



# Environment and Natural Resources Trust Fund

## 2021 Request for Proposal

### General Information

**Proposal ID:** 2021-238

**Proposal Title:** Morrison County Performance Drainage And Hydrology Management II

### Project Manager Information

**Name:** Shannon Wettstein

**Organization:** Morrison Soil and Water Conservation District

**Office Telephone:** (320) 631-3553

**Email:** shannon.wettstein@morrisonswcd.org

### Project Basic Information

**Project Summary:** Complete the Morrison County culvert inventory started in 2016 to help solve landowner conflicts, protect wetlands, improve water quality, ensure road safety and design additional water storage throughout the county.

**Funds Requested:** \$197,000

**Proposed Project Completion:** 2023-06-30

**LCCMR Funding Category:** Small Projects (H)

**Secondary Category:** Foundational Natural Resource Data and Information (A)

### Project Location

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

Region(s): Central

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

Region(s): Central

**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.**

Morrison County, like other agricultural counties, has experienced a vast increase in drainage. Thousands of acres are being tiled with no approval or oversight. The water moving across the landscape has altered drainage capacity of county and township roads, as well as created major conflict between neighbors and road authorities' due to impacts of standing water on agricultural fields and topping of public roads. Morrison SWCD historically has taken the lead in managing drainage, county wide, through the administration of the Wetland Conservation Act (WCA) guiding private landowners and the local road authorities through WCA laws and regulation relating to ditching and draining. This leadership role was taken a step further when in 2016, the district was awarded a LCCMR grant to hire a hydrology technician and conduct an initial culvert inventory along township roads. This previous grant supported the completion of two thirds of the counties township centerline and driveway culverts. Due to the sheer amount of culverts and the time necessary to inventory them the previous grant was not sufficient to complete the entire county.

### **What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.**

Morrison SWCD is committed to serving the public through a leadership role in managing drainage and sharing a more complete understanding of drainage infrastructure within the county. The way to do this is by completing the county wide culvert inventory which was started in 2016 and by sharing this information with our partners, the public and local drainage authorities. This information will assist local authorities in making decisions about upcoming project areas based on complete hydrology and storm water information which ultimately improves public road safety and saves taxpayers money by allowing townships to take a more systematic approach to improving infrastructure. This information will help reduce conflict between landowners experiencing flooding or drainage issues by painting a clearer picture of what is actually happening on the landscape. This information will protect wetland habitats from accidental drainage when contractors or private landowners replace pipes at incorrect elevations. Finally, this information will allow Morrison SWCD to solve drainage issues not by just pushing water onto someone else but by identifying and designing water storage projects so they can be adopted on the landscape using federal, state or local funds.

### **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?**

Conduct culvert inventories on approximately 4,000 culverts along township roads, county road culvert information would be gathered by Morrison County Highway Department. This information would then:

- Create and maintain a database of all culvert elevations throughout the county.
- Provide updated culvert inventory data to Morrison County for publication on Morrison County Beacon GIS site.
- Prioritize and rank inventory work based on watershed and safety considerations.
- Provide updated culvert inventory data and prioritization suggestions to road authorities at the Township and County level as well as Camp Ripley, MN DNR and FEMA
- Identify locations for water storage throughout the county.

## Activities and Milestones

### Activity 1: Inventory culverts within Morrison County, specifically township road centerline and private driveways

**Activity Budget:** \$197,000

**Activity Description:**

Complete township centerline and driveway culverts in ten townships in order to comprehend the hydrology and storm water management for the county. The hydrology technician afforded through this capacity funding would work with township and county road authorities as well as Camp Ripley to identify culvert locations so drainage infrastructure can be inventoried. The remaining townships include Parker, Ripley, Bellevue, Buckman, Morrill, Lakin, Pulaski, Granite and Buh Townships. An additional area would include select culverts in and around Camp Ripley, a 53,000 acre Army National Guard training facility located in Morrison County which contributes a large watershed.

**Activity Milestones:**

| Description   | Completion Date |
|---|-----------------|
| Conduct culvert inventories on approximately 4,000 culverts   | 2022-10-31      |
| Create and maintain a database of all culvert elevations throughout the county                                    | 2022-10-31      |
| Provide updated culvert inventory data to Morrison County for publication on Morrison County Beacon GIS           | 2023-01-31      |
| Prioritize and rank inventory work based on watershed and safety considerations                                   | 2023-02-28      |
| Identify and design water storage locations throughout the county   | 2023-02-28      |
| Provide updated culvert inventory data and prioritization suggestions to road authorities and share with partners | 2023-04-30      |
| Provide updated culvert inventory data to Camp Ripley, DNR and FEMA.  | 2023-04-30      |

## Project Partners and Collaborators

| Name  | Organization                         | Role  | Receiving Funds |
|---|--------------------------------------|---|-----------------|
| West Central Technical Service Area Engineers | Technical Service Area II            | Provide engineering services and design work for water storage when identified by Morrison SWCD.  | Yes             |
| Camp Ripley Environmental                     | Department of Military Affairs (DMA) | Accompany Morrison SWCD when down range on camp training locations so culvert locations which flow into Morrison County can be documented. Work with Morrison SWCD to identify locations for water storage and wetland restorations.  | No              |
| Township Road Authorities                     | Morrison County Townships            | Provide locations of known culverts along township roads so these can be surveyed and documented.   | No              |
| Morrison County Land Services                 | Morrison County                      | Provides the platform for all of the publicly accessible culvert inventory data on their Morrison County Beacon, the interactive GIS mapping service of the county.   | No              |
| Morrison County Highway Department            | Morrison County                      | Simultaneously working on completing a culvert inventory on all county roads throughout the county using the same methods and equipment as Morrison SWCD so a more complete picture of the county drainage infrastructure can be formed. Work with Morrison SWCD to identify potential water storage locations. | 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 be funded?**

Once the drainage inventory is complete Morrison SWCD will continue to staff a hydrology technician in-house for assistance to township officials, Morrison County, landowners and Camp Ripley as requested and work with each of these entities to keep the inventory up to date. Ongoing culvert inventory data would be maintained by Morrison SWCD and would be accessible electronically through the Morrison County Beacon GIS system. This completed inventory will also identify locations for water storage throughout the county. Morrison SWCD would work with our engineers to design and implement these structures through various federal, state or local sources.

## Other ENRTF Appropriations Awarded in the Last Six Years

| Name  | Appropriation   | Amount Awarded |
|---|---|----------------|
| Oak Wilt Suppression at its Northern Edge                     | M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 06b | \$100,000      |
| Morrison County Performance Drainage and Hydrology Management | M.L. 2016, Chp. 186, Sec. 2, Subd. 04r                              | \$209,000      |

## Project Manager and Organization Qualifications

**Project Manager Name:** Shannon Wettstein

**Job Title:** District Manager

**Provide description of the project manager's qualifications to manage the proposed project.**

Shannon Wettstein, District Manager for Morrison Soil and Water Conservation District holds an MBA from the University of Chester England and an Environmental Studies degree from the University of Minnesota Duluth. She has

served in this role since 2018, prior to this she worked as the Water Planner in another district.

Morrison SWCD has a long successful history of administering and executing grants such as MPCA 319 grants, Clean Water Funds, Special Project grants through BWSR; Challenge Grants, as well as the budget for the district which includes multiple sources of funding from the state, county, and federal funds. The district also administers the MN Wetland Conservation Act, the Local Water Plan, and one of the biggest easement programs in the state, the Army Compatible Use Buffer Program which holds just under 300 easements funded by the Dept. of Defense, LSOHC, and National Guard Bureau which has received nearly \$39,000,000 to date. The mission of Morrison SWCD is to provide leadership and direct assistance for conservation management of soil and water.

**Organization:** Morrison Soil and Water Conservation District

**Organization Description:**

Morrison Soil and Water Conservation District's mission is to "To provide leadership and direct assistance for conservation management of soil and water." The district is directed by a five-member Board of Supervisors, each is elected to serve a four year term of office. The SWCD has five staff and they are responsible for carrying out the goals of the District. The primary focus of the district is offering technical assistance to landowners and to provide cost share assistance to install conservation practices on private lands. Morrison SWCD also has a long history of partnerships with other local, state and federal agencies who work in the area. Morrison SWCD has been a leader in the natural resource community and is often the first place citizens, county commissioners and agency staff call to find answers and get assistance on resource concerns.

Morrison SWCD offers a diverse amount of programs including: Army Compatible Use Buffer (ACUB) and other RIM easement programs, AgBMP, Buffer Law assistance, climatology reporting, Water Plan admin., hydrology, forestry, shoreland and nutrient management technical assistance and state and federal cost share assistance through multiple funding pools, native plant community restoration, nitrate testing, certified wetland delineations and Wetland Conservation.

## Budget Summary

| Category / Name                                       | Subcategory or Type | Description   | Purpose | Gen. Ineligible | % Benefits | # FTE | Classified Staff? | \$ Amount        |
|---|---------------------|---|---------|-----------------|------------|-------|-------------------|------------------|
| <b>Personnel</b>                                      |                     |   |         |                 |            |       |                   |                  |
| Engineering Technician                                |                     | Survey culvert locations, elevations and conditions; Provide hydrologic assessments; provide technical assistance to drainage authorities, Camp Ripley and private landowners   |         |                 | 33%        | 3     |                   | \$167,500        |
|   |                     |   |         |                 |            |       | <b>Sub Total</b>  | <b>\$167,500</b> |
| <b>Contracts and Services</b>                         |                     |   |         |                 |            |       |                   |                  |
| West Central Technical Service Area (WCTSA) Engineers | Sub award           | WCTSA provides engineering services to SWCDs within a twelve county region in central Minnesota. WCTSA would work with Morrison SWCD once a project location had been identified to design water storage capacity on the landscape. These plans could then be implemented once additional funding is secured. |         |                 |            | 0.09  |                   | \$20,000         |
|   |                     |   |         |                 |            |       | <b>Sub Total</b>  | <b>\$20,000</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>                            |                     |   |         |                 |            |       |                   |                  |

|                                 |                          |   |   |  |  |  |                    |                  |
|---------------------------------|--------------------------|---|---|--|--|--|--------------------|------------------|
|                                 | Miles/ Meals/<br>Lodging | Approximately 17,000 miles within Morrison County | Providing transportation in and around townships and Camp Ripley to conduct the inventory |  |  |  |                    | \$9,500          |
|                                 |                          |   |   |  |  |  | <b>Sub Total</b>   | <b>\$9,500</b>   |
| <b>Travel Outside Minnesota</b> |                          |   |   |  |  |  |                    |                  |
|                                 |                          |   |   |  |  |  | <b>Sub Total</b>   | -                |
| <b>Printing and Publication</b> |                          |   |   |  |  |  |                    |                  |
|                                 |                          |   |   |  |  |  | <b>Sub Total</b>   | -                |
| <b>Other Expenses</b>           |                          |   |   |  |  |  |                    |                  |
|                                 |                          |   |   |  |  |  | <b>Sub Total</b>   | -                |
|                                 |                          |   |   |  |  |  | <b>Grand Total</b> | <b>\$197,000</b> |

## 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          |
|------------------|--|---|----------------------------|-----------------|
| <b>State</b>     |  |   |                            |                 |
| In-Kind          | SWCD Local Capacity dollars provided through the Clean Water Fund. | Morrison SWCD staff time for administration of the grant including reporting and grant management. Staff time sharing culvert inventory information with agency partners and at local township and county government meetings.  | Pending                    | \$25,000        |
|                  |  |   | <b>State Sub Total</b>     | <b>\$25,000</b> |
| <b>Non-State</b> |  |   |                            |                 |
| In-Kind          | Morrison County and Township tax base.                             | Township Supervisor per diem for semiannual township meeting, time and mileage to identify culverts, submit culvert replacement forms and go over inventory data with SWCD staff; County Public Works time to inventory and mark culverts, host and attend meetings where the information is presented, submit culvert replacement information; County Land Services and GIS Departments time to update Beacon the interactive GIS mapping; County Commissioner per diem to attend and speak at meetings where the information is presented; Marking flags for townships to identify culvert locations during their annual road and bridge drive. | Pending                    | \$32,000        |
|                  |  |   | <b>Non State Sub Total</b> | <b>\$32,000</b> |
|                  |  |   | <b>Funds Total</b>         | <b>\$57,000</b> |

## Attachments

### Required Attachments

#### *Visual Component*

File: [bc09a41b-05b.pdf](#)

#### *Alternate Text for Visual Component*

Map showing Morrison County with remaining townships and Camp Ripley to be inventoried. Also shows all of the culvert locations inventoried since 2016 when the project started.

#### *Board Resolution or Letter*

| Title                    | File                              |
|--------------------------|-----------------------------------|
| Morrison SWCD Resolution | <a href="#">d984e3b3-b0d.docx</a> |

### Optional Attachments

#### *Support Letter or Other*

| Title                                | File                             |
|--------------------------------------|----------------------------------|
| Representative Kresha Support Letter | <a href="#">ad177cbf-20e.pdf</a> |
| Senator Gazelka Support Letter       | <a href="#">ec3e257b-ce5.pdf</a> |
| Camp Ripley Support Letter           | <a href="#">d44e325e-064.doc</a> |

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Does your project have patent, royalties, or revenue potential?**

No

**Does your project include research?**

No

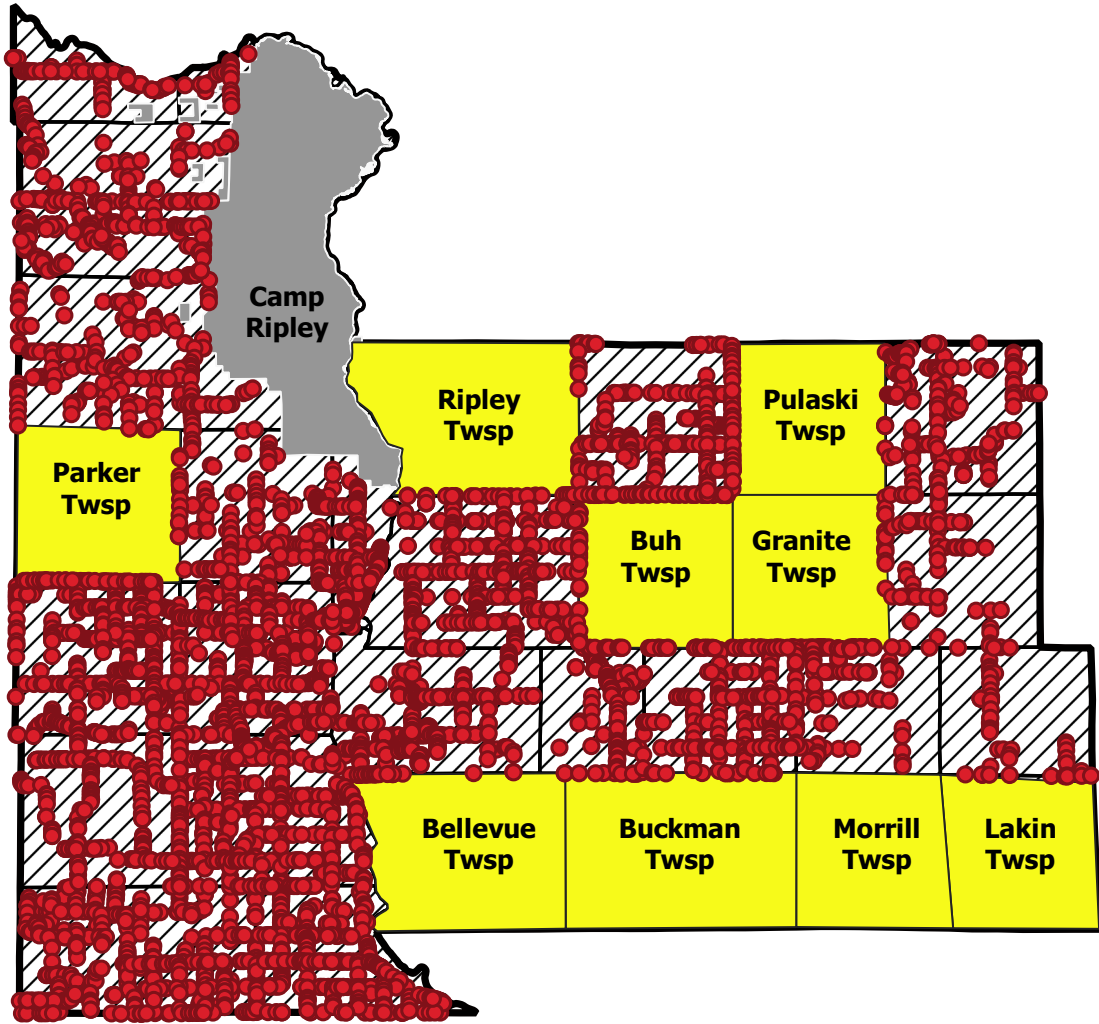
**Does the organization have a fiscal agent for this project?**

No

# Morrison SWCD Culvert Inventory

## Morrison County

4-14-2020



**Legend**

- All Culverts 4-14-2020 ●
- Townships to complete
- Camp\_Ripley
- Township Boundary
- Morrison County Boundary

0 5 10 mi



Created on: 04/14/2020



