

# Farmer/Landowner Engagement and Organizing in the Chippewa and Root River Watersheds: Achieving a healthy ecosystem in agricultural watersheds

**Chippewa Partners:** Land Stewardship Project, Chippewa River Watershed Project, Pope County SWCD/NRCS, University of Minnesota Extension, West Central Research and Outreach Center, USDA-ARS Soil Lab, Minnesota DNR, US Fish and Wildlife Service, The Nature Conservancy

**Root Partners:** Land Stewardship Project, The Nature Conservancy, Fillmore County SWCD/NRCS, Grazing Lands Conservation Initiative of Minnesota

## Introduction and Overview

The Root River Watershed is located mostly within the Driftless agro-eco-region. Approximately 97% percent of the 1,064,970 acres are privately owned, including about 3,000 farms. Resource concerns in the watershed include sediment and erosion, nutrient management, and protection of habitat for grassland birds. Forty total maximum daily load (TMDL) studies are underway or finished and several stream reaches are on the list of impaired waters. Long-term, landscape level outcomes we seek are:

- Enhance habitat for grassland birds of greatest conservation need;
- Gain perennial cover through profitable grazing, conservation program incentives, and fostering of a land ethic;
- Measurably reduce nutrient loss; and
- Make progress toward multifunctional landscape goals for water quality, wildlife habitat, and food and energy production.

The Chippewa River Watershed is a 1.3 million acre watershed in west central Minnesota. Nearly 90% of the land is privately owned with over 68% in agriculture. The Chippewa River watershed includes a complex mixture of moraines and till, lake deposits, and outwash plains. The hilly moraines result in a high potential for erosion of sediment into streams. The long-term goal of this initiative is to increase biological diversity and perennial cover on an additional 10% of the row cropped land in the Chippewa River Watershed in the Prairie Pothole Region.

- Long-term outcomes we seek are to:
- Improve water quality through reduction in erosion and N loss;
  - Enhance prairie and habitat for grassland birds;
  - Assist partners to help farmers in the CRW maintain and adopt conservation practices including prescribed grazing, conservation cover, cover crops and native prairie protection and management; and
  - Make progress toward water quality goals for the Chippewa River Watershed.

Market, policy and infrastructure pressure in both watersheds has resulted in increased row crop acreage and a reduction in grasslands, including CRP. Much remaining grassland is poorly managed with continuous grazing or as unattended recreational land. Improvement in water quality will require reductions in erosion on row crop fields as well as land use change to perennials in vulnerable areas.

**Central to our approach in both watersheds is the belief that good stewardship of the land and soil resources can and must be profitable for farmers.**

## Talking about Stewardship

Our key strategy for improving agricultural conservation in both watersheds is building relationships with farmers. One to one conversations with farmers and landowners give the opportunity to express stewardship values and begin to identify barriers to pursuing those values.

We identify potential hosts and help organize kitchen table meetings. These informal gatherings of friends and neighbors provide the *challenge and the opportunity* to share in a little more public yet safe setting what is important to participants about their land and stewardship practices they would like to implement. Through these gatherings we

- Nurture the concept of farmers and landowners supporting each other and working together; and
- Begin to contribute to the development of *land ethic*.

Many farmers and landowners we are seeking to build relationships with welcome the opportunity to talk about conservation, stewardship and what their land means to them. Having those conversations publicly, even with friends and neighbors, is a challenge.

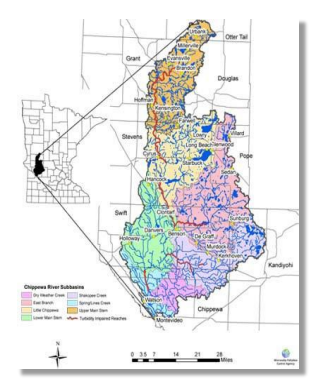
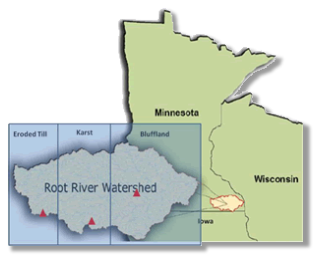
**What impact does the cultural pressure farmers and landowners experience to tamp down and deny stewardship values in making decisions about practices and land use have on our agricultural landscapes?**

## Farmer Demonstration & Learning Networks

Peer to peer networks are a great tool for farmers and landowners to try new ideas for enhancing conservation on their land and demonstrate to others in the area what they have learned. They build knowledge and skills, provide working demonstrations to skeptical friends and neighbors and social support for implementing stewardship practices.

- Networks include
- Improving nutrient management on row crops
  - Cover crop learning groups focusing on improving soil health by building healthy biological activity and cover for soil and, in some instances, providing winter browse for cattle or sheep.
  - Grazing networks and groups to improve grazing techniques and profit while enhancing wildlife habitat, building healthy soil and reducing runoff and wind erosion.

Acres owned by non-operating landowners are growing. Over 60% of the farmland in the Upper Minnesota basin, for example, is land that is leased to a farmer/operator. Women who have a strong conservation and community ethic but may not have the tools and confidence to work with renters to implement those values own much of this land. We are implementing learning groups of women landowners to help them understand and provide social support for implementing conservation requirements on farmland they lease to others.



## Conservation Leaders

Farmers, landowners and community members speaking out about stewardship and good conservation practices is crucial to developing a strong base to carry the work we are starting forward.

Our work in both watersheds provides opportunities to develop and demonstrate leadership skills and habits by hosting a kitchen table meeting, hosting or speaking at a field day, leading a tour, taking a leadership role in a network, or demonstrating their stewardship values and practices in publications, commentaries and public testimony.



## Soil Health

A cornerstone of improving conservation in the Chippewa and Root River watersheds is building healthy soil that is resilient to the pressures of agricultural production. Inspired and informed by the Burleigh County North Dakota network of farmers, ranchers, and NRCS/SWCD staff, we are building awareness of the *economic, conservation and ecosystem services* value of biologically healthy soil teeming with micro biotic life.

Tillage, chemicals and monocrops degrade our soil resulting in erosion and increasing demand for more and more purchased inputs to grow our agricultural crops. Stewardship — taking care of the land — starts with taking care of the soil, the foundational resource in any land-based agricultural system. Many of the soil conservation practices that are promoted to farmers and landowners — buffer strips, grassed waterways, sediment dams, etc. — are really only addressing the symptoms of a degraded soil resource. Biologically healthy soil is both rich in nutrients and resilient to wind and water erosion. Learn more about how farmers and landowners can build healthy soil at:

<http://landstewardshipproject.org/stewardshipfood/soilquality>.



*Restoring the Resource*

## Simon Lake Challenge

Question? **Can an area of individual parcels of land owned by farmers, ranchers, hunters, and public agencies be developed into a healthy, functioning ecosystem through landowner cooperation, land use planning, careful grazing management?**

The Simon Lake area in southeastern Pope County is preparing to take on the challenge! Farmers, public land managers and outdoor recreationalists are interested in pursuing a cooperative land management strategy to benefit water quality, push back invasive species, provide high quality wildlife habitat and a pleasing landscape, build healthy, resilient soil, and opportunity for profit for farmers and ranchers. Management strategies will include a shared vision, carefully managed ruminant livestock impact, and cover crops.



Still in an early phase of development, Land Stewardship Project, area farmers, recreational landowners and the U.S. Fish and Wildlife Service are initiating this exciting and innovative project

## Market Pull

### Making the Economic Case

Values for good stewardship are important drivers of improving water quality and other ecosystems services through private agricultural land management decisions but farm profit is critical to the success of these efforts. *Simply put, farmers will not be able to continue farming if they do not make good economic decisions!*

Good stewardship pays.

High quality grassfed beef requiring well managed grass and forages and healthy soil is a market growing at 10-20% per year. Opportunities to market grassfed beef are growing through branded program businesses like **1000 Hills Cattle Company** and **Grass Run Farms**.

A thriving ruminant livestock industry provides opportunity for farmers to lease under performing fields not suitable for row crops to beginning farmers interested in innovative grazing strategies.

Healthy soil builds a farm's most important asset over time and can substantially reduce input costs. A Leopold Center study showed that over 13 years, by building soil health organic crop farmers improve water quality, reap harvest premiums **and reduce input costs** fetching roughly \$200 more per acre. <http://www.leopold.iastate.edu/long-term-agroecological-research>



Through demonstration site trips and field days, testimonials, case studies, and cost calculators and we are making the economic case for good stewardship.

## Community Benefits

"Know your farmer" reminds us to know where our good food comes from and to support the farmers who raise our grassfed beef, chicken, natural pork and weekly CSA box of great produce. Let's also "know our farmer" who manages a healthy grassland along our favorite trout stream, keeps nutrients and soil in place and out of our water, builds healthy, resilient soil for all our futures and provides good wildlife habitat for our recreational and aesthetic well-being. Farmers with stewardship values and a keen eye for economic opportunity work with public land managers to help keep Wildlife Protection Areas and Wildlife Management Areas healthy and productive and make careful choices about how to manage each field they farm

Through field days, events, one to one outreach to community leaders, social and print media we are building awareness of how the natural and the human community benefits from farmers who practice a high level of stewardship. The choices about the food we eat and the energy we use and the local, state and federal policies we support matter.



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