



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2014 Work Plan

Date of Report: 1/23/2014
Date of Next Status Update Report: 1/31/2015
Date of Work Plan Approval:
Project Completion Date: June 30, 2017
Does this submission include an amendment request? No

PROJECT TITLE: Southeast Minnesota Watershed Protection Plan

Project Manager: Richard Biske
Organization: The Nature Conservancy
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Location: Rice, Dakota, Goodhue, Olmsted, Wabasha, Winona,

Total ENRTF Project Budget:	ENRTF Appropriation:	\$200,000
	Amount Spent:	\$0
	Balance:	\$200,000

Legal Citation: M.L. 2014, Chp. 226, Sec. 2, Subd. 06e

Appropriation Language:

\$200,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with The Nature Conservancy to provide a framework and plans for the protection and stewardship of unimpaired waters in southeast Minnesota. The result will be a template for watershed protection in Minnesota. This appropriation is available until June 30, 2017, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: Southeast Minnesota Watershed Protection Plan

II. PROJECT STATEMENT: To date the majority of watershed conservation efforts are directed toward impaired waters. At a time when agricultural lands within the region are managed more intensively, the ecosystem services provided by the region’s natural areas cannot be understated. Protection and proper stewardship of the region’s natural areas is important for maintaining what is left of the region’s unimpaired waters. It is much more cost-effective to protect habitat and water resources before they are degraded.

The Blufflands of Southeast Minnesota are home to more Species of Greatest Conservation Need than any other ecological subsection in Minnesota. The unique habitats like oak savannas and hickory forests, have been recognized for the wildlife habitat they provide. These same unique habitats when protected and managed responsibly, can maintain healthy rivers. Ecologically sensitive lands continue to be converted to rural residential housing and expanded agricultural production while many private lands are subject to poor management. Each of Southeast Minnesota’s major rivers is impaired for turbidity and has suffered from significant flood events in recent years. The project will utilize existing datasets including the Minnesota Biological Survey, the Ecological Ranking Tool and Geologic Atlas to develop a watershed protection framework and tools necessary to keep healthy waters healthy. This project will use a process supported by the US Forest Service and will provide strategic direction for existing state and federal cost-share programs while increasing likelihood of new/additional federal cost-share from the USDA NRCS’ Driftless Area Landscape Conservation Initiative.

III. PROJECT STATUS UPDATES:

Project Status as of: January 31, 2015

Project Status as of: July 31, 2015

Project Status as of: January 31, 2016

Project Status as of: July 31, 2016

Project Status as of: January 31, 2017

Project Status as of: July 31, 2017

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Landscape Stewardship Plans (Lower Mississippi River Tributaries including Cannon and Zumbro Rivers)

Description:

Complete landscape stewardship plans for each watershed with detailed ecological assessments and protection strategies for high biodiversity sub-basins and associated habitats. Landscape Stewardship Plans (LSPs) have been recognized and supported by the US Forest Service and MN Forest Resources Council (MFRC) in the Root River, Camp Ripley and Whitewater River watersheds. LSPs serving as watershed protection plans will be developed for the Cannon and Zumbro watersheds. LSPs developed will inform MPCA’s Watershed Restoration and Protection (WRaP) strategy and local water plans as the protection component. WRaPs are intended to identify watershed protection strategies for unimpaired waters in addition to restoration and source reduction

strategies for impaired waters. To date protection strategies for unimpaired waters are often lacking in watershed plans.

Landscape Stewardship Plans will provide a framework for the long-term stewardship and protection of priority sub-watersheds. The landscape stewardship approach is predicated on the likelihood that different stakeholders will be satisfied by common solutions. This approach follows five general principles in developing and applying these solutions:

- Invest in priority areas – be strategic.
- Build a collaborative network – create ownership in the process and leverage resources.
- Appeal to self-interest – understand stakeholder motivations and needs.
- Manage for results – align actions with objectives and evaluate outcomes.
- Encourage flexibility at all levels – be adaptive; every situation is unique.

Activities:

Stakeholder Engagement – The Nature Conservancy Staff

The Nature Conservancy’s Southeast Minnesota Conservation Coordinator will meet individually and collectively with stakeholders in the project areas. Primary stakeholders include: Minnesota Pollution Control Agency, Soil and Water Conservation Districts, Department of Natural Resources Forestry, Ecological and Water Resources and Fisheries, Watershed Partnerships, citizen groups, user groups, non-government conservation groups and individual watershed landowners. TNC staff will conduct an Active River Area analysis and a contract plan writer will conduct some of the watershed analysis using Geographic Information System (GIS) mapping. Resource prioritization and attribute weighting will be done with the influence of the above mentioned stakeholders to prioritize areas and strategies. Conservancy staff will facilitate discussions related to analysis and prioritization, ensuring stakeholder input is recognized. Conservancy staff will ensure input, analysis and products are compatible with complementary efforts and plans including Watershed Restoration and Protection Plans, 1 Water 1 Plan or Local Water Plans. Each minor watershed (approximately 10,000 to 15,000 acres in size) within the large major watershed will be ranked for protection and restoration.

Landscape Stewardship Plan – Contract Consultant

A contracted plan writer will conduct watershed analysis that includes several datasets, including, but not limited to:

GIS Products	Land Ownership	Aquatic Attributes	Terrestrial Attribute
Active River Area analysis	State Land	Index of Biotic Integrity (IBI)	land cover/use
LiDAR derived terrain analysis	Parcel Size	Trends in Nitrogen, Phosphorous, Bacteria	Existing Conservation Practices
Environmental Benefits Index (EBI)	Conservation Easements	Trends in Turbidity and Suspended Solids	Native Plant Communities
	Existing Stewardship Plans	Natural Heritage Data Element Occurrence (fish and mussels)	Natural Heritage Data Element Occurrence
		Hydrology (where available)	
		Spring Shed Maps	
		Karst Features	
		Vulnerable Groundwater Zones	

Ecological Assessment and Sub-basin Protection Plan – The Nature Conservancy Staff & Consultant
 Priority sub-basins within the larger watersheds will be ranked in order based on relative watershed health. Priority watersheds will be described in greater detail in this section. Each of the watershed attributes listed above will be described in greater detail, quantified and function/interconnectedness described for each minor

watershed. The sub-basin assessments and protection plans will include parcel specific conservation activities as a means of estimating conservation needs and costs associated with outreach, technical assistance and implementation.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 165,000
Amount Spent: \$ 0
Balance: \$ 165,000

Activity Completion Date: June 30, 2016

Outcome	Completion Date	Budget
<i>1. Engage stakeholders: Zumbro and Cannon River Watershed Partnerships will be contacted for a summary of existing data, plans and activities. DNR Fisheries, Eco Waters and Forestry will be contacted for GIS data and MPCA will be contacted for summarized water resources data. Each agency and partner will be asked for relevant data and expert opinion. Additional partners, including SWCDs, active landowners, NRCS and others will be sought for input on the plan activities and input on review</i>	<i>January 2015</i>	<i>\$ 15,000</i>
<i>2. Landscape Stewardship/Watershed Protection Plans for Cannon and Zumbro Watersheds: Stewardship plans will include watersheds ranked from protection to restoration and a description of watershed function.</i>	<i>January 2016</i>	<i>\$ 100,000</i>
<i>3. Ecological Assessment and Sub-basin Protection Plan: Detailed plans for priority sub-basins including recommended protection and management activities based on aquatic and terrestrial assessments.</i>		<i>\$50,000</i>

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Final Report Summary:

Activity 2: Private Land Restoration/Protection

Budget: \$ 35,000

Private Land Stewardship: Consulting Foresters with Guidance from TNC Staff

Private land stewardship plans will be completed for priority properties identified in LSPs where necessary. However emphasis will be placed on developing conservation practice plans with technical assistance directed to priority lands aligning stewardship needs with existing cost-share programs and leveraging new cost-share funds for accelerated conservation practice implementation. If more conservation practice plans are needed, fewer Forest Stewardship Plans will be developed, including tributaries to the Lower Mississippi River in Minnesota where Landscape Stewardship Plans have been completed. Site level plans include a description of the property focusing on natural features and an identification of conservation needs/opportunities. Specific

activities to address conservation needs/opportunities are described along with the means to accomplish the work; either through an existing program, private contractor or local resource group.

Field Days or Workshops will be hosted in at least 3 of the priority watersheds. Private land habitat stewardship activities will be highlighted along with important stewardship plan elements. These events will be an opportunity for landowners to meet local resource staff available, agency and private, and learn first-hand activities they can conduct on their property.

Habitat/Watershed Protection: TNC Staff facilitating Stakeholder Implementation Team

Plans will guide implementation of conservation activities in priority watersheds using Clean Water Funds and federal cost-share programs. New watershed protection tools will be developed to protect critical upland and groundwater recharge zones identified by LSPs. Specific activities identified in private land stewardship plans will provide guidance to agency and conservation stakeholders when modifying technical assistance programs and seeking implementation funds, particularly BWSR Clean Water Funds for practice and implementation, the Reinvest in Minnesota Easement Program and land acquisition.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 35,000
Amount Spent: \$ 0
Balance: \$ 55,000

Activity Completion Date: June 30, 2017

Outcome	Completion Date	Budget
<i>1. 20 Site level comprehensive stewardship plans (2,000 acres of private land)</i>	<i>June 2017</i>	<i>\$ 25,000</i>
<i>2. 20 Conservation activity plans and associated cost-share (200 acres of practices)</i>	<i>June 2017</i>	<i>\$ 8,000</i>
<i>3. 6 workshops/field days</i>	<i>June 2017</i>	<i>\$ 2,000</i>

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Project Status as of: July 31, 2017

Final Report Summary:

V. DISSEMINATION:

Description: Copies of Landscape Stewardship/Watershed Protection Plans will be provided to each stakeholder within the respective watersheds, including, but not limited to: watershed organizations, Soil and Water Conservation Districts (SWCD), Board of Water and Soil Resources, Minnesota Pollution Control Agency, MN DNR Divisions and NGOs operating in the watershed. TNC’s Project Manager will also provide updates and final results via presentations to watershed boards and regional partnerships.

Site level comprehensive stewardship and conservation activity plans will be provided to the landowners and land managers of each site. Site plans will also be provided to the relevant program staff including SWCDs,

Natural Resources Conservation Service and DNR Forestry. Private Forest Management (PFM) Plans approved by a DNR Forester will be entered into the DNR's PFM module that tracks landowner outreach and conservation needs.

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Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Explanation
Personnel:	\$ 71,000	TNC Project Manager: coordination, plan elements. TNC Regional GIS Specialist: Active River Area Analysis.
Professional/Technical/Service Contracts:	\$129,000	2 Watershed plans, up to 20 site level plans Site level plans will meet Forest Stewardship Plan requirements of the MN DNR Division of Forestry and approved by a DNR Forester. Each plan will include an assessment of the entire property broken down by forest stand or habitat type. Specific management recommendations with schedule and applicable cost-share program will be included. Additionally, 20 conservation practice plans will be written making specific conservation activities eligible for state or federal cost-share. Note, if the need for more conservation practice plans is identified, more conservation practice plans will be developed and fewer forest stewardship plans will be developed.
TOTAL ENRTF BUDGET:	\$200,000	

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: NA

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: .75

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 2.25

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
	\$44,000	\$	TNC staff for analysis that goes into plan Unrecoverable indirect.
State			
	\$0	\$	
TOTAL OTHER FUNDS:	\$44,000	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

Project Partners Not Receiving Funds:

- Cannon River Watershed Partnership
- Zumbro Watershed Partnership
- Minnesota Pollution Control Agency
- Goodhue Soil and Water Conservation District
- Board of Water and Soil Resources
- MN DNR Divisions of Forestry and Ecological and Water Resources
- Wabasha Soil and Water Conservation District

Project Partners Receiving Funds:

- Contract Plan Writer TBD: \$105,000 for production of the watershed protection plan.
- Consulting Forester: \$24,000 for site level conservation plans

B. Project Impact and Long-term Strategy:

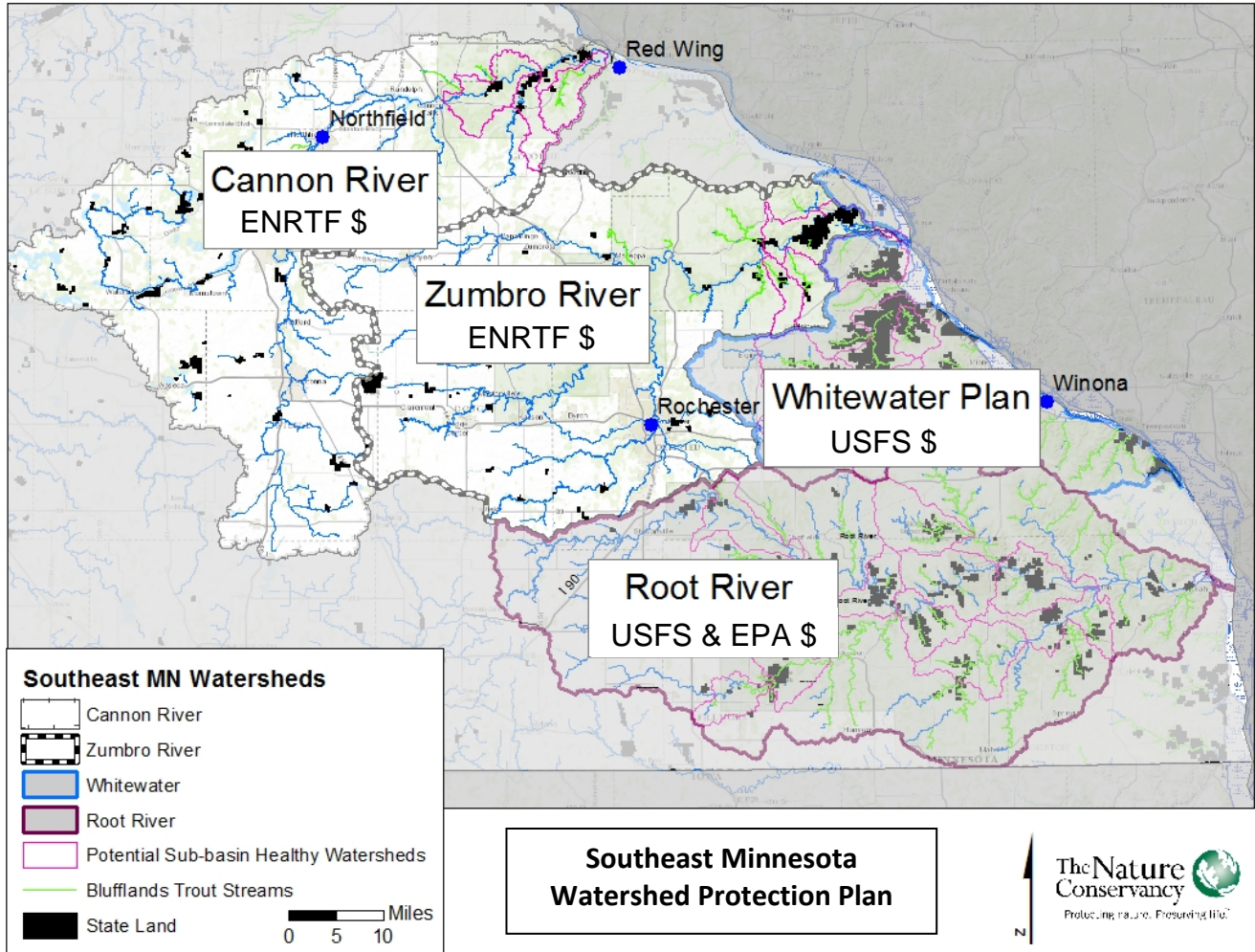
The project will provide guidance on assessing healthy watersheds within Southeast Minnesota and the attributes that contribute to healthy watersheds including clean water and stable flows. Strategies for maintaining clean water, healthy flows and aquatic habitat through land management will be identified and described in a way that can be integrated with existing programs with state and local agencies. Understanding what makes healthy watersheds healthy and conditions contribute to healthy waters is a significant step in watershed management in Minnesota. To date, much of the watershed assessment, planning and implementation work that is done has focused on impaired or degraded waters. It is important to prevent healthy lakes, rivers and streams from becoming degraded in the first place. This project will develop a process for keeping healthy waters healthy for the Cannon and Zumbro Rivers while providing a framework for other watersheds to replicate.

C. Spending History:

Funding Source	M.L. 2008 or FY09	M.L. 2009 or FY10	M.L. 2010 or FY11	M.L. 2011 or FY12-13	M.L. 2013 or FY14
US Forest Service				\$40,000	
US Forest Service				\$30,000	

VIII. ACQUISITION/RESTORATION LIST: NA

IX. VISUAL ELEMENT or MAP(S):



X. ACQUISITION/RESTORATION REQUIREMENTS WORKSHEET: NA

XI. RESEARCH ADDENDUM: NA

XII. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than January 31, 2015, July 31, 2015, January 31, 2016, July 31, 2016, January 31, 2017. A final report and associated products will be submitted between June 30 and August 15, 2017.



Environment and Natural Resources Trust Fund								
M.L. 2014 Project Budget								
Project Title: <i>Southeast Minnesota Watershed Protection Plan</i>								
Legal Citation: <i>M.L. 2014, Chp. 226, Sec. 2, Subd. 06e</i>								
Project Manager: <i>Richard Biske</i>								
Organization: <i>The Nature Conservancy</i>								
M.L. 2014 ENRTF Appropriation: \$ 200,000								
Project Length and Completion Date: <i>3 Years, June 30, 2017</i>								
Date of Report: <i>May 5, 2014</i>								

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>Landscape Stewardship Plans</i>		<i>Private Land Restoration/Protection</i>					
Personnel (Wages and Benefits) <i>TNC Project Manager will: 1) coordinate the development of Landscape Stewardship Plans with Ecological Assessments 2) Administer contracts associated with the project, 3) Coordinate site based stewardship plans, 4) Organize and lead field days, educational events and landowner outreach activities .25 FTE/yr, 70% for salary and 30% for benefits for grant funded position. TNC Regional GIS Specialist will: 1) Conduct Active River Area Analysis and associated GIS products .05 FTE/yr, 70% for salary and 30% for benefits for grant funded position</i>	\$60,000		\$60,000	\$11,000		\$11,000	\$71,000	\$71,000
Professional/Technical/Service Contracts								
Landscape Ecologist , Contractor has not been identified. An RFP will be distributed and bids will be reviewed based on qualifications and price. Contractor is responsible for collecting all datasets, analysis, production for review by partners, plan writing, editing and plan formatting and production.	\$105,000		\$105,000				\$105,000	\$105,000
Consulting Forester/Steward: Contractor has not been identified. An RFP will be distributed and bids will be reviewed based on qualifications and price. There may be multiple contractors selected depending on interest and geographic scope. Consulting foresters will be asked to conduct property assessments, meet with landowners to discuss management history and landowner goals, develop stand/habitat type prescriptions, write specific conservation activity to address conservation needs/opportunities and produce final plans for the landowner and relevant agency.				\$24,000		\$24,000	\$24,000	\$24,000
COLUMN TOTAL	\$165,000	\$0	\$165,000	\$35,000	\$0	\$35,000	\$200,000	\$200,000

