



# Environment and Natural Resources Trust Fund

M.L. 2022 Approved Work Plan

## General Information

**ID Number:** 2022-301

**Staff Lead:** Michael Varien

**Date this document submitted to LCCMR:** December 9, 2022

**Project Title:** Rural and Farmstead Ring Levees

**Project Budget:** \$360,000

## Project Manager Information

**Name:** Andrew Graham

**Organization:** MN DNR - Ecological and Water Resources Division

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## Project Reporting

**Date Work Plan Approved by LCCMR:** January 24, 2023

**Reporting Schedule:** March 1 / September 1 of each year.

**Project Completion:** June 30, 2025

**Final Report Due Date:** August 14, 2025

## Legal Information

**Legal Citation:** M.L. 2022, Chp. 94, Sec. 2, Subd. 10g

**Appropriation Language:** \$360,000 the second year is from the trust fund to the commissioner of natural resources for grants to assist in constructing rural and farmstead ring levees for flood protection in the Red River watershed. A grant may not exceed 50 percent of the cost of the project.

**Appropriation End Date:** June 30, 2025

## Narrative

**Project Summary:** Pass-through grants to watershed districts and/or other local governments for design and construction of rural and farmstead ring levees within the Red River watershed (a.k.a. Basin).

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

High-water conditions caused by floods in the Red River Basin can damage structures and equipment and disrupt operations at farms, rural businesses and residences. Following the devastating Red River flood in 1997, the Legislature appropriated funding to construct rural ring levees to address this problem in conjunction with other programs. Appropriations were made in most years from 1997 through 2015, enabling construction of nearly 300 farmstead ring levees in Minnesota's portion of the Red River Basin. DNR partnered with the Red River Watershed Management Board and local watershed districts in this effort. As a result many of the most vulnerable farmsteads have received assistance and now have ring levees in place. The latest funding was appropriated in 2015 and awarded through FY2020. The new \$360,000 appropriation approved in the 2022 legislative session is the first one since then. Landowners working with their watershed districts continue to identify one to three sites per year needing protection with ring levees.

**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.**

Constructing low, earthen levees around rural homes, equipment sheds, grain storage bins and other structures can avoid damages and reduce flood costs borne by landowners and farmers. The project will award funds on a site-by-site basis to construct protective levees at individual sites. Levees are typically on the order of three to six feet tall, and individual projects are expected to protect areas on the order of 1 to 5 acres per site. At a 1:1 matching requirement with non-state funds, the ENRTF funding is expected to enable levee construction at approximately six to nine sites. The actual number of sites will depend on site-specific conditions at local project sites identified over the course of the grant period, and inflationary trends affecting the costs of design and construction over that period. The number of sites could increase if federal funding (e.g. USDA NRCS) becomes available as a matching source during the grant period.

**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 funding directed by Legislative action will reduce the impact of flooding on local farm owners, operators and residents at multiple sites across the Red River Basin. The primary benefit to natural resources is that ring levees prevent the uncontrolled mobilization of fuels and chemicals stored on farm properties during floods, keeping them from entering nearby wetlands, lakes and watercourses where they would degrade water quality and could harm fish, wildlife, macroinvertebrates or other aquatic organisms.

## Project Location

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

Watershed(s): Red Lake River, Red River of the North - Grand Marais Creek, Red River of the North - Marsh River, Red River of the North - Tamarac River, Red River of the North - Sandhill River, Otter Tail River, Mustinka River, Bois de Sioux River, Roseau River, Thief River, Two Rivers, Upper Red River of the North, Wild Rice River, Buffalo River, Snake River,

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

Watershed(s): Red Lake River, Red River of the North - Grand Marais Creek, Red River of the North - Marsh River, Red River of the North - Tamarac River, Red River of the North - Sandhill River, Bois de Sioux River, Buffalo River, Clearwater River, Mustinka River, Otter Tail River, Roseau River, Snake River, Thief River, Two Rivers, Upper Red River of the North, Wild Rice River,

**When will the work impact occur?**

In the Future

## Activities and Milestones

**Activity 1: Outreach from the DNR and RRWMB to local government partners. Outreach from local government partners to local landowners.**

**Activity Budget:** \$1

**Activity Description:**

DNR and RRWMB staff will communicate with local governments and tribes across the Red River Basin regarding availability of funding for ring-levee projects at rural and farmstead properties. The primary focus will be communication with the nine watershed districts active in flood resiliency efforts across the basin, as they have good local networks as well as the appropriate administrative and technical expertise for ring-levee projects. DNR and RRWMB staff will also communicate with the 18 counties, 2 tribes and all soil and water conservation districts (SWCDs) in the Red River Basin. This activity will be provided by the DNR and RRWMB as an in-kind contribution without using ENRTF funds.

Staff from the DNR and RRWMB will also request that the local partners mentioned above extend the outreach effort to landowners at the local level via established communication channels. Local partners participating in this activity can perform outreach in the course of their normal operations, and this is not expected to require ENRTF funds. DNR will request the watershed districts publish/release annual notices to their local publics over the three-year period of this project. The goal will be to identify at least 6 to 9 viable levee projects.

**Activity Milestones:**

Description	Approximate Completion Date
CY 2023 Outreach - all WDs, SWCDs, counties, and tribes in Red River Basin contacted	April 30, 2023
CY 2024 Outreach (same as above)	March 31, 2024
CY 2025 Outreach (same as above)	February 28, 2025

## Activity 2: Evaluation of Project Applications, Contracting and Grant Administration

**Activity Budget:** \$1

**Activity Description:**

As local government partners identify candidate sites for ring levees within their jurisdictions, the DNR and RRWMB will evaluate the sites and select those suitable to receive grant awards. For each local government with at least one levee site selected, the DNR will prepare a grant agreement to fund design and construction at the selected site(s). The DNR will then administer the suite of grant agreements with the local governments through completion of the approved ring levees. The exact pace and number of grants and projects will depend on the number of eligible sites identified by the local government partners in each of the three years for this project. We anticipate at least six to nine applications will be evaluated with grants awarded. This activity will be performed with in-kind and/or matching funds and will not use ENRTF funds.

**Activity Milestones:**

Description	Approximate Completion Date
CY 2023 Evaluations, Contracting and Grant Administration - at least 2 proposals evaluated/awarded	December 31, 2023
CY2024 Evaluations, Contracting and Grant Administration - 3 to 5 additional proposals evaluated/awarded	December 31, 2024
CY 2025 Evaluations, Contracting and Grant Administration - 1 to 2 additional proposals evaluated/awarded	June 30, 2025

### Activity 3: Ring Levee Design and Construction

**Activity Budget:** \$359,998

**Activity Description:**

Local partners will contract for design and construction of ring levees at sites approved under Activity 2. Ring levees are constructed from locally sourced, low permeability soil typically excavated from adjacent farmland that is compacted to be relatively impermeable to flood water. Ring levees are typically raised three to six feet above natural grade, are from 20 to 40 feet wide at the base with sloped sides, and fully enclose the protected area. Farm drives are raised to go over the levees. Permanent vegetation such as turf that can be mowed regularly is established on the levees to prevent erosion and structural deterioration while enabling visual inspection.

Local partners will develop and oversee contracts with landowners, engineering firms and construction contractors using a combination of in-kind services, local funds and ENRTF funding. For purposes of this work plan, it is assumed that the ENRTF funding will be disbursed in equal amounts over the three-year period for this project. Actual disbursements may be higher in some years than others, based on the pace of site-by-site identifications and approvals in each year. We anticipate at least six to nine levees can be constructed with the state funding plus matching funds.

**Activity Milestones:**

Description	Approximate Completion Date
CY 2023 Design and Construction - at least 2 levees completed	December 31, 2023
CY 2024 Design and Construction - 3 to 5 additional levees completed	December 31, 2024
CY 2025 Design and Construction - 1 to 2 additional levees completed	June 30, 2025

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Rob Sip	Red River Watershed Management Board	Collaborate with the DNR in soliciting and evaluating applications from local governments for ring levee funding. This will include outreach to local governments and assigning the RRWMB Technical Advisory Committee to review site-specific applications for ring levee projects. Continues long history of successful collaboration on ring levees in the basin.	No
Administrators	Red River Basin Watershed Districts (9 WDs)	Outreach to landowners; receive and administer site-specific funding; contract for design and construction; oversee site-by-site construction of ring levees in their watersheds.	Yes
County engineers	Counties in Red River Basin	Outreach to landowners, receive and administer site-specific funding, contract for design and construction; oversee site-by-site construction of ring levees in their jurisdictions.	Yes
Managers & staff	Soil and Water Conservation Districts in the Red River Basin	Outreach to landowners. Facilitate services provided by the DNR and its partners.	No
TBD	White Earth Nation and Red Lakes Nation	Outreach to landowners, receive and administer site specific funding, contract for design and construction, oversee site-by-site construction of ring levees in its jurisdiction	Yes

## 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.**

An overview of the ring levees funded by this grant will be provided at the annual joint conference sponsored by the Flood Damage Reduction Work Group (FDRWG) and the Red River Watershed Management Board (RRWMB). The event is typically held in late winter each year. The FDRWG's newly developed newsletter (launched Fall 2022) will also be used to inform stakeholders and the public in the Red River Basin about ring levees completed.

The DNR, RRWMB and FDRWG will acknowledge the Minnesota Environment and Natural Resources Trust Fund (ENRTF) as the source of project funding at all formal presentations and in printed or on-line fact sheets, newsletters, reports or formal releases to the news media or social media covering project activities. This will include either use of the trust fund logo or standard attribution language provided, or both.

## 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 results of this project will derive entirely from construction of the ring levees. The design life of the levees will be on the order of fifty years. Upon completion of each ring levee, ongoing protection of property, structures, farm implements and commodities from flooding are anticipated to continue during that period, with the landowners having sole responsibility for post-construction maintenance and/or repair. Neither the DNR nor its local government partners will have any ongoing responsibilities after the levees have been constructed and approved.



## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
							<b>Sub Total</b>	-
<b>Contracts and Services</b>								
Local government partners	Sub award	Design and construction of 6 to 9 ring levees at approved sites				0		\$360,000
							<b>Sub Total</b>	\$360,000
<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>								
							<b>Sub Total</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>\$360,000</b>

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
<b>State</b>				
In-Kind	Staff time, DNR EWR Division, Red River Basin Coordinator	Coordination of Activity 1; contracting & grant administration in Activity 2	Secured	\$15,000
			<b>State Sub Total</b>	<b>\$15,000</b>
<b>Non-State</b>				
In-Kind	Red River Watershed Management Board - Executive Director and Staff	Participation in outreach efforts. Participation in overall project coordination.	Secured	\$10,000
In-Kind	RRWMB - Technical Advisory Committee	Review of local-government proposals for ring-levee construction	Potential	\$15,000
In-Kind	Local governments	Local government participation in outreach. Direct activity in contracting, oversight of site-by-site construction.	Potential	\$30,000
Cash	Matching funds from landowners, local governments, RRWMB, tribal/federal and/or other non-state sources	Matching funds to pay for contracted design and construction of ring levees	Potential	\$360,000
			<b>Non State Sub Total</b>	<b>\$415,000</b>
			<b>Funds Total</b>	<b>\$430,000</b>

## Attachments

### Required Attachments

#### *Visual Component*

File: [1942ff52-3d4.pdf](#)

#### *Alternate Text for Visual Component*

Maps displaying the Red River Basin in Minnesota, with watershed district and county boundaries. Two photographs showing existing ring levees protecting farmsteads during a flood in the Red River Basin....

### Optional Attachments

#### *Support Letter or Other*

Title	File
Background check certification	<a href="#">8c4def77-fea.pdf</a>
RRWMB Confirmation of Participation	<a href="#">fadebfa5-a91.pdf</a>

### Difference between Proposal and Work Plan

#### *Describe changes from Proposal to Work Plan Stage*

Not applicable. This grant was generated by a specific action by the Legislature and there was no prior proposal.

## 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, 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