

2015 Annual Report

Conservation Equation

Local Leadership + Local Action
=
Lasting Value

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THANK YOU

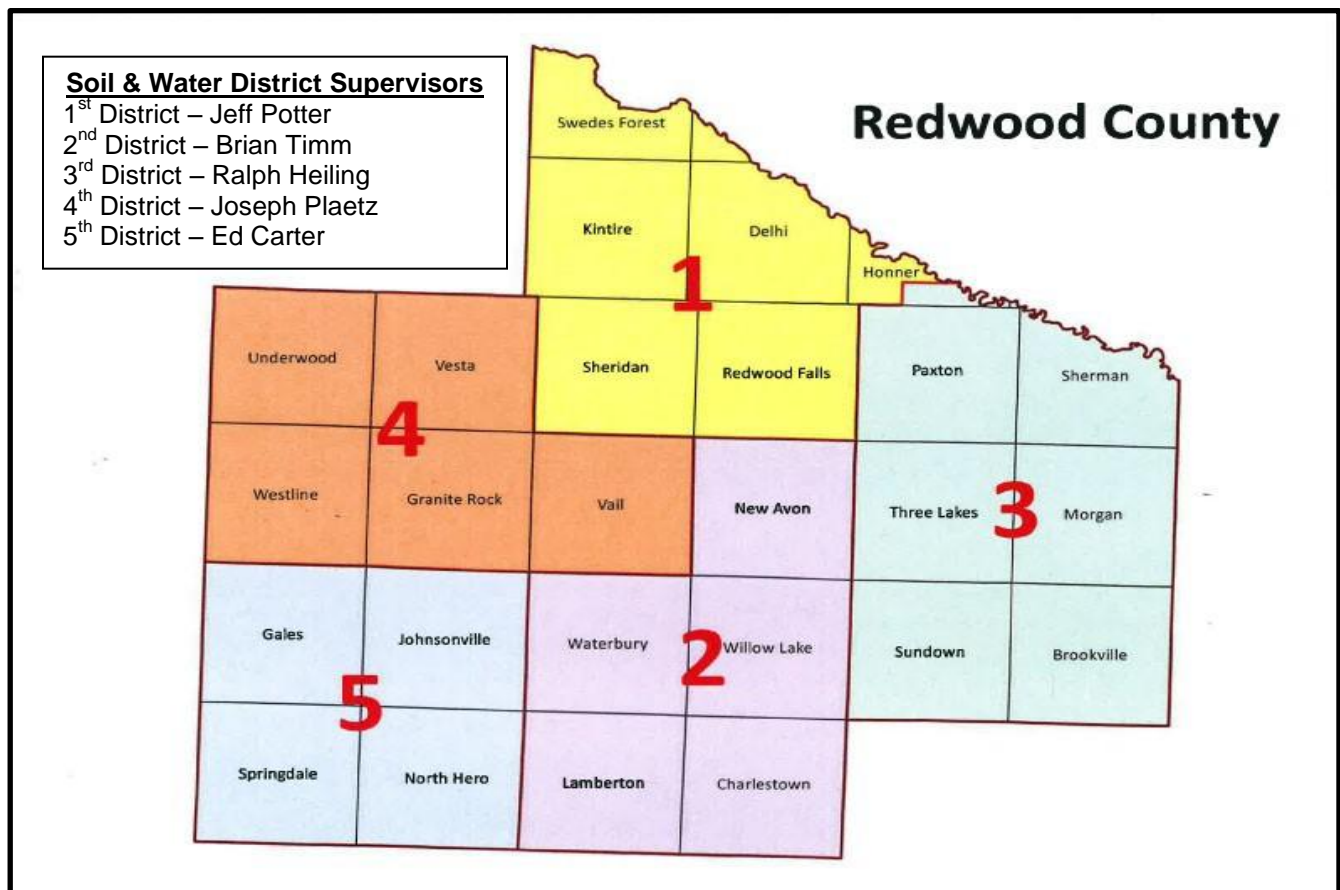
The Redwood SWCD Board and Staff extend our sincere appreciation to the Redwood Board of Commissioners and our other conservation partners. We would like to thank Redwood County Landowners/Operators for implementing Best Management Conservation practices to help us work toward Redwood SWCD Water Quality goals.

2016 Redwood SWCD Board of Supervisors & County Commissioner



Monthly Meetings
2nd Wednesday of
every month at
8:30 a.m.
in the meeting
room at the Ag
Service Center in
Redwood Falls

Pictured *left to right*: Jeff Potter, Brian Timm, Ed Carter, Ralph Heiling,
Dennis Groebner (Redwood County Commissioner) and Joe Plaetz



REDWOOD SOIL & WATER CONSERVATION



"Helping bring YOU clean water"

Redwood SWCD

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Redwood SWCD & NRCS Staff

Redwood

Staff

District Administrator –
Marilyn Bernhardson

Office Assistant – Kari
Clouse

Conservation Specialist
– Kristy Zajac

Water Quality
Technician – Kurt
Mathiowetz

NRCS Staff

District Conservationist
– Vacant

Soil Conservation
Technician – Brian
Pfarr

Resource
Conservationist – Jeff
Kjorness

MISSION STATEMENT

The mission of the Redwood Soil and Water Conservation District is to educate and assist the citizens of Redwood County to efficiently and economically manage the soil and water resources of the county, for present and future generations.

SERVING THE CONSERVATION NEEDS OF REDWOOD COUNTY



The Redwood Soil and Water Conservation District was established in January, 1953. Citizens of Redwood County were concerned about soil erosion by wind and water and its affect on water quality. Since the districts inception, many refer to us as 'Redwood SWCD'. The district was authorized as a result of the state legislature passing the Minnesota Soil Conservation District Law in 1937. The law enabled farmers to organize for conservation purposes and gave them the power to enter into legal agreements and provide financial aid to landowners.

Other powers and duties granted to districts include:

- Legal subdivisions of the state which can exercise public powers
- May carry out soil and water conservation measures on any land in the district with the consent of landowners
- May cooperate or enter into agreements with any governmental agency or individual landowner for the purpose of carrying on a program of erosion prevention and control.

This district is governed by five locally elected supervisors. Each is elected from one of five nomination districts in the county. The district board is charged with three basic roles:

- To establish policy that guides district staff in the day-to-day operation of the district;
- To provide guidance in the development of long and short range plans, and develop a yearly budget;
- Hire staff that will carry out the policy and plan for the district.

Redwood SWCD receives funding from Redwood County, the State of Minnesota, self-generated funds, various conservation grants and sometimes through agreements with the Federal Government.

County Funds - Redwood SWCD receives an annual allocation from the County that enables the district to secure technical, administrative and educational staff to



State Funds - Each district receives approximately \$20,000 administrative funds and several pass-through grants for various programs that places conservation on the ground.

Self-Generated - Our district has a tree matting program that earns limited funds.

LEGISLATIVE ACTIVITIES

Redwood SWCD continues to have a voice in legislative activities relating to conservation through its supervisors and administrator. Minnesota Soil and Water Conservation Districts have made legislators aware of their support of conservation, by making regular visits to the state capitol and lobbying for continued support. District Administrator, Marilyn Bernhardson, has been active with the legislative activities through the Minnesota Association of Soil and Water Conservation Districts (MASWCD) Legislative Committee. The legislative committee is responsible for setting the legislative agenda for the state association.



Front row: Representative Chris Swedzinski & Representative Paul Torkelson. Back row: SWCD Supervisors; Jeff Potter, Brian Timm & Ralph Heiling & District Administrator: Marilyn Bernhardson



Left to right: Marilyn Bernhardson, Jeff Potter, Senator Bill Weber, Ralph Heiling & Brian Timm



Left to right: SWCD Supervisors, Ralph Heiling, Brian Timm, Senator Gary Dahms, District Administrator, Marilyn Bernhardson & SWCD Supervisor Jeff Potter.



Senator Rod Hamilton, Marilyn Bernhardson, Brian Timm, Ralph Heiling & Jeff Potter

REINVEST IN MINNESOTA (RIM) PROGRAM

In 1986, the Reinvest in Minnesota Resources Act was enacted to restore certain lands to protect soil and water quality and support fish and wildlife habitat. RIM is a voluntary conservation easement program primarily designed to take sensitive cropland out of production to address a variety of concerns. The vast majority of RIM easements are permanent in duration. The RIM contract means the landowner surrenders certain rights they have to the property; cropping, haying/grazing (unless approved), general disturbance of conservation cover, and building structures or developing roads. Essentially, the landowner must keep the habitat intact. Landowners are compensated for granting these conservation easements, all the while the landowner still owns the land and manages access, pays taxes (typically reduced) and conducts the management on the parcel. This program is administered by the Board of Water and Soil Resources. Local Soil and Water Conservation Districts implement the program locally.

Since 1986, almost all of the capital bonding bills has included funding for the RIM program. Bonding dollars have been the backbone of RIM since its inception. In addition to bonding money, various other pots of money have been used to assist in acquiring these conservation easements. In Redwood County, we have easements on wetland restorations, grasslands, buffer strips, rock outcrops, calcareous fens and maple-basswood forests. Programs like RIM have been integral to protecting water quality, wildlife habitat, and threatened ecosystems on private land.



In 2008, the citizens of Minnesota voted to change to the constitution, increasing the sales tax and dedicating a large portion of that money toward clean water and wildlife habitat. It has been hugely successful, especially here in Redwood County. In addition to a large influx of money allocated by the legislature for RIM Bonding, we were able to enroll larger areas adjacent to rivers, ditches and lakes, and public water wetlands.

Currently, Redwood County has a total of **473 easements** recorded or in process since 1986. These contracts total 15,493 acres. Local seed vendors, earthwork contractors, land management contractors, area elevators and farmers have been hired to perform the establishment, maintenance and management of these conservation lands. These lands are tremendously important for area wildlife, wildlife enthusiasts, water quality, and soil health. Having more diversity on this landscape is the basis to quality of life, ensures financial risk management, and values the land ethic for future generations. We need to continue to see value in things that don't visibly show financial value on our landscape. Conservation values are often hard to quantify, but the gap of our knowledge is lessening every day.

"Biological wealth...is much more potent for long-term human welfare than is generally appreciated..." – E.O. Wilson

REINVEST IN MINNESOTA/WETLAND RESERVE PROGRAM (RIM/WRP)

Conservation easements are a critical component of the state's efforts to improve water quality. They reduce soil erosion, phosphorus, and nitrogen loading, and improve wildlife habitat and flood attenuation on private lands.

Easements protect the state's water and soil resources by permanently restoring wetlands, adjacent grassland, wildlife habitat complexes and permanent riparian buffers. Funds to pay for these easements come from both the State of Minnesota and the USDA.

Redwood SWCD, in cooperation with Board of Water and Soil Resources (BWSR), and the USDA Natural Resources Conservation Service (NRCS), implement the RIM/WRP program. The program compensates landowners for granting conservation easement and establishing native vegetation habitat on economically marginal, flood-prone, environmentally sensitive or highly erodible lands.

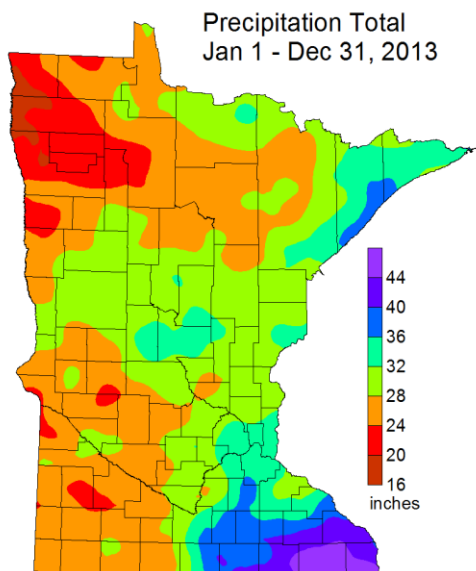
In Redwood County, we have 7 contracts totaling 364 acres. This program is no longer offered in the state; however, the seven contracts will continue to be monitored and spot checked.



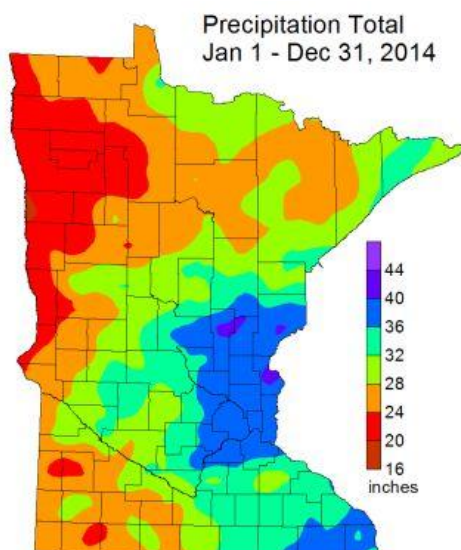
RAIN GAUGE PROGRAM

Redwood SWCD continues to cooperate with the State Climatologists Office to enlist individuals across the county to collect rainfall data. All SWCD's in the state select individuals every 12 miles across the state to collect this data. The data is used to record average rainfall data for the entire state.

Our present ran gauge holders include: Ervin Runck – Lamberton, Tom Daub – Wabasso, Mike Appel – Milroy, Gary Hammerschmidt – Morgan, David Swedzinski – Milroy and Redwood SWCD – Redwood Falls. The two photos are a comparison of rainfall in 2013 and 2014.



DNR State Climatology Office, April 9, 2014



DNR State Climatology Office, April 10, 2015



LOCAL WATER MANAGEMENT

Redwood SWCD is the coordinating agency for implementing the county's Comprehensive Local Water Management Plan. The plan addresses surface water, groundwater, and all related land resource issues.

The priority concerns the plan addresses include:

- Groundwater protection focusing on wellhead protection for public water supplies
- Drainage water management focuses on wetland restorations and floodwater retention opportunities
- Surface water quality addressing impaired waters, by major watershed, for these priority pollutants: nutrients, turbidity, biota and fecal coliform bacteria.
- Erosion and sediment control focusing on residue management and gully/concentrated flow areas in the southwest portion of Redwood County.

Programs and projects implemented through the Local Water Management Plan:

- Continued to monitor the 49.7 miles of filter strips
- Provided funds to seal 5 abandoned wells
- Sponsored the Ecology Bus for two schools in the county
- Sponsored Multi-County Environmental Fair available to schools in Redwood County
- Published the newsletter in the local newspaper
- Promoted the installation of filter strips along rivers, streams and ditches.
- Continued secchi disk readings of Lake Laura to monitor for clarity.
- Provided incentive to establish 80 acres of drilled cover crop.
- Sponsored Cover Crop Workshop
- Started Amendment of Water Management Plan



Well Sealing



Environmental Fair



Filterstrip



Secchi Disk



Cover Crop

EROSIN CONTROL AND WATER MANAGEMENT PROGRAM

Redwood SWCD receives a grant each year from the Board of Water and Soil Resource (BWSR) to help local landowners/operators offset the costs of installing conservation practices. These funds are used to protect and improve water quality by controlling soil erosion and reducing sedimentation.

Through the State Cost Share Program, landowners/operators can request financial and/or technical assistance to implement state approved conservation practices.

This was the first program legislated for soil and water conservation districts to implement at the local level.

The program provides financial assistance up to 75% of the project cost to install best management practices such as:

- Water and Sediment Control Basins
- Grassed Waterways
- Grade Stabilization Structures
- Field Windbreaks
- Shelterbelts
- Diversions
- Terraces
- Agricultural Waste Systems

Approved construction practices include activities that stabilize critical soil erosion areas, reduce wind erosion, control gully, rill or sheet erosion, divert runoff to protect and improve water quality, control storm water runoff or protect surface, and improve or protect ground water quality.

Since 1978, Redwood SWCD has helped landowners install 345 different practices across Redwood County totaling approximately \$535,590.



During construction of water and sediment control basin



After construction of water and sediment control basin

Completed water and sediment control basin



2012 CLEAN WATER FUNDS TARGET SUB-WATERSHED

Outcomes From Targeted Best Management Practice Installation*

* Phosphorus Reduction	1,421 lbs. per year
* Sediment Reduction	1,107 tons per year
* Soil Saved	788 tons per year

*This does not include reductions from Variable Rate Application of Nutrients.

Redwood SWCD was awarded a Clean Water Fund Grant to apply conservation Best Management Practices in sub-watershed (29053) of the Cottonwood River Watershed.

Through a producer-led informational meeting, it was determined there was a need to implement best management practices in this sub-watershed.

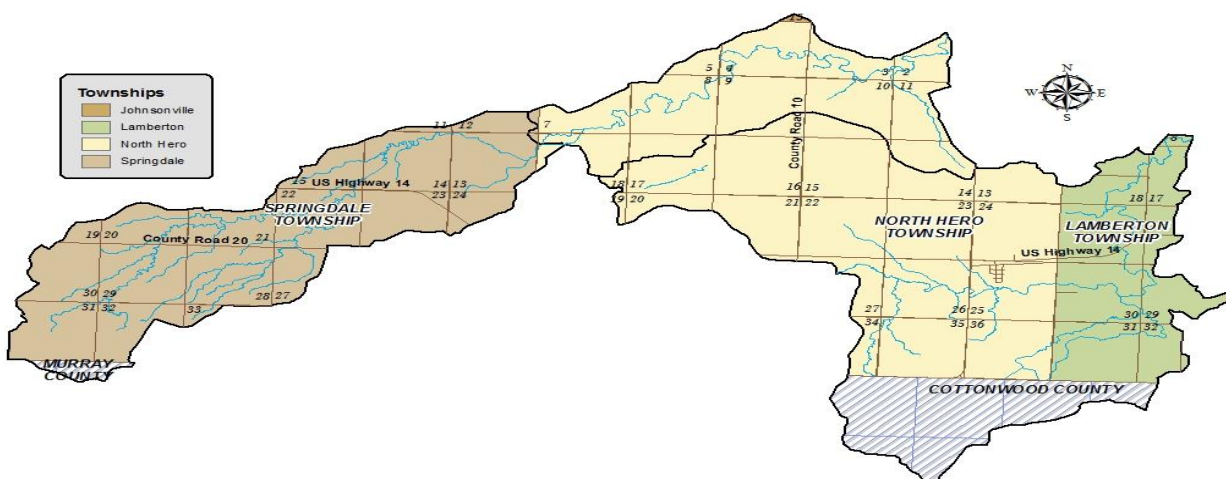
Producers developed a list of concerns, including:

- Creek/River Banks eroding
- Open Intakes
- Need to slow down water
- Need to hold water on land
- Need more controlled drainage
- Sediment moves with water
- Farming too close to water bodies
- Waterways are disappearing

Projects Completed:

- 8 Grade Stabilization Structures
- 10 Water and Sediment Control Basins
- 4.1 acres of Grassed Waterway
- 3 CNMP Plans
- 1,600 acres of Variable Rate Applications
- 11 Alternative Intakes

Through a grant amendment, we added two adjoining sub-watersheds to our project area; 29043 and 29048. With the amendment we also extended the sunset date of the grant to June, 2016.



FARM BILL PARTNERSHIP



The farm bill partnership position continues to bring additional conservation acres to Redwood County. In 2015, 142 contracts were signed totaling 2,053 acres were enrolled in CRP and added 368 acres into the RIM program for permanent protection. Staff worked with 155 landowners to help them develop management plans on already established conservation acres. Also, worked with 5 producers to add an additional 129 acres into the Pollinator Practice. In Redwood County, we have a total of 1,361 contracts totaling 16,420 acres.

Redwood SWCD, once again, received funding to staff a three quarter time position to accelerate the implementation of state and federal conservation programs.

Redwood SWCD continues to participate in the Farm Bill Partnership to promote conservation practices on private land using USDA Farm Bill programs; e.g. CRP. This partnership also allows the SWCD to work with conservation programs to protect and enhance wildlife habitat and improve water quality. During 2014, we were very busy sending buffer strips and wetlands restoration proposals to encourage enrollment in a conservation program. The interest in Redwood County for RIM continues to be impressive.

Under this partnership, we work with the USDA NRCS and FSA to target lands for conservation practices, assist the landowner and governmental agencies in following through with sign-ups and provide technical guidance on practice establishment and maintenance.

With new enrollees and re-enrollments contracts were signed into the following practices: grassland establishment, pollinator plantings, buffer strips, farmstead shelterbelts, living snow fences, field windbreaks and wetland restorations. Redwood County has been very successful in maintaining continuous CRP practices and our hope is for this to continue in to the future.



AG BEST MANAGEMENT PROGRAM

Redwood Soil and Water Conservation District administers the Ag Best Management Loan Program offered by the Minnesota Department of Agriculture.

The loan program provides low interest financing to farmers, rural landowners, and agriculture supply businesses for the implementation of best management practices that improve water quality problems in Redwood County. Loans are provided for projects that meet the goals in Redwood County's Comprehensive Local Water Management Plan.



No-Till Drill

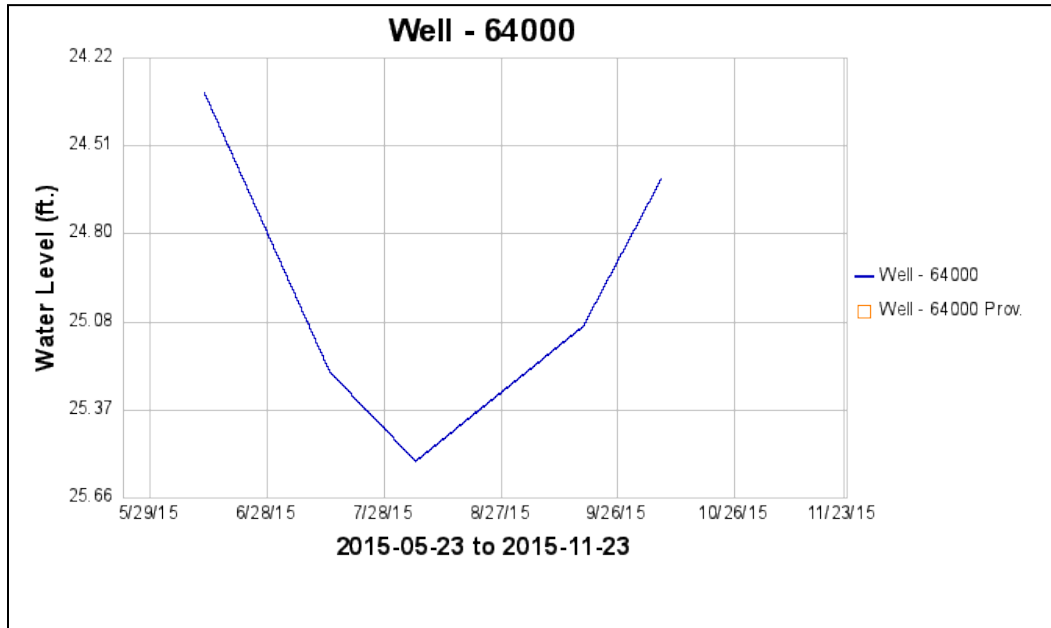
Some activities that have qualified for low interest loans in Redwood County include:

- Feedlot improvements to treat a pollution problem
- Manure handling equipment
- Conservation Tillage equipment to leave minimum of 30% residue
- Upgrade out-of-compliance individual septic systems
- New well construction if old well is contaminated by proof of water test.

Through 2015, this program has provided low interest loans in the amount of \$2,479,401 in the following categories:

Ag Waste Management	15	\$ 786,264
Conservation Tillage	60	\$1,112,768
Septic System Upgrades	67	\$ 469,469
Drill New Well/Sealing	1	\$ 10,900
Manure Separator	1	\$ 100,000

WELL OBSERVATIONS



Well No. 64000 – Near Walnut Grove

Most months throughout the year, the SWCD staff measures State of Minnesota observation wells in Redwood County and reports to the MN DNR the water levels of each well. The six (6) wells we monitor are from Redwood Falls south to Sanborn and west to the County line. One of these wells has been monitored since 1952; another since 1972; the others were installed in 2008 and 2010. These wells provide the state with information about ground water levels. The readings in these wells have shown mixed results in water levels.

The well in the above illustration is near Walnut Grove, and was first observed in 1972. This record is from May to November, 2015. This well along with most of the other wells showed water levels that dipped significantly In July, however made a recovery as the year progressed. This type of data is very valuable when we talk about water supply, aquifer levels, and groundwater recharge. To find out information about water levels check the Minnesota Climatological Working Group website at http://climate.umn.edu/ground_water_level/.

WETLAND CONSERVATION ACT (WCA) PROGRAM

In 1991, reacting to public concern about the disappearance of wetlands in Minnesota, the Minnesota Legislature approved and signed the Wetland Conservation Act. There are several purposes of the Wetland Conservation Act.

1. Achieve no net loss of wetland quantity, quality and biological diversity or existing wetlands.
2. Increase quantity, quality and biological diversity of wetlands through restoration or enhancements of previously impacted wetlands.
3. Avoid impacts that destroy or diminish quantity, quality or biological diversity.
4. Replace wetlands when avoidance of impacts are not feasible and prudent.

Redwood SWCD is the designed WCA LGU under resolution from Redwood County Board of Commissioners, with oversight by the MN Board of Water and Soil Resources and enforcement from the MN DNR Enforcement Division. The Wetland Conservation Act (WCA) required anyone proposing “impacts” to wetlands to go through a permitting process. Certain activities are exempted from WCA. These exemptions vary by type, size and location.

A summary of 2015 accomplishments:

1. Assistance provided to 76 individuals
2. Applications – 11 approved
3. Exemptions – 4
4. Replacement Plan – 5 approved
5. Monitoring Report – 1 received
6. Potential Violations – 4
7. Trainings – Attended 4 training sessions to maintain credits for certified delineator.

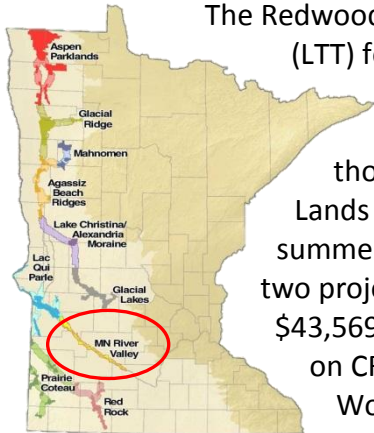
Redwood SWCD has a Certified Wetland Delineator on staff.

Several entities regulate wetlands, sometimes with overlapping jurisdiction. Wetland issues are land use issues, so it doesn't matter if you live in a rural area or a town you need to make sure you are in compliance with both state and federal requirements.



Restored Wetland

MINNESOTA PRAIRIE CONSERVATION PLAN



The Redwood SWCD is an active member of the Minnesota River Valley Local Technical Team (LTT) for the MN Prairie Conservation Plan, released in 2011. Money is available to each of 10 Prairie Core Areas in the prairie region of the state – the MN River Valley is one of those Core Areas. The Redwood SWCD applied for various projects. Of those projects, several have been approved for funding using the MN DNR Working Lands Initiative (WLI) money. Two Native Prairie Bank easements were closed on this summer using WLI funds as an added incentive for these high priority parcels. Additionally, two projects on three remnant prairie parcels were approved for tree removal - 78 acres for \$43,569. Furthermore, the LTT saw a need to assist landowners in managing the grasslands on CRP, RIM and remnant prairie parcels. Thus, we proposed a Grassland Management Workshop to take place this summer and will be administered through the Redwood SWCD. This workshop was funded for \$1,000 through the WLI. The Redwood SWCD continues to value the grassland resources in the area. We will further the outreach and funding requests for prairie protection, management and reconstruction in Redwood County for years to come.

DISASTER RECOVERY ASSISTANCE PROGRAM

Redwood SWCD received Flood Recovery funds from the 2014 Flood Recovery allocation Minnesota Legislators approved during the 2015 Legislative session.

The funds are to be used in the following ways:

- 1) To repair best management practices that were damaged as a result of the heavy rains that occurred in June, 2014.
- 2) To install new best management practices on the landscape where heavy rains caused erosion.

To date we have received \$183,314.00 to make repairs or install new practices. Over \$900,000 were applied for during the two application periods. We are hoping that during the third application phase we will be able to secure additional funds.

Redwood SWCD Board of Supervisors adopted a Flood Recovery policy to guide staff for allocation of funds.

Example of Grade Stabilization Project completed as part of the Flood Disaster Relief



ECOLOGY BUS

Through the Redwood County comprehensive Local Water Management Plan, Redwood SWCD sponsors the Prairie Ecology Bus to travel to schools in Redwood County. Each year, on a rotating basis two schools are selected to give students a hands-on environmental education opportunity. The Ecology Bus is a state-of-the-art school on wheels. Students use the on board

Scientific laboratory and classroom which helps educate them about environmental and natural sciences.



2015 sponsored bus for Belview Learning Center and St. Anne's School in Wabasso

The Ecology Bus offers a wide variety of programs that include; Aquatics, Prairies, Earth Science and Forests. They also offer several "winter only" programs. As part of the Aquatics Program they offer programs that aid in teaching water quality, Stream and Lake Ecology, Wetland Science: Water, Soils and Plants and Wetland Wildlife. Each course is designed for specific ages of students participating.



Classroom Outreach

Redwood SWCD provides a number of classroom presentations on a wide variety of topics to students in Redwood County schools. One of the favorite of the teachers and students is the presentation utilizing the district's groundwater model that addresses water quality. Dye is used to show how "pollutants" travel to wells and into our surface water. It is typically presented to fifth grade students in the spring. As part of the presentation, the students view "The Journey of the Blob". It shows how when you pollute water and send it downstream, you may get it back.

Presentations can be developed upon request or tailored to fit classrooms of any age.

2015 Conservation Farmer



Mike and George

Redwood SWCD selected Mike and George Landuyt from Walnut Grove as our 2015 Conservation Farmers. Mike and George Landuyt, farm nearly 2,000 acres and custom-farm another 650. Mike is the fourth generation on the farm. Along with a beef finishing operation for 700 head of Holstein, he and his father grow corn, soybeans and hay.

The Landuyts have incorporated conservation practices on their farm since before programs became available to provide assistance.

At their own expense, they relocated the feedlot and constructed a mono-slope roof barn. They use reduced tillage on most of the farm, including vertical tillage in a couple of areas. They also are experimenting with cover crops. Their crop consultant grid-samples in 2.5-acre plots every four years for correct nutrient placement.

Over the years, they've signed contracts for the Conservation Reserve Program and Conservation Stewardship Program. Their land has 13 water- and sediment-control basins, grade-stabilization structures and buffer strips, installed with assistance through EQIP, Clean Water funds and state cost-share monies. Last fall, they planned to construct a large grade-stabilization structure to reduce gully erosion



Landuyts were recognized at the 2015 MASWCD State Convention

CONSERVATION STEWARDSHIP PROGRAM (CSP)

The Conservation Stewardship Program (CSP) is a voluntary conservation program that encourages producers to address resource concerns in a comprehensive manner by undertaking additional conservation activities, and by improving, maintaining, and managing existing conservation activities already in place. CSP encourages land stewards to improve their conservation performance by offering annual land use payments for the operation-level environmental benefits they produce and the increase of environmental benefits while enrolled in CSP. CSP provides two types of payments through five year contracts; annual payments for installing new conservation activities and maintaining existing practices; and supplemental payments for adopting a resource conserving crop rotation. To be accepted into CSP, producers need to already be good stewards of the land, but adopt additional conservation practices on their operation during the contract to increase their operations conservation performance.

In 2015 Redwood Office renews 5 contracts totaling 5,882 acres. Total annual payments for these 5 contracts are \$18,775. Also in 2015 a sign up was held to accept new applications. They accepted 21 new contacts enrolling 17,191 acres. Total annual payments will be \$185,739.60.

Redwood County has a total of 87 contracts totaling 73,012 acres.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)

The Environmental Quality Incentive Program (EQIP) is a federal program that provides technical and financial assistance to agricultural producers in order to address natural resources concerns. Redwood SWCD has successfully partnered with the Natural Resources Conservation Service (NRCS) counterparts to promote EQIP as well as other Farm Bill Programs.

The efforts have meant just over \$1,226,938 in federal cost share to assist Redwood County producers in implementing conservation measures since 2010. Practices implemented in the county through EQIP include: nutrient and pest management, rotational grazing, Cover Crops, No-Till, Ag-Waste and Structural Best Management Practices. Interest in EQIP continues to be strong. Each year Redwood County is able to sure

Year	Number Funded	Funded Amount
2010	8	\$155,501
2011	8	\$84,644
2012	10	\$33,464
2013	21	\$359,654
2014	23	\$309,305
2015	22	\$284,370

The Redwood SWCD prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program.