



Redwood Soil and Water  
Conservation District

2016

Annual Plan of Work

# INTRODUCTION

Redwood Soil and Water Conservation District's 2016 Annual Plan of Work is developed from the district's long-range plan. Redwood Soil and Water Conservation District (SWCD), through a resolution, has adopted Redwood County's Comprehensive Local Water Management Plan (CLWMP) as our Long Range Plan. Specific action items that relate to goals of the SWCD are taken from the CLWMP. There are other action items that address the goals of the SWCD but are not specifically outlined in the CLWMP.

The SWCD is the local unit of government that provides assistance to citizens who are interested in preserving, restoring and protecting soil and water resources in Redwood County.

The Mission of the Redwood SWCD 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.

The purpose of the plan is to guide the district in effectively providing conservation on the land within the county, placing priorities on high priority areas as identified. This plan includes guidelines for employees and supervisors for the achievement of the district objectives.

Our 2016 Annual Plan of Work is developed from annual needs, in the Redwood County's Comprehensive Local Water Management Plan, which the district adopted December 9, 2010, as our five year comprehensive plan. The district will implement conservation programs as necessary to achieve our goals.

Redwood County is in the process of amending the Comprehensive Local Water Management Plan, therefore our 2016 Annual Plan of Work will be developed using the 2010 plan. However, we will be incorporating new programs from legislation and some recommendations from the Water Management Advisory Committee that will be recommended for inclusion in our amended plan.

PRIORITY CONCERNS  
GOALS  
OBJECTIVES  
ACTIONS

**PRIORITY CONCERNS FOR 2016:**

**GROUNDWATER PROTECTION THAT WILL FOCUS ON WELLHEAD PROTECTION FOR PUBLIC WATER SUPPLY.**

**DRAINAGE MANAGEMENT FOCUSING 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 COUNTYWIDE AND GULLY AND CONCENTRATED FLOW AREAS IN THE SOUTHWEST PORTION OF REDWOOD COUNTY.**

**PROVIDE FOR AN EFFICIENT DISTRICT OPERATION AND PROVIDE ASSISTANCE TO PRODUCERS.**

**INCREASE PUBLIC AWARENESS OF THE SOIL AND WATER CONSERVATION ACTIVITIES IN REDWOOD COUNTY.**

**PRIORITY CONCERN: GROUNDWATER PROTECTION THAT WILL  
FOCUS ON WELLHEAD PROTECTION FOR PUBLIC WATER SUPPLY.**

**GOAL:** Prevent and protect public drinking supplies from becoming contaminated from land use activities.

**OBJECTIVE:** Educate county citizens of all ages on the importance of groundwater protection.

**ACTION:** Make 1 presentation illustrate the importance of groundwater protection.

**ACTION:** Educate producers on the effects of tile on groundwater discharge and the importance of implementing practices to improve recharge.

**ACTION:** Provide funds to 3 individuals who have abandoned wells.

**ACTION:** Do 1 radio program promoting the importance of having wells tested for contaminants.

**PRIORITY CONCERN: DRAINAGE MANAGEMENT FOCUSING ON WETLAND RESTORATIONS AND FLOODWATER RETENTION OPPORTUNITIES.**

**GOAL:** Provide protection to the drainage management system in place in the county.

**GOAL:** As part of managing the drainage system, reduce sediment and nutrients from entering surface water bodies.

**OBJECTIVE:** Restore Wetlands throughout the county.

**ACTION:** Restore the hydrology of 100 acres of prairie pothole wetlands, not including upland buffer, using temporary or permanent conservation programs.

**ACTION:** Restore 150 acres of floodplain wetlands (not including upland buffer), restore hydrology where possible, using temporary or permanent conservation programs.

**ACTION:** Educate producers on the importance of reducing flood potential and water velocity from drainage systems.

**OBJECTIVE:** Protect existing wetlands throughout the county.

**ACTION:** Implement the state of Minnesota's Wetland Conservation Act (WCA) to achieve "no net-loss" of wetlands, as stated under the law. The Redwood SWCD is the identified GLU responsible for the implementation of WCA.

**ACTION:** Spot check at least 1/3 of the wetlands restored under the Reinvest in Minnesota program, including the 126 acre fen in Swedes Forest Township.

**OBJECTIVE:** Educate on the importance of holding water on the land to reduce flood potential and water velocity in water courses.

**ACTION:** Provide information to landowners on the value of holding water on the land through news articles, brochures and events.

**ACTION:** Work with local newspapers to show success stories (both grade stabilization and wetland restoration) where local people have held water on the land and the difference it makes locally.

**OBJECTIVE:** Improve the drainage ditch system in the county through applying Best Management Practices when maintaining open drainage systems.

**ACTION:** Utilizing federal and state programs such as CRP and RIM to promote filter strips to assist Redwood County producers implement the buffer law of 2015.

**ACTION:** Maintain an open dialogue with the County Environmental office when discussing ditch cleaning and redesign.

**ACTION:** SWCD will provide appropriate seed mixes to County Environmental office for buffer strips after clean outs are completed.

**ACTION:** Encourage new designs, such as 2-stage systems, when improving/maintaining public drainage systems.

**ACTION:** Maintain the 54.7 acres of filter strips enrolled through Redwood County Water Management Plan.

**OBJECTIVE:** Incorporate the restoration or new construction of grade stabilization structures on the landscape to reduce sediment and nutrients from entering nearby surface water bodies.

**ACTION:** Restore or construct two (2) grade stabilization structures in targeted watersheds to hold water on the land.

**OBJECTIVE:** Educate landowners in the county on the drainage issues.

**ACTION:** Through news releases and direct contact, inform landowners of the importance of not farming right up to a water course and the importance of leaving a filterstrip to protect the drainage system.

**OBJECTIVE:** Work with one landowner to help them understand that meter drainage systems will slow the velocity of water entering ditches and rivers.

**ACTION:** Install control structure to better manage the output of drainage systems.

**OBJECTIVE:** Establish buffers along protected waters.

**ACTION:** Work with producers who have land required by law to establish a 50 foot buffer.

**PRIORITY CONCERN: SURFACE WATER QUALITY ADDRESSING IMPAIRED WATERS BY MAJOR WATERSHED FOR THESE PRIORITY POLLUTANTS: NUTRIENTS, TURBIDITY, BIOTA AND FECAL COLIFORM BACTERIA.**

**GOAL:** To improve, restore and protect the surface water quality of the lakes, rivers and streams in Redwood County.

**GOAL:** Reduce sediment and phosphorus from entering surface water bodies.

**OBJECTIVE:** Promote and encourage the proper use of nutrients as applied to cropland.

**ACTION:** Work with 50 producers to enroll in federal programs, such as EQIP to reduce nitrogen and phosphorus loss.

**ACTION:** Continue to promote nutrient management plans in particular variable rate applications.

**ACTION:** Educate the producers on the timing of application due to leaching and volatilization if applied prior to soil temperature being below 50 degrees.

**ACTION:** Provide assistance to one feedlot operator who has a pollution problem utilizing funds through EQIP or State Cost Share Program.

**ACTION:** Provide low interest loan to one producer to upgrade an animal waste facility who has less than 1000 a.u.

**OBJECTIVE:** Promote the installation of Cover Crops across the county for improved soil quality.

**ACTION:** Host or co-host a producer lead field day demonstrating the importance of establishing cover crops.

**ACTION:** Promote the establishment of 5,000 acres of cover crop.

**ACTION:** Distribute the 25 Cover Crop Field Guides that were purchased.

**ACTION:** Work with the local media to publish at least 2 articles on the importance of establishing cover crops.

**OBJECTIVE:** Target all identified Total Maximum Daily Load (TMDL) water bodies for implementation of practices to reduce pollutants.

**ACTION:** Provide low interest loans to three individuals to upgrade failing septic systems.

**ACTION:** Promote the installation of best management practices that will aid in the reduction of pollutant loading.

3 Grassed Waterways

15 Water and Sediment Control Basins

**OBJECTIVE:** Educate county citizens on the importance of runoff control and surface water protection.

**ACTION:** Provide flood recovery funds to individuals in the county who have had BMP's damaged or new erosion concerns due to the flooding from June, 2014.

**ACTION:** Provide funds to sponsor presentations by the Prairie Ecology Bus Center to two schools in the county.

**ACTION:** Participate in more outreach to adults utilizing opportunities within the county such as SWROC field days, Redwood County Fair, Farmfest and other such events.

**OBJECTIVE:** Trap and hold sediment and nutrients to prevent them from entering surface water

**ACTION:** Complete four (8) grade stabilization structures.

**OBJECTIVE:** To protect endangered wetlands from degradation.

**ACTION:** Complete a spot check on the calcareous fen portion of the Conservation Partnership that protected 126 acres of calcareous fen.

**OBJECTIVE:** Work with the Watershed Restoration and Protection Strategy (WRAPS) process in the middle Minnesota River Watershed.

**ACTION:** Work jointly with Brown and Cottonwood County staff on areas of the three counties that lie in the Middle Minnesota River Watershed.

**ACTION:** Develop a brochure detailing information about land use, etc. for the land lying in Redwood County.

**ACTION:** Hold at least one (1) public information meeting to gather input into water quality concerns in the Middle Minnesota River Watershed.



**PRIORITY CONCERN: EROSION AND SEDIMENT CONTROL FOCUSING ON RESIDUE MANAGEMENT COUNTYWIDE AND GULLY AND CONCENTRATED FLOW AREAS IN THE SOUTHWEST PORTION OF REDWOOD COUNTY.**

**GOAL:** To protect and preserve the resource value of soil on agricultural producing land in Redwood County.

**OBJECTIVE:** To preserve the surface water quality of Redwood County by reducing soil to at least T (Tolerable Soil Loss) utilizing appropriate resources and land management systems.

**ACTION:**

- Write two news releases promoting importance of installing BMPs.

**ACTION:** Install 10 Water and Sediment Control Basins  
Install 2 Grassed Waterways  
Encourage the installation of alternative intakes

**ACTION:** Implement MS 103F addressing the Soil Loss Erosion Law

**OBJECTIVE:** Protect and increase wildlife habitat through existing grasslands and wetlands and by restoring additional grasslands and wetlands.

**ACTION:** Work with six (6) RIM contract holders to improve existing/enhance cover on 300 acres.

**ACTION:** GPS, stake and sign boundaries of RIM easements.

**ACTION:** Assist in developing three (3) "Pheasant Target Areas" within the county and provide outreach to landowners within those areas to discuss developing and enhancing grassland/wetland complexes.

**ACTION:** Utilizing the DNR Working Lands Initiative (WLI), work to remove red cedar and other invasive species on 78 acres of high quality grassland and grassland/wetland complexes within the Minnesota River Prairie Core Area.

**OBJECTIVE:** Protect and enhance select areas of the native hardwood forest in the county.

**ACTION:** Assist the landowners of the 83.8 acre maple-basswood mesic forest RIM easement with forest management. Conduct spot checks to assess the site and determine appropriate management.

**OBJECTIVE:** Develop priority areas within the county to manage specifically for wildlife habitat.

**ACTION:** Work with other agency partners and wildlife habitat organizations to develop a map of target areas to help direct the creation of wildlife complexes and corridors.

**ACTION:** Target outreach to 50 landowners within defined areas to increase and enhance wildlife habitat through such programs as RIM, CRP, CREP, WLI, etc.

**PRIORITY CONCERN: PROVIDE FOR AN EFFICIENT DISTRICT OPERATION AND PROVIDE ASSISTANCE TO PRODUCERS:**

**ACTION:**

- Regular board meetings will be held the second Wednesday of each month or rescheduled as needed.
- Develop Annual Plan of Work.
- Develop a Biennial Budget Request (BBR) according to BWSR guidelines.
- Staff will include: Administrator, two District Technicians of which one will spend 75% of their time as the Farm Bill Technician and Office Assistant.
- Necessary training will be provided for all personnel in order to carry out the district programs.
- Review Memorandums of Understanding that we have with other agencies.
- Membership and support will continue in the Area V Association, MASWCD and NACD.
- Continue implementation of Redwood County's Comprehensive Local Water Management Plan.
- Develop Annual Budget and present to Redwood County Commissioners.
- Provide representation to various organizations such as but not limited to: RCRC, Southwest Prairie Technical Service Area, EQIP Local Work Group.
- Utilize web based reporting system to report progress.
- Utilize district web site to publish annual and other reports.
- Participate in the stake holders meeting and local work group for establishing priorities for EQIP and other conservation programs.
- Participate in brainstorming meetings that will establish priorities and needs in the watersheds in Redwood County.
- Apply for funds through Clean Water and other sources as they become available.
- Install all cost share practices according to standards and specifications required by the program.
- State Cost practices will be spot checked by district staff in accordance with state cost share guidelines.
- Staff will meet with County FAC Committee at least twice a year to discuss issues related to the building.

- Review and comment on all DNR water and county planning and zoning permits in identifying environmental concerns.
- Monitor wells as designated by DNR.
- Maintain an efficient rain gauge monitoring network within the county.
- All programs and services of the conservation office are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status or handicap.

**PRIORITY CONCERN: INCREASE PUBIC AWARENESS OF THE SOIL AND WATER CONSERVATION ACTIVITIES.**

**ACTION:**

- Continue to update district web site ([redwoodswcd.org](http://redwoodswcd.org)).
- Staff will participate in the WRAPS process in the Middle Minnesota River Watershed, which includes holding meetings in the sub-watershed.
- Have a booth at the Redwood County Fair. In conjunction with SWCD's in Area V and VI, have an exhibit at Farmfest.
- Select Conservation Farmer and publish a news article on their accomplishments.
- Work with other Area V districts to promote environmental learning opportunities through activities such as; environmental fair and area and state Envirothon.
- Provide informational meetings and mail out letters and materials on conservation programs as they become available.
- If possible, use social media; such as email to send information about programs to producers in the county.
- Host a cover crop/soil health Workshop
- Provide several forms of information to producers of riparian buffer strips along ditches, rivers, streams and existing wetlands. This would include; news releases, one-to-one contracts, radio programs and informational meetings.

## STAFFING NEEDS

Concerns	Staff Years	
	Administrative	Technical
Groundwater protection that will focus on protection for public water supply.	.2	.2
Drainage management focusing on wetland restorations and floodwater retention opportunities.	.2	.7
Surface water quality addressing impaired waters by major watershed for the priority pollutants; nutrients, turbidity, biota and fecal coliform bacteria.	.3	1.5
Erosion and sediment control focusing on residue management county-wide, and gully and concentrated flow areas in the southwest portion of Redwood County.	.4	1.4
Provide for an efficient district operation and provide assistance to producers.	1	
Increase Public Awareness of the soil and water conservation activities.	.5	.3
Total Staffing years	2.6	4.6

Total staffing years include four full time district employees, as well as three full time NRCS employees.

## **COST SHARE REQUIREMENTS**

### **HIGH PRIORITY EROSION PROBLEMS**

High priority erosion problems have been defined as:

"High priority erosion problems" means areas where erosion from wind or water is occurring equal to, or in excess of, 2 x T tons per acre per year or is occurring on any area that exhibits active gully erosion or is identified as high priority in the comprehensive local water plan or the conservation district's comprehensive plan. Water erosion is occurring at a rate of 2T on 25,000 acres of land in the county.

Wind erosion is occurring on approximately 135,000 acres throughout the county at a rate that exceeds 2T per acres per year. However, our high priority areas where we will be concentrating our efforts are in: Paxton, Sherman, Vesta, Underwood, Delhi, Charlestown and Springdale townships.

The funds needed to install practices such as terraces, waterways, field windbreaks and diversions to control high priority wind and water problems in these areas come from State Cost Share, EQIP Cost Share program, Comprehensive Local Water Management Plan funds and Clean Water Legacy funds.

### **HIGH PRIORITY WATER QUALITY PROBLEMS**

High priority water quality leading to sedimentation problems have been defined as:

"High priority water quality problems" means areas where sediment, nutrients, chemicals, or other pollutants discharge into Department of Natural Resources-designated protected waters, or to any high priority waters, as identified in a comprehensive local water plan or the conservation district's comprehensive plan, or discharge to sinkholes or groundwater.

The pollutant delivery rate to the water source is in amounts that will impair the quality or usefulness of the water resource.

The sedimentation in our county occurs along the Minnesota, Redwood and Cottonwood Rivers, specifically in the townships of Springdale, Lamberton, Charlestown and Johnsonville. Along these drainage ways, there is approximately 14,000 acres of land that exceeds 3 tons per acre per year. This is the reason why the sub-watersheds in these areas will be targeted for conservation application.

### **HIGH PRIORITY FEEDLOT PROBLEMS**

High priority feedlots are defined as:

"Those feedlots where the pollution potential rating (from the ag waste model) is greater than or equal to one, and is discharging pollutants to DNR-designated protected waters or wetlands, to a sinkhole, to shallow soils overlying fractured or cavernous bedrock, or within 150 feet of a water well."

Cost share on high priority feedlots will be considered on an individual basis. We will consider establishing a new pollution abatement system or bringing an established system into compliance.

Items which may be cost shared: clean water diversions, buffer strips, holding ponds or complete systems, if necessary.

## **COST SHARE PROGRAM SUMMARY**

Redwood Soil and Water Conservation District considers high priority projects first. These projects are cost shared at a maximum of 75% of the total cost. The district estimates that it will receive \$13,000 in state cost share funds of which 20% maybe used for Technical and administrative functions in the district.

The cost share dollars will be encumbered for: contours, bio-retention basins, grade stabilization structures, grassed waterways and water sediment control basins.

Our 2012 Clean Water Fund grant will be completed in June, 2016. There is a small fund balance that is anticipated to be encumbered. There is one best management practice that did not get completed, however it will be completed by June 1, 2016.

The funds needed to install and implement the practices include: State Cost Share, Federal EQIP, Ag. BMP loan program, Flood Recovery Dollars, Comprehensive Local Water Management and other grants that may become available.



## **2016 BUDGET**

Our total budget needs for staff, cost share and operation expenses are as follows:

<b>REVENUES:</b>	
SWCD Cons. Delivery/RIM	143,337
State Cost Share	13,500
State Grant – (DNR Wells and Others)	37,040
Administrative Funds from Grants	4,000
Wetland Conservation Act (WCA)	10,387
Water Plan	15,595
Water Plan Administration	5,000
Interest Earnings & Principal Return	1,000
County	112,000

<b>Total Revenues</b>	<b>\$341,859</b>
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<b>EXPENDITURES:</b>	
District Operations	
Personnel Services	263,514
Rent	11,000
Office Maintenance	4,800
Employee Training	1,500
Vehicle Maintenance & Expense	4,000
Insurance	5,000
Education, Promotion & Advertising	1,000
Supplies	1,800
Supervisors Comp & Expenses	12,000
Professional Services Exp & Dues	9,000
Capital Outlay	1,000
Miscellaneous	-0-
<b>Total District Operations</b>	<b>3146,614</b>

Special Projects	
State Cost Share	13,500
Water Plan	15,595
<b>Total Special Project Expenses</b>	<b>30,595</b>

<b>Total Expenditures</b>	<b>\$ 343,709</b>
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