (507) 765-3878

**Email:** anne.koliha@fillmoreswcd.org

## **Project Basic Information**

**Project Summary:** Restore the channel of the North Branch Root River at the site of a former hydro power dam that failed and was removed in 2003.

**Funds Requested:** $1,020,000

**Proposed Project Completion:** July 31, 2025

**LCCMR Funding Category:** Water Resources (B)

## **Project Location**

**What is the best scale for describing where your work will take place?** Region(s): SE

**What is the best scale to describe the area impacted by your work?** Region(s): SE

**When will the work impact occur?** During the Project and In the Future

## **Narrative**

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

The hydro power facility was constructed by the Root River Power and Light Company in 1913-14. Two dams were constructed at the site. The upper dam was 164 ft-wide and diverted flow into a side channel. A dam on the side channel was 40 ft-wide and 12 ft-high. This dam diverted water into a 1,750 ft-long tunnel cut through the bluff (Figure 1). The tunnel remains today serving as a bat sanctuary. The hydro power dam failed in the early 1990's and the dam was removed in 2003. However, the channel was not stabilized after dam removal and this has caused significant channel downcutting and bank erosion. A headcut has migrated 4,000 ft upstream and has caused sedimentation and habitat loss. An estimated 540 tons of sediment is being eroded annually from a 2,800 ft-long bank section downstream of the former dam. This erosion is occurring because the channel is forced into an extreme meander due to lasting effects of the dam. This reach of the North Branch Root River is listed as impaired for sediment and macroinvertebrates. This project will help address these impairments while improving aquatic habitat and recreational opportunities.

**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.**

The river channel at the project location has been unstable since removal of the dam. We will excavate a new section of channel to restore the proper meander pattern. Existing eroded banks will be sloped and stabilized with toe-wood and sod mats. Two grade control riffles will be constructed to maintain the proper channel gradient through the project reach. A section of the current channel will no longer have flow and will be filled-in providing the opportunity to restore some of the native prairie that has been lost to erosion. Aquatic habitat will be improved by the addition of cover from toe wood and root wads as well as a reduction in sedimentation which will improve macroinvertebrate and fish spawning habitat.

**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 channel will be placed in a stable form that has not occurred since dam construction in the early 1900’s. Aquatic habitat for fish, macroinvertebrates, and freshwater mussels will be improved. Lake Sturgeon and the Ellipse mussel, both state listed species, will benefit from reduced sedimentation. The project would improve angling opportunities for Smallmouth Bass, Walleye, and Brown Trout as well as nongame species. The history of the hydropower facility presents an intriguing story about the long lasting effects of dams. The site will be used for educational purposes for the public and Eagle Bluff Environmental Center.

## **Activities and Milestones**

### **Activity 1: Project administration, design, bid, and award**

**Activity Budget:** $155,200

**Activity Description:**Develop an RFP for hiring a consulting engineer to develop a construction plan set, identify permit requirements, and develop bidding materials. The bid packet will be advertised, a pre-bid meeting will be held, and the construction award will be granted to a contractor. Outcomes will be a project plan set and the hiring of an engineer and construction contractor.

**Activity Milestones:**

|  |  |
| --- | --- |
| **Description** | **Completion Date** |
| Submit a RFP for hiring a consulting engineer | August 31, 2023 |
| Hire a consultant | October 31, 2023 |
| Develop an engineered plan set to be used for contractor bidding | December 31, 2023 |
| Contractor hiring and onboarding | March 31, 2024 |
| Permitting complicance completed | April 30, 2024 |

### **Activity 2: Project construction**

**Activity Budget:** $864,800

**Activity Description:**Construct the project according to design plans. The project will require tree clearing which will provide rootwads for bank stabilization. A new channel and floodplain will be excavated. The present channel will be disconnected from flow and filled. Eroding banks will be sloped and toewood will be installed for stabilization. Rip-rap will be used to create a boulder toe and placed in the middle of constructed riffles. Two riffles will be constructed using boulders to create cross vanes. The riffles will stabilize the channel slope and prevent headcutting. Extensive erosion control measures will be used including silt fence, straw logs and mulch, and erosion control blanket. The site will be seeded with a variety of mixes depending upon the location. Live stake willows will also be installed to further protect the river banks from erosion

**Activity Milestones:**

|  |  |
| --- | --- |
| **Description** | **Completion Date** |
| Site preparation | May 31, 2024 |
| Construction completion | December 31, 2024 |
| Final grading and seeding | June 30, 2025 |
| Complete project summary report and final submittal | June 30, 2025 |

## **Project Partners and Collaborators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Organization** | **Role** | **Receiving Funds** |
| Jeff Weiss | Minnesota Department of Natural Resources | Project coordination and technical advise | No |
| Colleen Foehrenbacher | Eagle Bluff Environmental Learning Center | Developing educational materials and programming | No |
| Brian Provost | Private landowner | Construction access and prairie restoration | No |

## **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?**The project will be used for educational purposes for the public and for students attending Eagle Bluff ELC. Permanent channel monitoring cross-sections will be established and DNR staff will monitor changes to the channel over time. Established MPCA water quality and biological monitoring sites will be used to evaluate progress towards achieving water quality goals for the North Branch Root River. Monitoring results will be used to inform the implementation of future projects on larger rivers in southeast Minnesota. All monitoring work will be funded by DNR and MPCA appropriations and no additional funding is needed for monitoring.

## **Project Manager and Organization Qualifications**

**Project Manager Name:** Anne Koliha

**Job Title:** District Administrator

**Provide description of the project manager’s qualifications to manage the proposed project.**Anne Koliha has worked for the Fillmore SWCD for 20 years and has experience in handling grants and working with partner agencies. She began her career with SWCD as an Engineer Technician and moved up to the District Administrator role. Over the years Koliha has worked with numerous grants with BWSR, MPCA, MDA, DNR, and NRCS and is very familiar with the grant report processes each agency requires. During the time Koliha was an Engineer Technician she worked with Engineers/Consulting Firms on project plans and then worked with contractors to get the work completed and this continues as necessary as the District Administrator in leading staff with projects that go through the SWCD. Koliha has experience working with partner agencies as necessary to get work completed and to get proper permits for work to be completed and manage project budgets.

**Organization:** Fillmore County Soil and Water Conservation District

**Organization Description:**Fillmore SWCD is a local unit of government that manages and directs natural resources management programs at the local level. The District works both in urban and rural setting with landowners and other units of government to carry out a program for the conservation, use, and development of soil, water and related resources. Fillmore SWCD provides technical assistance and financial assistance for conservation that protect the water quality and soil health of Minnesota's natural resources.

## **Budget Summary**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category / Name** | **Subcategory or Type** | **Description** | **Purpose** | **Gen. Ineli gible** | **% Bene fits** | **# FTE** | **Class ified Staff?** | **$ Amount** |
| **Personnel** |  |  |  |  |  |  |  |  |
| SWCD Administrator |  | Grant administration and fiscal management |  |  | 30% | 320 |  | $17,600 |
|  |  |  |  |  |  |  | **Sub Total** | **$17,600** |
| **Contracts and Services** |  |  |  |  |  |  |  |  |
| TBD | Professional or Technical Service Contract | The consulting engineering company will be responsible for developing engineered project plans and hiring a construction contractor. They will also be responsible for permit compliance and construction oversight. |  |  |  | - |  | $137,000 |
| TBD | Professional or Technical Service Contract | The construction contractor will be responsible for constructing the project according to engineered plans and in accordance with permitting requirements. They will also be responsible for procurement of construction materials. |  |  |  | - |  | $677,975 |
|  |  |  |  |  |  |  | **Sub Total** | **$814,975** |
| **Equipment, Tools, and Supplies** |  |  |  |  |  |  |  |  |
|  | Tools and Supplies | Class V rip-rap | Riffle construction |  |  |  |  | $33,000 |
|  | Tools and Supplies | Boulders | Cross vanes in riffles |  |  |  |  | $72,000 |
|  | Tools and Supplies | Straw sediment control logs | Erosion control and prevention |  |  |  |  | $8,000 |
|  | Tools and Supplies | Seed, MN State Mixture 32-241 (Native Construction) | Soil stabilization |  |  |  |  | $725 |
|  | Tools and Supplies | Seed, MN State Mixture 34-261 (Riparian South and West) + cover crop | Soil stabilization |  |  |  |  | $12,960 |
|  | Tools and Supplies | Seed, MN State Mixture35-641 (Mesic prairie) + cover crop | Soil stabilization and prairie restoration |  |  |  |  | $8,640 |
|  | Tools and Supplies | Straw mulch and disc anchoring | Erosion control |  |  |  |  | $500 |
|  | Tools and Supplies | Erosion control blanket (Geocoir/DeKoWe 700) | Erosion control |  |  |  |  | $11,500 |
|  | Tools and Supplies | Straw erosion control blanket | Erosion control |  |  |  |  | $30,000 |
|  | Tools and Supplies | Bare root shrubs | Soil and bank stabilization |  |  |  |  | $8,000 |
|  | Tools and Supplies | Live stake willows | Soil and bank stabilization |  |  |  |  | $1,200 |
|  | Tools and Supplies | Silt fence, heavy duty | Erosion control |  |  |  |  | $900 |
|  |  |  |  |  |  |  | **Sub Total** | **$187,425** |
| **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** | **$1,020,000** |

### **Classified Staff or Generally Ineligible Expenses**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category/Name** | **Subcategory or Type** | **Description** | **Justification Ineligible Expense or Classified Staff Request** |

### **Non ENRTF Funds**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Specific Source** | **Use** | **Status** | **Amount** |
| **State** |  |  |  |  |
| In-Kind | Clean Water Fund | MNDNR clean water program staff will provide in-kind technical services and permitting and compliance support. MNDNR staff will conduct long-term project monitoring. | Secured | $42,669 |
|  |  |  | **State Sub Total** | **$42,669** |
| **Non-State** |  |  |  |  |
|  |  |  | **Non State Sub Total** | **-** |
|  |  |  | **Funds Total** | **$42,669** |

## **Attachments**

### **Required Attachments**

#### ***Visual Component***

File: [13656d05-104.pdf](https://lccmrprojectmgmt.leg.mn/media/map/13656d05-104.pdf)

#### ***Alternate Text for Visual Component***

Image of the conceptual design of the remeandered river channel, constructed riffles, and bank stabilization locations. The portion of the existing channel that will be filled and restored to native prairie is also shown on the image....

#### ***Board Resolution or Letter***

|  |  |
| --- | --- |
| **Title** | **File** |
| SWCD Board Authorization | [e0ba9f82-37e.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/e0ba9f82-37e.pdf) |

### **Optional Attachments**

#### ***Support Letter or Other***

|  |  |
| --- | --- |
| **Title** | **File** |
| MNDNR Letter of Support | [c50004eb-d2b.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/c50004eb-d2b.pdf) |
| Project Proposal | [e3169fe4-f1f.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/e3169fe4-f1f.pdf) |
| Friends of the Root River-Letter of Support | [5f38cc1a-30a.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/5f38cc1a-30a.pdf) |
| TNC Letter of Support | [af71a995-a76.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/af71a995-a76.pdf) |

## **Administrative Use**

**Does your project include restoration or acquisition of land rights?**
 No

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