



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2016 Work Plan

Date of Report: May 29, 2016

Date of Next Status Update Report: January 2017

Date of Work Plan Approval: June 7, 2016

Project Completion Date: June 30, 2019

Does this submission include an amendment request? NO

PROJECT TITLE: Master Water Steward Program Expansion

Project Manager: Peggy Knapp

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Location: Statewide

Total ENRTF Project Budget:

ENRTF Appropriation: \$116,000

Amount Spent: \$0

Balance: \$116,000

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 05h

Appropriation Language:

\$116,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Freshwater Society to train community volunteers as master water stewards who will work with neighborhoods to install water management projects that preserve and restore water quality. This appropriation is available until June 30, 2019, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: Master Water Stewards Program Expansion

II. PROJECT STATEMENT:

Non-point pollution is a hard-to-address threat to waters in our state. Because the problem is decentralized and sources of pollution are highly localized, we need to address the challenge with decentralized, locally focused efforts. The Master Water Stewards program identifies, educates, certifies and supports volunteer community leaders, called “Master Water Stewards,” who engage their communities and take action to restore and preserve local water resources. As part of their certification, they are required to work with their neighbors and complete a Capstone Project that includes installing a rainscaping project and conducting behavior change/citizen action campaigns. The program extends environmental leadership opportunities into neighborhoods and inspires a new set of confident community leaders to install residential-scale green infrastructure projects, and carry the clean water message. The program just finished a highly successful three-year pilot that showed the program can run on a self-sustaining basis.

Demand for the program from metropolitan Watershed Districts and other local governments outside the Minnehaha Creek Watershed District pilot area grew quickly. We adapted the core curriculum to step up to a metro wide service area. This included creating substantial on-line learning modules in 2016 in order to serve the wider geography and keep staffing costs low enough to retain the self-sustaining nature of the program.

This project will allow us to adapt the program so it can take the next step up to the statewide level. Adaptations will need to include land uses and practices such as rural section roads, wellhead protection areas, alternative utility placements, and other region-specific uses and practices. The program has also identified key “communities of interest” such as lake associations, service clubs, and school communities that offer additional opportunities for outreach and stewardship to a greater diversity of audiences. Program staff will work with these communities of interest to develop additional training for effective outreach to these audiences. Once the program is equipped with the tools and structure this grant will provide, we will be able to train stewards and fund construction using the program’s self-sustaining model. (i.e. we have a solid program, the LCCMR funds will pay for the transitioning leap to statewide availability)

Accessing, motivating, and channeling efforts of volunteers is a critical part of the program as well as a force multiplier. A tool for organizations to manage volunteers in a wide diversity of settings and track measurable outcomes has become a critical need as the program expands. Being able to report back on pollutant reductions and volunteer hours logged, for example, on either a municipal or watershed basis will help quantify benefits from the projects being installed.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of January 2017:

Project Status as of June 2017:

Project Status as of January 2018:

Project Status as of June 2018:

Project Status as of January 2019:

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Systems and policies to run the program safely and sustainably

Description: This activity builds the tools, policies, forms, procedures, reporting mechanisms, and pollution prevention calculators, and refines materials to expand implementation of the Master Water Stewards (MWS) Program to a wider diversity of organizations and settings statewide. This is necessary because MWS was originally piloted in an urban/suburban setting. Subsequent updates and revisions addressed the wider array of soils and land uses found in the broader metropolitan area. Approaches will be revised again to address a wider spectrum of approaches.

A critical step in the process includes assembling an Advisory Board to identify local issues and concerns. The group will help improve the quality of a needs assessment for local partners (Watershed Districts, Watershed Management Organizations, Cities, and Counties) that systematically determine the kinds of tools, metrics, and policies they need to successfully offer the program.

The Partner Organization Guidebook (to be made available in printed and online formats) will include the following components developed through the needs assessment: tools, policies, forms, procedures, reporting mechanisms, and pollution prevention calculators.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 16,000
Amount Spent: \$ 0
Balance: \$ 16,000

Outcome	Completion Date
<i>1. Set up volunteer Advisory Board of stakeholders to influence content and local partnership recruitment</i>	January 2017
<i>2. Develop a complete "Train the Trainer" package in the form of a Partner Organization Guidebook for new program partners appropriate to a wide diversity of local settings</i>	June 2017
<i>3. Pilot materials by implementing training with partners in in no fewer than 5 communities or organizations outside the metro area, training 30 Stewards</i>	June 2019
<i>4. Evaluate tools and materials and revise education modules and materials</i>	December 2018

Activity Status as of January 2017:

Activity Status as of June 2017:

Activity Status as of January 2018:

Activity Status as of June 2018:

Activity Status as of January 2019:

Final Report Summary:

ACTIVITY 2: Training program to deliver and support stormwater management and green infrastructure education for Stewards

Description: This activity modifies and delivers the existing Master Water Stewards education materials necessary to expand the program to serve a wider array of audiences throughout Minnesota.

The process will include revising the existing online course modules using feedback from the first year of using the online delivery mode. Program staff will evaluate feedback from program partners, participants, and the

Advisory Board on the effectiveness of the existing curriculum. Staff will also gather input on evolving state and local water priorities from community members and water professionals in five communities or organizations outside the metro area to guide the modifications and adaptations of education modules. The online course modules will also be refined based on feedback and information gathered.

Changes may incorporate the inclusion of issues and priorities such as Chloride Management, Water Reuse Strategies, groundwater protection, pollution prevention, illicit discharges, pollinator habitat restoration, buffers, well-sealing and other rural BMPs. Similar to other issue areas, resources and guidelines will help trainers and facilitators in organizing and running the MWS programs.

Early results in the metropolitan area have had good results from tapping existing groups, or, “communities of interest.” Existing modules will be adapted to serve specific audiences including K-12 teachers working with schools, lake associations, and community leaders working with homeowner associations. Developing these strategies will increase the effectiveness and geographic range of Stewards.

A cohort will recruited of potential stewards to pilot the online course modules in communities outside the metro area. Those stewards will complete the updated training course that will provide them with the education, training, and foundation to work within their communities to improve stormwater management for years to come. These stewards will implement 15 stormwater projects over the summer of 2019 that will be completed post grant period.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 34,000
Amount Spent: \$ 0
Balance: \$ 34,000

Outcome	Completion Date
<i>1. Revise 14 existing online course modules to integrate evaluation feedback from the first year of implementation of the online delivery mode.</i>	June 2018
<i>2. Modify existing courses to reflect evolving state and local priorities to better serve all regions of Minnesota.</i>	January 2019
<i>3. Adapt existing education modules to better serve specific audiences, including but not limited to schools, lake associations and homeowner associations,</i>	June 2019
<i>4. Develop trainer and facilitator resources and guidelines to help in organizing and running the MWS programs</i>	June 2019
<i>5. Recruit cohort of stewards to pilot the online course modules in no fewer than 5 communities or organizations outside the metro area. This will result in 30 trained stewards. These stewards will implement 15 stormwater management projects that will be completed post grant period, during the summer of 2019.</i>	June 2019

Activity Status as of January 2017:

Activity Status as of June 2017:

Activity Status as of January 2018:

Activity Status as of June 2018:

Activity Status as of January 2019:

Final Report Summary:

ACTIVITY 3: Materials to manage and sustain ongoing local stewardship and project implementation

Description: Master Water Stewards conduct outreach campaigns and promote the installation of green infrastructure projects. Accessing, motivating, and monitoring the efforts of volunteers works as a force multiplier to implement practices that protect water, and conduct outreach and education to build community awareness. This activity builds the tools necessary for organizations to manage volunteers and support ongoing stewardship in a wide range of settings.

“Train the Trainer” packages will be provided for and piloted with local staff in the form of Volunteer Management Guidebooks. These will provide a field guide for managing volunteers as they implement stormwater management projects and education outreach campaigns in a variety of local contexts. Materials will focus on:

- a. Communicating local priorities and waters to volunteers
- b. Focusing and targeting volunteer efforts on specific projects
- c. Working with specialized audiences, such as local policymakers and communities of interest, such as schools, lake associations, and homeowner associations
- d. Recruiting and retaining volunteers
- e. Communicating with volunteers to increase retention

Development of a robust online tracking system website for volunteer efforts is critical for tracking and quantifying measurable outcomes. Master Water Stewards’ work contributes to their community’s efforts to meet the six Minimum Control Measures of their MS4 permit requirements. We will develop a tracking system that records the impact of volunteers’ pollution prevention projects (volume reduction, phosphorus removed and Total Suspended Solids removed), and education and outreach efforts. Cities and other local governments may include those efforts through their MS4 reporting on a municipal or watershed basis. The outcome will quantify the impact of water resources of community members’ education, outreach and actions.

Summary Budget Information for Activity 3:

ENRTF Budget: \$ 66,000
Amount Spent: \$ 0
Balance: \$ 66,000

Outcome	Completion Date
1. Develop “Train the Trainer” education materials for local staff in the form of a Volunteer Management Guidebook	June 2018
2. Adapt course modules for local partners who will work with Stewards	January 2019
3. Develop a robust online tracking system for volunteer efforts	January 2019
4. Develop tools that help partners target volunteer opportunities that focus on priority issues and waters	January 2019
5. Pilot volunteer management and tracking systems in 7 metro area watershed districts currently engaged with the Master Water Stewards program. Tracking systems will quantify the pollution prevention efforts of 60-70 Stewards in the metro area (30-35 green infrastructure projects and outreach campaigns)	Ongoing, ending June 2019
6. Review and refine reporting mechanisms to better meet partner needs	Ongoing, ending June 2019

Activity Status as of January 2017:

Activity Status as of June 2017:

Activity Status as of January 2018:

Activity Status as of June 2018:

Activity Status as of January 2019:

Final Report Summary:

V. DISSEMINATION:

Description: The products developed with support from the grant will be disseminated on two web sites. One, the Master Water Stewards informational site, <http://masterwaterstewards.org/> will offer a public facing site that gives potential Stewards and other public audiences information on the program, how to get involved, program requirements, benefits of joining, and information on individual actions that protect water.

A second web site, <http://learning.freshwater.org/>, will be a participant site that grants access to the curriculum, special events, professional development, best practices for managing Stewards, managing cost share and grant processes, reporting tools and other operational information. Resources will be made available for download and printing. Education modules will be made available through an online education software delivery platform.

The basic framework for these sites has been developed with other funding. As we do the work of expanding the program statewide with support from this grant, these two sites will be built out to accommodate the materials, processes, and tools developed in this work plan.

Status as of January 2017:

Status as of June 2017:

Status as of January 2018:

Status as of June 2018:

Status as of January 2019:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$ 83,490	Program Director at 18% FTE over three years (\$49,490), Program Coordinator at 16% FTE over three years (\$26,930), Program Assistant at 5% over three years (\$7,070)
Professional/Technical/Service Contracts:	\$ 30,000	1 Contract consultant to adapt education modules and refine curriculum and guidebooks (\$18,000); 1 Contract consultant to develop tracking and reporting tools/databases (\$12,000)
Equipment/Tools/Supplies:	\$ 1,200	Program supplies and software licenses needed for online education tools/databases

Travel Expenses in MN:	\$ 1,310	Mileage, hotel, and meals for travel
TOTAL ENRTF BUDGET:	\$116,000	

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 1.17

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: .5 FTE over three years

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
Participating Watershed Districts	\$150,000	\$150,000	Adapt curriculum to online delivery mode
Watershed Districts, communities organizations (anticipated revenue)	\$105,000 (\$3,500 per Steward enrolled)		No funding has been requested or secured for this project "Master Water Stewards Program Expansion". FWS will seek funding for general expenses of the Master Water Stewards program of approx. \$2,500 per steward and for the capstone project implementation of approx. \$1,000 per project which is not covered by this grant but is part of our MWS program.
State			
	\$	\$	
TOTAL OTHER FUNDS:	\$225,000	\$150,000	

VII. PROJECT STRATEGY:

A. Project Partners: Freshwater Society will collaborate with the instructors of our current curriculum: Metro Blooms/Blue Thumb, University of Minnesota Extension, Wenck Associates, Waterdrop Design, Hennepin County Environmental Services, MN DNR, University of St. Thomas, and Freshwater Society. Web consultants, designers and programmers will be used to develop the education systems and volunteer tracking online. Part of the funding from the Environmental and Natural Resources Trust Fund will be put towards this. Those consultants have not yet been finalized.

B. Project Impact and Long-term Strategy: Currently, the 2015 Stewards are participating in 50 hours of hands-on training on pollution prevention. The training includes 13 learning sessions, designed to give them the knowledge, skills and confidence they need to take a leadership role in neighborhood-level stormwater management. As part of their certification, they are required to work with their neighbors and complete a Capstone Project that includes installing a rainscaping project and conducting behavior change/citizen action campaigns. The first years' stewards' management projects drain a total area of 10,296 square feet of impermeable surface, and will reduce run off by 5,397 gallons per one-inch rainfall or 145,649 gallons a year.

Calculations were done using the Minimal Impact Design Standards (MIDS) calculator created by and for the state of Minnesota.

With each cohort of trainees the reach of the program expands exponentially. Project work by stewards in the first two cohorts has continued to occur and increase each year beyond their capstone projects. We intend to align all volunteer management practices with accepted best practices in this sector, including safety, liability, background checks. We will align reporting procedures to include the Minimal Impact Design Standards (MIDS) calculator and watershed specific calculators where they align. Reporting via this system will help municipalities to meet several minimum control measures on their Stormwater Pollution Prevention Plans.

We work with watershed districts, counties, cities, and SWCDs to dedicate available cost-share funds so volunteers have incentive funds available to construct projects when landowners express interest. As more LGUs establish these small funds, the ability for the program to sustain itself will increase.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
Meadowlark Foundation	2013	\$ 2,000
Butler Family Foundation	2013	\$ 15,000
Clean Water Fund	2013-15	\$ 326,000
Participating Watershed Districts	2016	\$150,000
Cynthia Krieg Watershed Stewardship Fund	2014-15	\$ 25,000
Hennepin county Green Partners grant	2013-15	\$ 45,000
New Belgium Stewardship grant	2015	\$ 1,500
Jeffers Foundation (in-kind)	2015	\$ 15,000

VIII. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List: N/A

B. Acquisition/Restoration Information: N/A

IX. VISUAL COMPONENT or MAP(S):

As part of their certification, Stewards are required to work in pairs to complete a Capstone Project that includes installing a rainscaping project and conducting behavior change/citizen action campaigns. Projects might include, but are not limited to:



Redirecting downspouts



Rainbarrels and rain chains



Shoreland planting

Raingardens





X. RESEARCH ADDENDUM: N/A

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than [January 31, 2017], [June 30, 2017], [January 31, 2018], [June 30, 2018], and [January 31, 2019]. A final report and associated products will be submitted between June 30 and August 15, 2019.

**Environment and Natural Resources Trust Fund
M.L. 2016 Project Budget**



Project Title: Master Water Steward Program Expansion

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 05h

Project Manager: Peggy Knapp

Organization: Freshwater Society

M.L. 2016 ENRTF Appropriation: \$116,000

Project Length and Completion Date: 3 years, June 2019

Date of Report: May 29, 2016

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	Activity 3 Budget	Amount Spent	Activity 3 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Program Systems</i>			<i>Education Systems</i>			<i>Volunteer Systems</i>				
Personnel (Wages and Benefits)	\$11,290			\$25,600			\$46,600			\$83,490	\$83,490
Peggy Knapp, Program Director \$49,490 (75% salary, 25% benefits); 18% FTE over 3 years											
Deirdre Coleman, Program Coordinator \$26,930 (75% salary, 25% benefits); 16% FTE over 3 years											
Whitney Canton, Program Assistant \$7,070 (75% salary, 25% benefits) 5% FTE over 3 years											
Professional/Technical/Service Contracts											
TBD (competitive bid) Consultant(s) to adapt education modules and refine curriculum and guidebook	\$3,000			\$8,000			\$7,000			\$18,000	\$18,000
TBD (competitive bid) Consultant(s) to develop tracking and reporting tools and databases							\$12,000			\$12,000	\$12,000
Equipment/Tools/Supplies											
Program Supplies and software licenses needed for online databases	\$400			\$400			\$400			\$1,200	\$1,200
Travel expenses in Minnesota											
Travel expenses for outstate meetings with partners and stakeholders (mileage, hotel, meals)	\$1,310									\$1,310	\$1,310
COLUMN TOTAL	\$16,000	\$0	\$0	\$34,000	\$0	\$0	\$66,000	\$0	\$0	\$116,000	\$116,000

