



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2017 LCCMR Work Plan

Date of Submission: November 1, 2016

Date of Next Status Update Report: January 15, 2018

Date of Work Plan Approval: 06/07/2017

Project Completion Date: December 31, 2020

Does this submission include an amendment request? No

PROJECT TITLE: Drainage Records Modernization Cost Share – Phase II

Project Manager: Tim Gillette

Organization: BWSR

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Location: Statewide

Total ENRTF Project Budget:

ENRTF Appropriation: \$540,000

Amount Spent: \$0

Balance: \$540,000

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 03g

Appropriation Language:

\$540,000 the first year is from the trust fund to the Board of Water and Soil Resources to facilitate statewide modernization of public drainage records under Minnesota Statutes, chapter 103E, and integrate new specifications into existing drainage records modernization guidelines through matching cost-share grants to drainage authorities. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: Drainage Records Modernization – Phase 2, Match Grants

II. PROJECT STATEMENT:

1. *Project Need:* Minnesota has an estimated 20,000 miles of Minnesota Statutes Chapter 103E public drainage ditches (*Public Drainage Ditch Buffer Strip Study*, Feb. 2006), and estimated thousands of miles of Chapter 103E public subsurface tile systems. Records for these public drainage systems are kept by the current 96 district drainage authorities (a drainage authority (DA) can be a county, joint county board, or a Watershed district). The drainage system records are in various conditions, including deteriorating hard copy materials and scanned documents with limited electronic access. Use of consistent GIS database capabilities are needed to advance local management of public drainage systems and to improve public access to statewide hydrographic data. Hydrographic data about the location, type (ditch or tile), dimensions and profiles of public drainage systems are often sought for watershed modeling and water planning, but have not been easily accessible. As hydrologic modeling and planning for multipurpose water management become increasingly robust, the need for this public drainage system hydrographic data will continue to increase.

The State of Minnesota has provided grants to drainage authorities in the past: 2009 - \$456,929 (County DAs \$349,308, Watershed District DAs \$107,621), 2011 - \$65,426 (County DA \$52,747. Watershed District DAs \$12,679)

2. *Project Goals:* The 2014 LCCMR 05c project titled “*Drainage Records Modernization and Statewide Geographic Information System Database*” was recommended and funded in part in 2014 (Phase 1). In calendar year 2016, the Phase 1 project is on track to:

- a) develop a drainage records GIS database template with data standards for Chapter 103E drainage authority use, and a statewide GIS database for easy access to public drainage system hydrographic data in the Geospatial Commons on the Minnesota Geospatial Information Office (MnGeo) website;
- b) update the *Drainage Records Modernization Guidelines* published by BWSR in September 2008;
- c) develop associated web-based access for these tools; and
- d) provide outreach to Chapter 103E drainage authorities about these new tools.

Drainage records database template development was based on experience from recent drainage records modernization projects and related pilot database development.

Phase 2 will advance local drainage records preservation and use for enhanced drainage system management and provide hydrographic data about these drainage systems in the statewide GIS database. This Phase 2 project will provide state grants matched at minimum 1:1 by local funding to complete the overall project utilizing the GIS database tools and guidance developed in Phase 1.

3. *Methods:* A Request For Proposal (RFP) will be prepared and sent out to all drainage authorities. The RFP will stipulate two eligibility criteria. First, a DA authority must agree to a.) use the Phase 1 database template and associated drainage records modernization guidelines and b.) to annually provide drainage system hydrographic data updates electronically to the associated statewide GIS database.

Second, the drainage authority must provide a local match of at least 1:1 with higher ranking priority given to applications that provide greater than 1:1 match.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of January 15, 2018:

Project Status as of July 15, 2018:

Project Status as of January 15, 2019:

Project Status as of July 15, 2019:

Project Status as of January 15, 2020:

Project Status as of July 15, 2020:

Overall Project Outcomes and Results: February 20, 2021

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Develop and Allocate Grants for Match Grant Program

Description: Implement a Match Grant Program and Allocate Grants with Agreements

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 12,000

Amount Spent: \$ 0

Balance: \$ 12,000

Outcome	Completion Date
1. FY 2018 Match Grants program RFP developed, including eligibility, ranking criteria and associated policies	July – Aug. 2017
2. Drainage Records Modernization Match Grants RFP distributed to Chapter 103E drainage authorities and outreach provided via an associated webinar	September 2017
3. Rank applications, recommend, review and approve grant allocations	December 2017
4. Grantees prepare project work plans and budget details and BWSR Board Conservationists and Conservation Drainage Engineer review and approve	February 2018
5. Grant agreements are signed by grantees and BWSR	March 2018

Activity 1 Status as of January 15, 2018:

Activity 1 Status as of July 15, 2018:

Activity 1 Status as of January 15, 2019:

Activity 1 Status as of July 15, 2019:

Activity 1 Status as of January 15, 2020:

Activity 1 Status as of July 15, 2020:

Final Report Summary: January 15, 2021

ACTIVITY 2: Drainage Authorities Implement Match Grant Agreements

Description: Implementation of Match Grant Agreements by Drainage Authorities, with MnGEO Technical Consultation and BWSR Oversight, and BWSR Survey of Drainage Authorities to Define Remaining Drainage Records Modernization Needs

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 528,000

Amount Spent: \$ 0

Balance: \$ 528,000

Outcome	Completion Date
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<p>1. Match Grants products. Chapter 103E Drainage authorities utilize the Phase 1 drainage records database template and Drainage Records Modernization Guidelines to develop a modern database for their drainage system records and to annually provide current public drainage system hydrographic data to the statewide GIS database. MnGeo will be contracted to provide technical consultation to drainage authority staff and/or consultants, and BWSR will provide grant project oversight. Past Match Grants averaged \$25,000. Twenty (20) new grants are anticipated.</p>	<p>December 2020</p>
<p>2. BWSR conducts a survey of drainage authorities near the end of the project to define status and remaining needs for drainage records modernization and Match Grants</p>	<p>December 2020</p>

Activity 1 Status as of January 15, 2018:

Activity 1 Status as of July 15, 2018:

Activity 1 Status as of January 15, 2019:

Activity 1 Status as of July 15, 2019:

Activity 1 Status as of January 15, 2020:

Activity 1 Status as of July 15, 2020:

Final Report Summary: January 15, 2021

V. DISSEMINATION:

Description: Since the Match Grants are limited to drainage authorities, the grant will be marketed through a RFP in 2017, and through a second RFP, if necessary, in 2018.

Status as of January 15, 2018:

Status as of July 15, 2018:

Status as of January 15, 2019:

Status as of July 15, 2019:

Status as of January 15, 2020:

Status as of July 15, 2020:

Final Summary: January 15, 2021

VI. PROJECT BUDGET SUMMARY:

A. Preliminary ENRTF Budget Overview:

***This section represents an overview of the preliminary budget at the start of the project. It will be reconciled with actual expenditures at the time of the final report.**

Budget Category	\$ Amount	Overview Explanation
Personnel Grant Administration	\$ 24,000	Drainage, Grants and Board Conservationist Staff - BWSR: (70% salary, 30% benefits) Ave. 0.07 FTE/yr. for 3 yrs. (total 0.21 FTE) (\$24,000)
Professional/Technical/Service Contracts:	\$ 16,000	GIS Specialist, MnGeo: (70% salary, 30% benefits) Ave. 0.05 FTE/yr. for 3 yrs. (0.15 FTE) (\$16,000)
Match Grants	\$500,000	BWSR will provide competitive drainage records modernization Match Grants to 96 Chapter 103E county and watershed district drainage authorities to use the new drainage records GIS database template, updated Drainage Records Modernization Guidelines, and web access developed by the 2014 LCCMR 05c project, Phase 1. Minimum 1:1 match will be required. Past Match Grants averaged \$25,000. Twenty (20) new grants are anticipated.
TOTAL ENRTF BUDGET:	\$540,000	

Explanation of Use of Classified Staff: See above.

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 0.21

Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 0.15

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state – Drainage Authorities			
	\$ 500,000	\$	Minimum 1:1 local match required for competitive drainage records modernization Match Grants.
State Inkind – BWSR			
	\$ 10,000	\$	BWSR staff time for project management, reporting and coordination: (Average 2% Tim Gillette, 0.5% Al Kean/yr. for 3 yrs.) (salary, benefits, and overhead)
TOTAL OTHER FUNDS:	\$ 510,000	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

Partners receiving ENRTF funding

- *BWSR Drainage Program Staff, Grants Staff and Board Conservationists:* Assist Match Grants program development, implementation, and oversight, as well as conduct a survey of drainage records modernization status and remaining needs near the end of the project.
- *Drainage Authority Project Managers:* Administer Match Grants on behalf of drainage authorities.
- *Drainage Authority Staff and Consultants:* Develop modern databases for Chapter 103E drainage records and annually provide hydrographic and other data to the statewide public drainage records GIS database.

- *MNIT MnGeo Staff*: Provide consultation to Match Grants grantees regarding use of the drainage records database template, guidelines, and hydrographic data transfer to the statewide GIS database.

Partners NOT receiving ENRTF funding

- *Tim Gillette, P.E., BWSR Conservation Drainage Engineer*: Project management, reporting and coordination.
- *Al Kean, P.E., BWSR Chief Engineer*: Administrative advice and consultation, based on prior drainage records modernization project experience.

B. Project Impact and Long-term Strategy:

This project builds on past efforts to modernize, preserve and better utilize public drainage system records, including improving availability of public drainage system hydrographic data statewide. The current estimated need for drainage records modernization Match Grants remaining after this project is approximately \$1.0 million. However, BWSR will survey public drainage authorities near the end of this project to better define the status of public drainage records modernization, associated hydrographic data access, and need for additional Match Grants. Use of the Phase 1 database template and guidelines is expected to substantially improve and streamline drainage records modernization. This estimate does not include costs associated with the long-term maintenance of the statewide drainage records database, guidelines and map viewer on the MnGeo website.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
2014 LCCMR 05c project. In FY 2015, BWSR received \$230,000 from ENRTF to develop a drainage records GIS database template, statewide GIS database, updated Drainage Records Modernization Guidelines, and web access. These Phase 1 products will be used by drainage authorities participating in this Phase 2, Match Grants project.	Project Ends	\$ 230,000

VIII. REPORTING REQUIREMENTS:

- **The project is for 3.5 years, will begin on 07/01/17, and end on 12/31/20.**
- **Periodic project status update reports will be submitted January 15 and July 15 of each year.**
- **A final report will be submitted between January 15 and February 15, 2021.**

Environment and Natural Resources Trust Fund
M.L. 2017 Project Budget



Project Title: Drainage Records Modernization Cost Share – Phase II

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 03g

Project Manager: *Tim Gillette*

Organization: BWSR

M.L. 2017 ENRTF Appropriation: \$ 540,000

Project Length and Completion Date: 3.5 years, December 2020.

Date of Report: November 1, 2016

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Develop and Allocate Grants for Match Grant Program</i>			<i>Drainage Authorities Implement Match Grant Agreements</i>				
Personnel (Wages and Benefits)								
<i>Drainage, Grants and Board Conservationist Staff - BWSR: (70% salary, 30% benefits) Ave. 0.07 FTE/yr. for 3 yrs. (total 0.21 FTE) (\$24,000)</i>	\$12,000	\$0	\$12,000	\$12,000	\$0	\$12,000	\$24,000	\$24,000
Professional/Technical/Service Contracts								
<i>Service Contract with MNGEO - GIS Specialist, (70% salary, 30% benefits) Ave. 0.05 FTE/yr. for 3 yrs. (0.15</i>	\$0	\$0	\$0	\$16,000	\$0	\$16,000	\$16,000	\$16,000
Grant Products								
<i>Match Grants to Drainage Authorities for Drainage Records Modernization- Past Match Grants averaged \$25,000. Twenty (20) new grants are anticipated.</i>	\$0	\$0	\$0	\$500,000	\$0	\$500,000	\$500,000	\$500,000
COLUMN TOTAL	\$12,000	\$0	\$12,000	\$528,000	\$0	\$528,000	\$540,000	\$540,000

