

**Environment and Natural Resources Trust Fund  
2019 Request for Proposals (RFP)**

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**Project Title:**

**ENRTF ID: 216-F**

Protecting Drinking Water Sources: 2,000ac in Mississippi Headwaters

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**Category:** F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

**Sub-Category:**

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**Total Project Budget: \$** 1,396,950

**Proposed Project Time Period for the Funding Requested:** June 30, 2022 (3 yrs)

**Summary:**

To improve critical ecological services in drinking water source and well-head protection areas by restoring and enhancing 2,000 acres on private land easements in the Camp Ripley Sentinel Landscape (CRSL).

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**Name:** Steven Huckett

**Sponsoring Organization:** Great River Greening

**Title:** Director of Conservation Programs

**Department:** NA

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St. Paul MN 55107

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**Location**

**Region:** Central

**County Name:** Cass, Crow Wing, Morrison, Todd

**City / Township:** Little Falls, Brainerd

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**Alternate Text for Visual:**

Location map for CRSL shows ACUB Easements (>24,000ac.) only. Does not include Interested Landowner parcels (~5000ac.) or other protected easements (>50,000ac.)

<input type="checkbox"/>	Funding Priorities	<input type="checkbox"/>	Multiple Benefits	<input type="checkbox"/>	Outcomes	<input type="checkbox"/>	Knowledge Base
<input type="checkbox"/>	Extent of Impact	<input type="checkbox"/>	Innovation	<input type="checkbox"/>	Scientific/Tech Basis	<input type="checkbox"/>	Urgency
<input type="checkbox"/>	Capacity	<input type="checkbox"/>	Readiness	<input type="checkbox"/>	Leverage	<input type="checkbox"/>	TOTAL <input type="checkbox"/> %
<input type="checkbox"/> If under \$200,000, waive presentation?							



Environment and Natural Resources Trust Fund (ENRTF)  
2019 Main Proposal Template

**PROJECT TITLE: Protecting Drinking Water Sources: 2,000ac in Mississippi Headwaters**

**I. PROJECT STATEMENT - *Restore and Enhance Habitats to Protect Drinking Water Source Areas.***

We will **restore and enhance 2,000 acres** of habitat directly linked to **drinking water source and well-head protection areas** in the Camp Ripley Sentinel Landscape (CRSL), an area legislatively designated for its significance for water quality and rural character. The CRSL is located in the Mississippi River headwaters region, which is ranked in the top five critical areas of Minnesota for source water for producing high quality drinking water resources to both local consumers, and to the Minneapolis/St. Paul Metropolitan Area (Figure 1). The CRSL planning area comprises the National Guard Training Center (52,000 acres), the Army Compatible Use Buffer (ACUB) zone (110,000 acres), and the greater sentinel landscape encompassing **719,463 acres** (1,124 mi<sup>2</sup>) in total within an approximate 10 miles radius. The CRSL is delineated by 8 sub-watersheds feeding into the Mississippi River and has had greater than 29,000 acres of impaired lake habitat, and over 154 miles of impaired stream identified. Currently, there are **221 parcels protected** by ACUB and Board of Soil and Water (BWSR) easements (**24,290 acres** Completed/Donated/Ongoing), 50,128 acres under other forms of state, federal, private, etc. protection, and approximately 5,000 additional acres offered by interested landowners for easement protections.

Due to the direct relationship between poor quality habitats, lack of ecosystem services, and costs of drinking water treatment, one of the most **cost effective means for providing high quality drinking water** is via habitat restoration and protection. This project is highly collaborative and integrates three activities: 1) **outreach to public and private land owners** in areas of impaired habitats identified by Multiple Benefits analysis for drinking water (water/prairie/forest); 2) **restoration and enhancement** activities on lands with permanent easements, including **applied research on soil health** attributable to these activities, and 3) establishment of a **sustaining stewardship program for protecting drinking water source areas**.

**II. PROJECT ACTIVITIES AND OUTCOMES**

**Activity 1: Landowner outreach, evaluation of Multiple Benefits analysis, Parcel Selection.**

**ENRTF BUDGET: \$75,000**

<b>Outcome</b>	<b>Completion Date</b>
1. <i>Outreach to key land owners, agencies, and local governments, and selection of at least 2000 acres on parcels with easements in highly ranked drinking water sources areas within 4 selected sub-Watersheds</i>	<i>Nov 30 2019</i>
2. <i>Development of restoration plans, contracts and timeline for implementing restoration/enhancement</i>	<i>Jun 30 2020</i>



**Environment and Natural Resources Trust Fund (ENRTF)**  
**2019 Main Proposal Template**

**Activity 2: Implement Restoration/Enhancement activities.**

**ENRTF BUDGET: \$1,246,950**

<b>Outcome</b>	<b>Completion Date</b>
1. <i>Habitat restoration activities – prescribed fire (May 2022), forest thinning (Mar 2022), plantings (Jun 2022)</i>	<i>Jun 30 2022</i>
2. <i>Soil Health assessment – to identify key indicators for protecting drinking water source areas by evaluation of change in soil characteristics due to implemented activities.</i>	<i>Jun 30 2022</i>

**Activity 3: Monitoring and development of stewardship program.**

**ENRTF BUDGET: \$75,000**

<b>Outcome</b>	<b>Completion Date</b>
1. <i>Analysis of restoration/enhancement activities, soil health</i>	<i>May 31 2022</i>
2. <i>Engagement of land owners on overall process successes and failures and recommendations</i>	<i>May 31 2022</i>
3. <i>Final Report and Stewardship Program Plan</i>	<i>Jun 30 2022</i>

**III. PROJECT PARTNERS:**

**A. Partners receiving ENRTF funding:** NA

**B. Partners NOT receiving ENRTF funding:** The Nature Conservancy; Morrison, Crow Wing, and Todd County SWCD's; MN DNR; USFWS; The Conservation Fund; City of Fort Ripley; Mississippi Headwaters Board; Board of Soil and Water Resources; USDA/NRCS; Camp Ripley, Land O'Lakes agricultural cooperative.

**IV. LONG-TERM IMPLEMENTATION AND FUNDING:**

This is the first of a multi-year program to protect drinking water source areas. Landowners will be required to agree to long-term maintenance of restoration sites. Engaging landowners/stakeholders will increase community awareness and promote restoration as a cultural value. It is expected that additional funding will be sought in future years.

**V. TIME LINE REQUIREMENTS:**

The multiple aspects of this complex project will require a deadline of June 30, 2022

**VI. SEE ADDITIONAL PROPOSAL COMPONENTS:**

**A. Proposal Budget Spreadsheet** ✓

**B. Visual Component or Map** - ✓

**C. Parcel List Spreadsheet** – N.A.

**D. Acquisition, Easements, and Restoration Requirements** - ✓

**E. Research Addendum (not required at proposal stage)** – N.A.

**F. Project Manager Qualifications and Organization Description** - ✓

**G. Letter or Resolution** - ✓

**H. Certified Audit or 990 Tax Information** - ✓

## 2019 Detailed Project Budget

### Project Title: Protecting Drinking Water Sources: 2,000ac in Mississippi Headwaters

#### IV. TOTAL ENRTF REQUEST BUDGET \$1,396,950 over 3 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
<b>Personnel:</b>	
Program Manager: Director of Conservation 0.25FTE each year for 3 years	\$ 70,000
Operations Director: 0.05 FTE each year for 3 years	\$ 14,000
Project Manager: 0.50 FTE each year for 3 years	\$ 100,000
Ecologists: 0.3 FTE each year for 3 years	\$ 35,000
Grants Management: 0.05 FTE each year for 3 years	\$ 11,000
Director of Finance: 0.05 FTE each year for 3 years	\$ 20,000
Financial Operations Manager: 0.02 FTE each year for 3 years	\$ 2,700
Communication and Outreach Coordinator: 0.05 FTE each year for 3 years	\$ 6,250
<b>Professional/Technical/Service Contracts:</b>	
Competitive RFP: 2,000 acres restoration: site preparation, invasive species control, prescribed fire, forestry mowing/thinning, herbicide treatment, monitoring	\$ 1,000,000
Competitive RFP: Soil Health lab analysis; Restoration Data collection, analysis, and reporting.	\$ 60,000
<b>Equipment/Tools/Supplies:</b>	
Soil Health equipment and supplies	\$ 10,000
Personal protective gear and hand tools for volunteers and technicians; Monitoring equipment; repair and maintenance of mowers, UTV, chainsaws, and sprayers.	\$ 10,000
Stakeholder Engagement Materials, rentals, etc.	\$ 10,000
<b>Travel:</b>	
In-state mileage (~60,000 miles) to/from sites, meetings, purchases. Fed mileage rate (0.545/mi.) 2018.	\$ 32,700
Per Diem for Staff and Partners (30d/yr * 3 yr * \$35 * 2people)	\$ 6,300
Lodging while traveling (\$100/night * 20nights * 3 yr)	\$ 6,000
<b>Additional Budget Items:</b>	
Volunteer Event Supplies & Rentals: Healthy food, beverages; table/chair/portable toilet/large tent rentals. 300 volunteers @ \$10/contact.	\$ 3,000
<b>TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =</b>	<b>\$ 1,396,950</b>

#### V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
<b>Other Non-State \$ To Be Applied To Project During Project Period: TNC</b>	\$ 50,000	Pending
<b>Other State \$ To Be Applied To Project During Project Period:</b>	\$ -	Pending
<b>In-kind Services To Be Applied To Project During Project Period:</b>	\$ 250,000	Pending
<b>In-kind services from Partners</b>	\$ 250,000	Pending
Office Space (and admin support) at TNC Lake Alexander Preserve (\$12/ft2 * 140ft2 * 12mo * 3 year)	\$ -	Pending
Crew Accommodations (\$65/n * 90n/yr * 3yr)	\$ -	Pending
<b>Past and Current ENRTF Appropriation:</b>		
M.L. 2016 \$509K; M.L. 2017 anticipated at \$0K (pending).		
<b>Other Funding History:</b>		
ENRTF: M.L. 2003 Bucks for Buckthorn \$255K; M.L. 2003 \$124K; M.L. 2005 \$100K; M.L. 2007 \$60K; M.L. 2008 \$111K; M.L. 2009 \$155K; M.L. 2011 \$400K; M.L. 2013 \$208K; M.L. 2014 \$300K; M.L. 2015 \$400K	\$ 2,113,000	ENRTF: Prior
OHF: Metro Big Rivers (MBR): M.L. 2010 \$170K; M.L. 2011 \$150K; M.L. 2012 \$375K; M.L. 2013 \$210K; M.L. 2014 \$400K; M.L. 2015 \$400K; M.L. 2016 \$1,170K. Anoka Sand Plain (ASP): M.L. 2010 \$747K; M.L. 2012 \$559K; M.L. 2014 \$901K; M.L. 2016 \$813K; M.L. 2017 \$345K (pending)	\$ 5,760,000	OHF: Prior
	\$ 345,000	Pending

Attachment C: INSTRUCTIONS

Environment and Natural Resources Trust Fund

M.L. 2019 Acquisition/Restoration Parcel List Spreadsheet

Project Title: *Protecting Drinking Water Sources: 2,000ac in Mississippi Headwaters*

Legal Citation: *Staff will update the legal citation upon work plan approval by the LCCMR following the MN Legislative Session.*

Project Manager: *Steven Hockett* Organization: *Great River Greening*. College/Department/Division: *NA*

M.L. 2019 ENRTF Appropriation: \$ *\$1,396,950*

Project Length and Completion Date: *3 Years, June 30, 2022*

Today's Date: *11 April 2018*

Instructions: Please include on the following list all targeted parcels that you are currently considering for acquisition (fee title or easement) or restoration (all phases) using the appropriation. The list may include more parcels than you will ultimately acquire or conduct restoration work on with the funds. To be eligible as part of your project, however, a parcel must be included on the list. Changes may be requested through the amendment process.  
Please update the status column and submit with your periodic workplan updates. Include any significant issues related to any particular parcel in your activity and project status sections of your Main Workplan Document.

#	Acquisition or Restoration Parcel Name	Geographic Coordinates (preferably from the center of the parcel) Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance (please include what ecosystem (e.g., prairie, forest, wetland, savanna) is represented as well as the ecological significance, site importance, conservation value, and public benefits)	Activity Description (e.g. fee title acquisition, conservation easement acquisition, site preparation, restoration)	# of Acres	# of Shoreline Miles	Type of Landowner (private individual or trust, non- profit organization, for-profit entity)	Proposed Fee Title or Easement Holder (if applicable)	Status of work (e.g. engaged in landowner negotiations, no longer in consideration, restoration activities underway)
		Latitude	Longitude										
1	No Acquisition												
2	Parcels designated for Restoration activities will be determined after proposal is selected for funding. There are greater than 221 private easements (ACUB/BWSR) existing to choose from in the CRSL. Selection will be based on rankings of impairment by MPCA, MN DNR, Multiple Benefits analysis for drinking water (water/prairie/forest), and community stakeholder input.								~ 2,000		Private	NA	
3													
4													
5													
6													
7													
8													
9													
10													
NOTES: This project will select parcels from existing private easement for restoration activities based on degree of impairment, stakeholder participation, and economic efficacy (return on investment) on parcels located in 4 of the 8 sub- watersheds identified in the Camp Ripley Sentinel Landscape.													

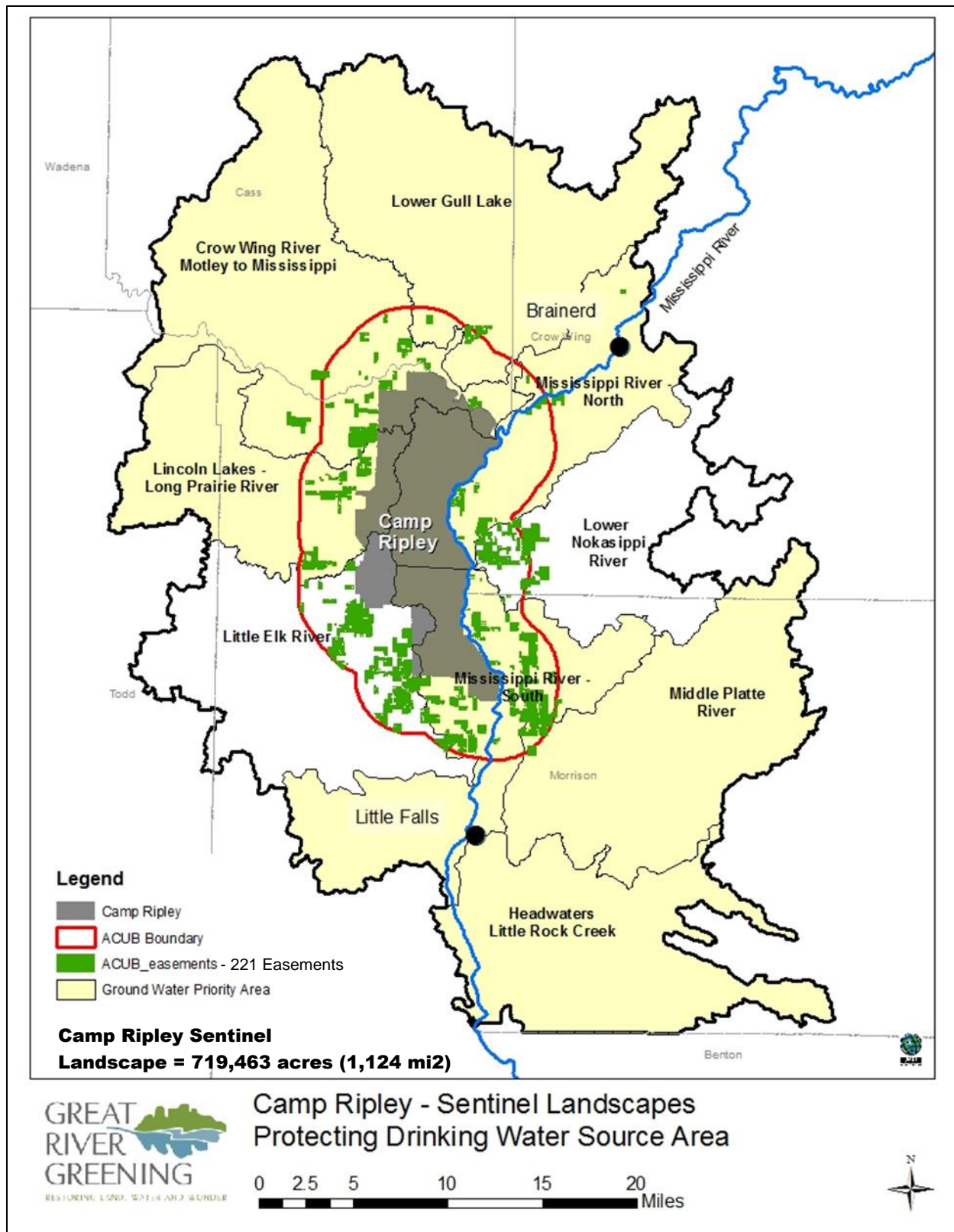


Figure 1.



### *Restoration Requirements Statement*

All restoration activities completed with these funds will occur on land permanently protected by a conservation easement and/or in public ownership. A management plan will be developed (or followed, in the case of DNR lands with existing plans) for each project that will include: target community based on historic and existing conditions including size, location, adjacency, ecosystem resilience, and native biodiversity; habitat considerations for specific rare species; invasive species control; restoration timeline and activity description; adaptive management and guiding principles for making decisions; opportunities for community engagement; ten year maintenance schedule; and visual aids. These plans are stored electronically in our office files by unique project number.

Key features of our long term restoration implementation include: the maintenance schedule included in the management plan; identifying community engagement opportunities to promote assistance, long term engagement and stewardship; requiring a written agreement from landowners to agree to maintain the site beyond the grant period; executing a Cooperative Agreement with each landowner including securing in-kind and/or cash match from the landowner (as a measure of landowner commitment), current BWSR native vegetation guidelines, our requirement to offer work to CCM, acknowledgement guidelines, DNR's invasive species and pollinator bmp operational orders, and our evaluation requirements including site access. Our restoration plans are designed to have the site in maintenance phase once the grant period ends, and when possible secure match from the landowner for beyond the grant period.

Evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations using the procedure developed earlier by the Trust Fund (Galatowitsch and Boenen) will analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

**EDUCATION**

**Ph.D.** in Human Dimensions of Ecosystem Science and Management, Adoption/Diffusion emphasis (2010) – Utah State University, **M.S.** in Biology, Ecosystems Ecology emphasis (1997) – University of New Mexico, **B.S.** in Agronomy, Soils Ecology emphasis (1983) – Kansas State University

**Experience**

**Conservation Programs Director** – *Great River Greening*, 2016 to present

**Postdoctoral Research Associate** – *University of Illinois and Ol Pejeta Conservancy, Kenya*. 2014-2015

**Assistant Professor (Adjunct)** – Johnson County Community College, Kansas. 2012 to 2014

**Research Scientist** – *Texas AgriLIFE Research, Texas A&M University*. 2009 to 2011

**Graduate Research Assistant** – *Utah State University, College of Natural Resources*. 2001 to 2009.

**General Manager** – *Covered Wagon Ranch, Big Sky, Montana*. Sept 1999 to Feb 2001.

**Preserve Manager** – *The Nature Conservancy, San Pedro River Preserve, Arizona*. 1996 to 1999

**AREAS OF SPECIALTY****Ecosystems and Watershed Sciences & Stream and Riparian Zone Restoration**

Planning and implementation of soil and water conservation practices in rural communities and agricultural landscapes using science based practices. Designed and supervised riparian habitat restoration, Implemented streambank restoration and stabilization practices, and addressed upland landscape impairments in mountainous and arid lands of the desert Southwest

**Human Dimensions of Natural Resource Management & Policy**

Community based conservation/restoration programs, community engagement, and identification of conditions and constraints of participation. Evaluation of current conditions which constrain potential restoration activities, design and implementation of socioeconomic surveys and household surveys

**Sustainable Habitat Conservation Practice Implementation and Planning**

Multi-dimensional responsibilities for converting a working cattle ranch/pecan farm/aquiculture operation into a 6,500 acre ranch/preserve in the Sonoran Desert

**Agriculture**

Crop and livestock production principles; Supervised production of experimental hybrid maize (corn) seed; extensive hands-on experience working with small-hold farmers and pastoralist in East Africa and livestock producers in the Southwest

**Great River Greening - Organization Description**

Since 1995, Great River Greening has worked to secure the legacy of Minnesota land and water through community-based restoration, stewardship, and partnerships. In these 20+ years, we have worked side-by-side with 42,000 volunteers to improve, restore and care for greater than 19,000 acres, and counting. Our work is supported by highly trained and experienced ecologists applying science based state-of-the-art restoration practices to projects who strive to share our skills and knowledge with landowners, volunteers, students and at-risk youth. We choose our conservation projects based upon conservation need, ecosystem services provided, and community benefits. Current priorities include critical habitat corridors (land and water), enhancing the recreational experience of visitors to parks, natural areas, lakes, and rivers; restoration of the globally endangered oak savanna habitats; and collaborative work with farmers in the Minnesota River to improve soil and water conservation participation; and improving water quality throughout the state. We currently work in the metro area; Anoka Sand Plain; Nicollet County; Cannon River Watershed; and are expanding into the Camp Ripley Sentinel Landscape; Greater St Cloud area; and Mississippi Headwaters Region while expanding existing project areas.