

**Environment and Natural Resources Trust Fund  
2015 Request for Proposals (RFP)**

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**Project Title:**

**ENRTF ID: 132-F**

Integrating Agriculture with Water Quality and Wildlife Habitat

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

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**Total Project Budget:** \$ 300,000

**Proposed Project Time Period for the Funding Requested:** 3 years, July 2015 - June 2018

**Summary:**

This project will develop profitable, resource management practices that protects and improves water quality and wildlife habitat while enhancing the local agricultural community in a 14,300-acre area in Greenvale Township.

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**Sponsoring Organization:** Dakota County

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**Location**

**Region:** Metro

**County Name:** Dakota

**City / Township:** Greenvale Township

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**Alternate Text for Visual:**

This map shows protected land natural areas water bodies and cultivated lands in a 14,300-acre of Greenvale

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	



**PROJECT TITLE: Integrating Agriculture with Water Quality and Wildlife Habitat**

**I. PROJECT STATEMENT**

The primary goal of the project is to develop profitable, multi-resource management practices on private lands that can protect and improve water quality and wildlife habitat while enhancing the longstanding agricultural tradition and economy in a 14,300-acre area of Greenvale Township in Dakota County.

A convergence of circumstances make this area an opportune location to integrate and expand private and public benefits: the natural features of the landscape; amount and type of land already protected, positive relationships between the County and landowners; township support; proximity to higher education institutions; increasing need and interest in reducing negative impacts of agricultural production on water quality, wildlife, and pollinator habitat; increasing demand for local food production aging farmer demographics; financial barriers to new/immigrant farmers.

**II. PROJECT ACTIVITIES AND OUTCOMES**

**Activity 1: Planning Framework**

**Budget: \$25,000**

Outcome	Completion Date
1. Detailed scope, work plan, organizational structure, and operating procedures for undertaking the project. Assessment of the current state of agriculture and natural resource protection within the project area.	Prior to 10/1/2015

**Activity 2: Initial Public Engagement and Goal-Setting**

**Budget: \$20,000**

Outreach and informational meetings will be conducted among land owners and other interested parties

Outcome	Completion Date
1. Establish goals and outcomes.	2/15/2016

**Activity 3: Update Existing Natural Resource Inventory**

**Budget: \$25,000**

MLCCS land cover, soils, geology, slopes, hydrology, water quality, regionally rare (SGCN) wildlife, public lands, conservation and farmland easements, and land parcels and other information will be compiled.

Outcome	Completion Date
1. GIS database of all natural resource and water-related data for study area	2/15/2016

**Activity 4: Ecosystem Services Assessment.**

**Budget: \$35,000**

Ecosystem services, ranging from managing stormwater, building soils and controlling diseases and pests, to enhancing pollination, sequestering carbon and regenerating game and fish populations will be inventoried.

Outcome	Completion Date
1. A series of maps for specific ecosystem services will be produced.	8/15/2016

**Activity 5: Land Management Analysis**

**Budget: \$20,000**

Landowner and farmer interviews and land management practices inventory will be conducted.

Outcome	Completion Date
1. Recommendations for moving agriculture towards land management which restores ecosystem services and can raise farm income or reduce costs.	1/15/2017



**Environment and Natural Resources Trust Fund (ENRTF)**

**2015 Main Proposal**

**Project Title:** Integrating Agriculture with Water Quality and Wildlife Habitat

**Activity 6: Economic Analysis**

**Budget:** \$100,000

Analyze economic conditions and opportunities, including new credit markets. A minimum of six diverse landowner operations will be assessed which concepts/ approaches have the most potential for use.

Outcome	Completion Date
1. A ecosystem services matrix will be compiled to show the costs of implementing each practice, and potential returns from each change/investment.	1/15/2017

**Activity 7: Legal and Regulatory Analysis**

**Budget:** \$35,000

Relevant state and federal laws and local ordinances will be reviewed to address potential opportunities and barriers to accomplishing project goals.

Outcome	Completion Date
1. Findings and recommendations	1/15/2017

**Activity 8: Demonstration Projects**

**Budget:** \$40,000

Outcome	Completion Date
1. A minimum of four rural landowners will be selected to begin implementing multi-resource management demonstration projects	6/30/2017

**III. PROJECT STRATEGY**

**A. Project Team/Partners**

Core team includes Applied Ecological Services (\$65,000/multiple activities), Cannon River Watershed Partnership (\$15,000/outreach), Crossroads Resource Center (\$60,000/economic analysis), Dakota County (\$50,000/multiple activities), Dakota County SWCD (\$65,000/multiple activities), Farmers Legal Action Group (\$35,000/legal analysis). Ag Star Financial, Greenvale Township, Hmong American Farming Association, USDA Natural Resources Conservation Service, local colleges, DNR, and MN Dept. of Agriculture will also be involved.

**B. Project Impact and Long-Term Strategy**

We have long recognized the significant impacts that agriculture has on water quality and wildlife habitat and understand that landowners use financial considerations for determining their land use and agricultural practices. Yet, we have not used integrated economic and ecological assessments to determine if there can be alternative financially rewarding practices that also improve water quality/quantity and wildlife habitat on private lands. This project is designed to begin understanding these relationships and opportunities for greater public and private benefits and is a progression of the successful Dakota County Farmland and Natural Areas Program. The County has committed \$50,000 for this project.

The project will be very collaborative in design with many opportunities for information transfer in multiple venues. The involvement of students and faculty from local colleges will provide additional value-added components. It is anticipated that supporting existing and new demonstration projects will provide valuable information and natural resource benefits. Providing resources for community governance may also be warranted. Finally, this project could provide a different integrated funding and implementation model based on geography and providing multiple public benefits, rather than separate agency missions or specific programs.











**C. Timeline Requirements**

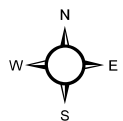
The multiple aspects of this complex project will require a deadline of June 30, 2018



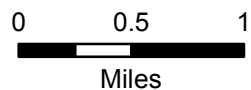
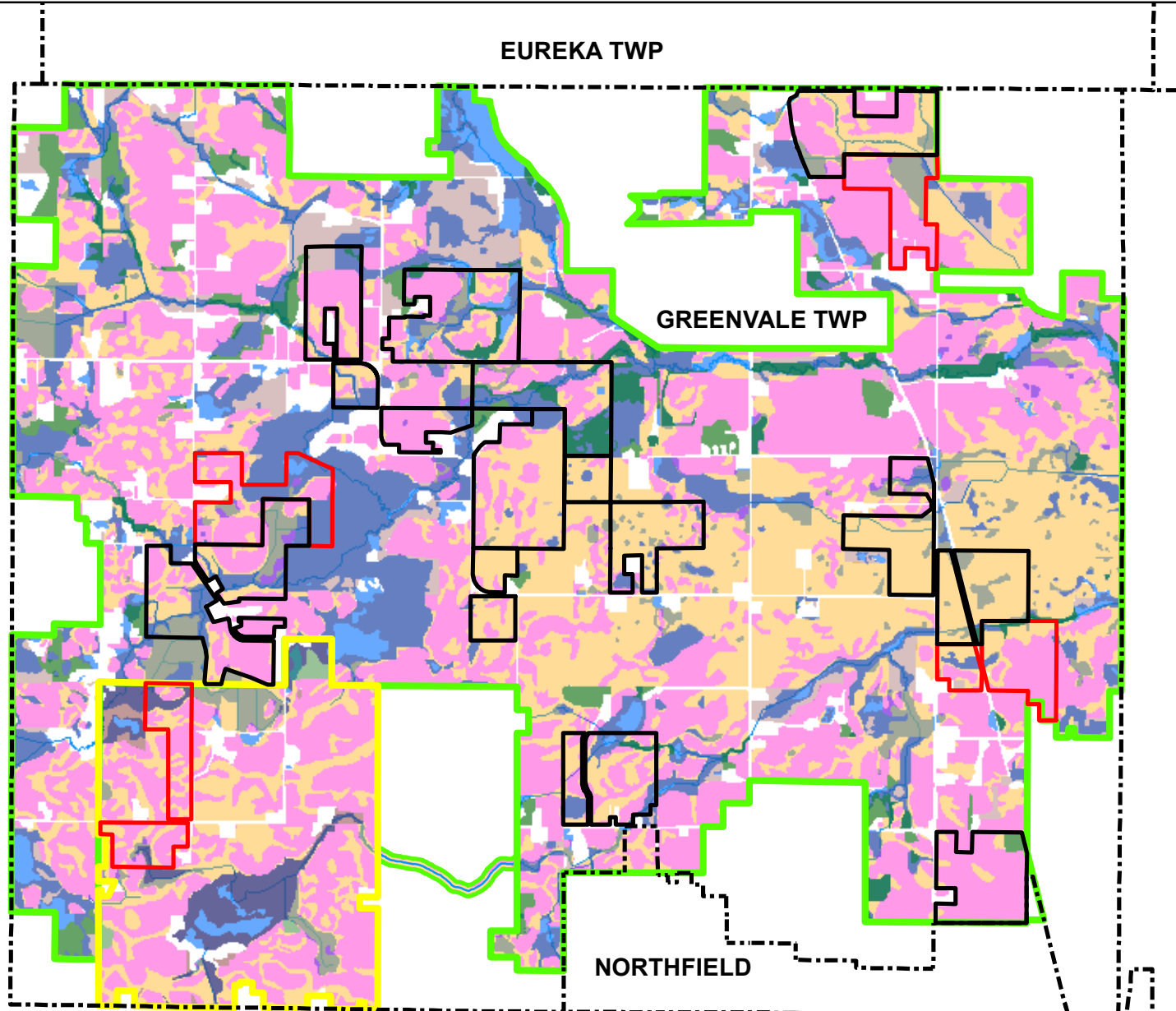
# Greenvale Conservation Zone

## Preliminary Study Area

-  Acquired Agricultural Easements (2,121 ac.)
-  Preliminarily Approved Easements (587 ac.)
-  Agricultural Conservation Zone (12,560 ac.) (238 Landowners)
-  Proposed WMA (1,693 ac.) (18 Landowners)
-  Farmed Hydric Soils (ACZ - 3,692 ac.) (WMA - 509 ac.)
-  Farmed Non-Hydric Soils (ACZ - 4,575 ac.) (WMA - 790 ac.)
-  Forests (ACZ - 619 ac.) (WMA - 26 ac.)
-  Herbaceous (ACZ - 2,174 ac.) (WMA - 220 ac.)
-  Waterways
-  Wetlands (ACZ - 2,928 ac.) (WMA - 318 ac.)



04/22/2014



# Project Manager Qualifications for Alan Singer

## **1978 to 1991 Dodge Nature Center Interpretive Naturalist and Program Manager**

- Teaching and facilitating 40,000 student visits and 10,000 adult and family participants per year
- Supervising ten staff and fifty adult volunteers

## **1991 to 1998 Minneapolis Park and Recreation Board Environmental Program Manager**

- Development of first, comprehensive Environmental Policy for the Park Board
- Developing and implementing the master plan and improvements for Cedar Lake Park and Trail
- Development and implementation of a park system-wide reduced mowing initiative and off-leash dog exercise area program
- Manage the J.D. Rivers Outdoor Discovery Center and Eloise Butler Wildflower Garden
- Management or involvement in the following LCMR projects:
  - Urban Rangers
  - Longfellow House Interpretive Center
  - Multi-use Urban Green Space Project
  - Cedar Lake Trail

## **1998 to 2003 MN DNR Metro Greenways Coordinator**

- Provided \$1 million in 50:50 matching funds for planning projects involved over 70 partners in 60 cities and towns in the metro region
- Secured and expended \$10M of state funds that leveraged an additional \$17M of non-state funds for land protection and restoration throughout the region
- Project Manager several LCMR-funded Metro Greenways allocations and the Initial Metro Wildlife (now Metro Conservation) Corridors project

## **2003 to Present Dakota County Land Conservation Manager**

- Managed the expenditure of more than \$20M of County funds to permanently protect more than 10,600 acres with a value greater than \$82 million
- Program Manager for 2008 LCCMR “Vermillion River Corridor Acquisition and Restoration in Dakota County” project to develop comprehensive water quality, wildlife habitat and recreation plan for the Vermillion River in Scott and Dakota Counties

## **Organizational Description**

Dakota County is Local Government Unit bordered by the Minnesota, Mississippi and Cannon Rivers with almost the entire Vermillion River located within in its boundaries. Nearly 400,000 people live in the county that that is comprised of 14 fully developed and rapidly developing suburbs; six small, rural towns; and 13 mostly rural townships.

The County has adopted a comprehensive, long-term land conservation vision that integrates the regional park system; a 200-mile greenway system that integrates water quality, wildlife habitat and recreation; the Shoreholders buffer program for all rivers, streams and undeveloped lakeshore; natural area protection; and farmland protection.