

Annual Report: 2016 Work Plan and 2015 Accomplishments



Ramsey
Conservation District

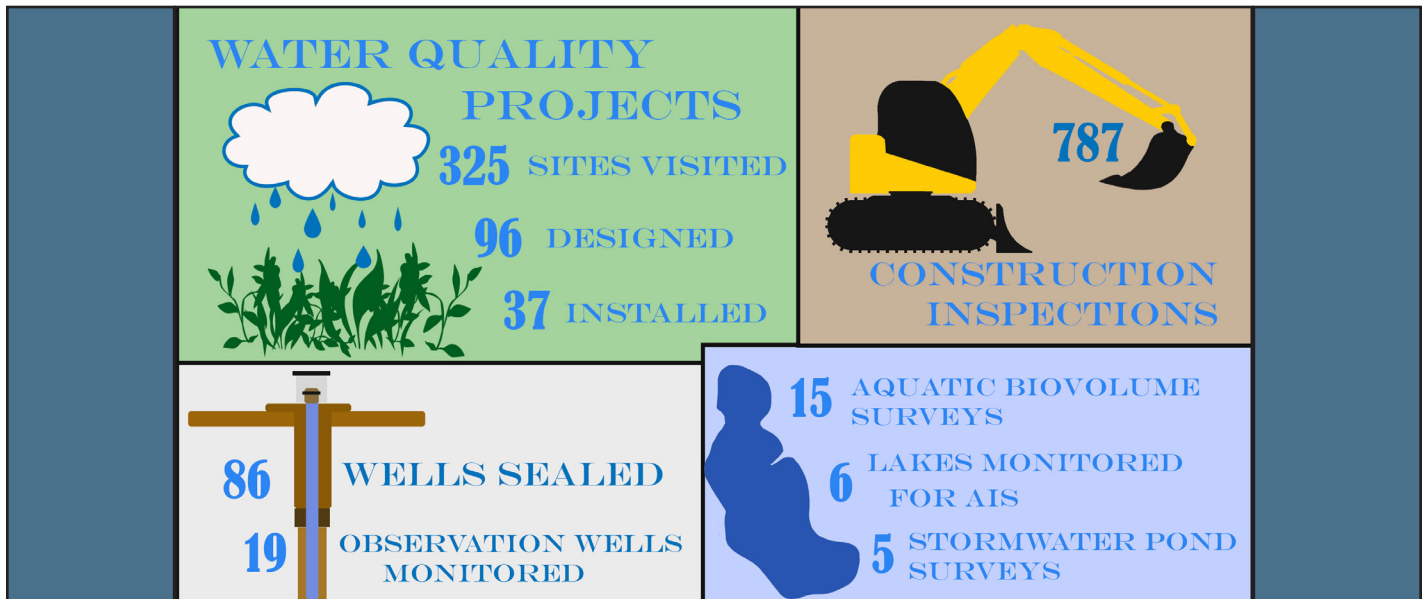


1425 Paul Kirkwold Drive
Arden Hills, MN 55112
651-266-7270
www.ramseycounty.us

Table of Contents

4	2015, A Year in Review
5	Ramsey County Land Use
6	Organization
7	Board of Supervisors
8	Staff, Volunteers, and Partners
9	Grants
	Community Partners
	Clean Water Fund: Well Sealing
	Clean Water Fund: Wakefield Project
	Clean Water Fund: Lambert Creek
	Cooperative Weed Management
	Wetland Conservation Act
	Minnesota Agricultural Water Quality Certification Program
	Buffer Initiative
15	Education and Outreach
	Envirothon
	Lake Phalen Waterfest
	Aquatic Invasive Species
	Children's Waterfest
	Clean Water Tour
	State of the Waters
17	2016 Work Plan
20	2016 Projections

2015, A Year in Review



The Minnesota State Legislature passed historic legislation in 2015, which will offer tremendous opportunities for Soil and Water Conservation Districts across the state, including the Ramsey Conservation District (RCD). Legislation passed in 2015 to appropriate Clean Water, Land and Legacy funding for all SWCDs in Minnesota. The RCD received \$100,000 in 2016 and will receive an additional \$100,000 in 2017. This increased funding will allow SWCDs to be more involved in numerous new initiatives in the state, including involvement with the new buffer law, which also passed in 2015. The RCD is looking forward to collaborating with our partners on many new projects in the coming year.

Ramsey Conservation District administered the 2013, 2014, and 2015 Community Partners Grants in 2015. These grants are funded by the Clean Water Land and Legacy Amendment and are available for use by faith organizations, schools, businesses, and homeowner organizations. Five organizations installed water quality improvement projects

using these grants in 2015. Together these projects will remove 3.08 pounds of phosphorus, 1860 pounds of total suspended solids, and keep 153,202.994 cubic feet of stormwater runoff from entering Ramsey County water bodies each year!

The District collaborated with watershed districts and water management organizations by completing 325 site visits, designing 148 concept plans, and designing 96 construction-ready documents. In 2015, there were 37 water quality improvement projects installed! These practices have reduced phosphorus, total suspended solids, and untreated stormwater from entering Ramsey County water bodies.

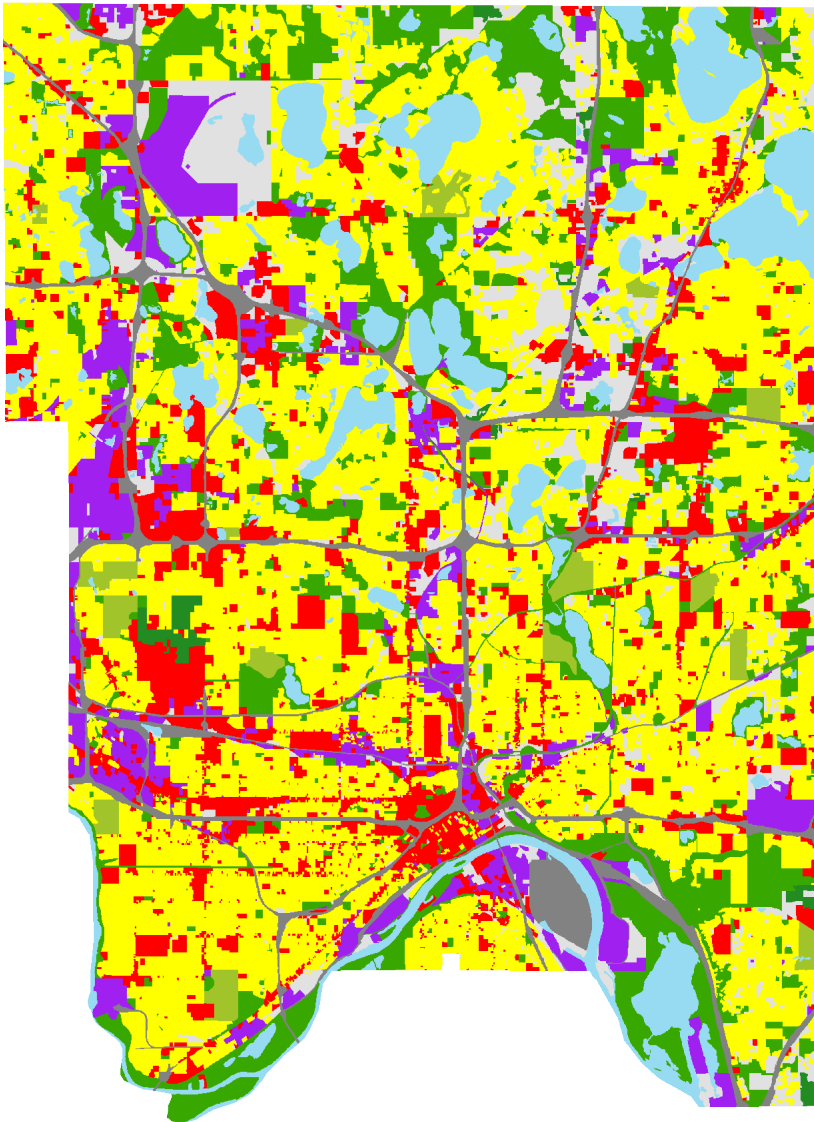
Staff have also assisted the cities of Arden Hills and Shoreview as well as Rice Creek Watershed District by conducting 787 construction site inspections. These site inspections ensure that construction sites are properly installing best management practices that reduce sediment and pollutants from entering water bodies, endangering aquatic ecosystems.

Groundwater protection has also been a focus for the Ramsey Conservation District. In 2015, the District assisted residents in sealing 86 unused wells. Unsealed wells can be a direct conduit for pollution to enter groundwater, so it is important to seal any abandoned or unused wells.

Educating Ramsey County citizens about environmental protection and natural resources is at the forefront of every project the District completes. Staff assisted with the Envirothon, Waterfest, Children's Waterfest, and other community engagement projects to enhance the public's appreciation for natural resources. The Ramsey Conservation District also hosted the State of the Waters event, which promotes the preservation of surface and groundwater resources.

The Ramsey Conservation District will continue to increase conservation efforts to improve water supplies as well as protect the ecosystems of Ramsey County.

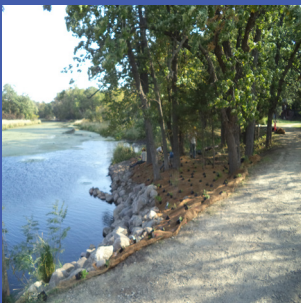
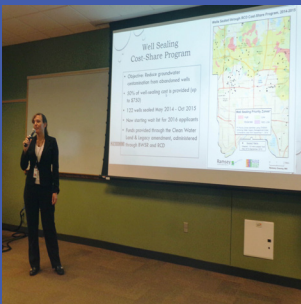
Ramsey County Land Use



Ramsey County Land Use

- Agricultural, 0.56%
- Residential, 43.78%
- Commercial, 11.36%
- Industrial, 6.65%
- Park 14,632, 13.46%
- Golf Course, 1.70%
- Transportation, 5.10%
- Undeveloped, 7.93%
- Open Water, 9.46%

Organization



Background

The Ramsey Conservation District is a political subdivision of the State of Minnesota established to assist the citizens of Ramsey County to conserve natural resources. The RCD is one of 89 Soil and Water Conservation Districts within our State.

Leadership and governance of the Ramsey Conservation District is provided by five elected supervisors. The role of the RCD Supervisors is to develop policy, prioritize long-range plans for natural resource conservation programs, and approve an annual budget and work plan.

The Ramsey Conservation District does not have taxing or regulatory authorities and must rely on partnerships with other governmental agencies to fund and implement its conservation programs. Our primary partners are: Minnesota Board of Water and Soil Resources (BWSR), Ramsey County Board of Commissioners, United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), the Metropolitan Conservation Districts (MCDs), seven water management organizations (WMOs) that have territory in Ramsey County and 19 municipalities within Ramsey County.

Mission

The Ramsey Conservation District is the bridge between Ramsey County citizens, conservation agencies and government to sustain our natural resources through partnerships, technical services, and education.

Vision

The Ramsey Conservation District provides programs and services, whose focus is to promote long-term sustainability of Ramsey County's natural resources, including and especially our rich reserves of groundwater and our lakes, rivers, and wetlands.

We are committed to being fiscally responsible with the public funds entrusted to us and to pursue grant funding to maximize resources and promote intergovernmental cooperative efforts for increased cost-efficiency.

Board of Supervisors

2015 Board of Supervisors Districts



Gwen Willems Mara Humphrey Paul Gardner Carrie Wasley Margaret Behrens

The Ramsey Conservation District Board of Supervisors is elected to set district policies and approve administration and conservation activities. Board members meet for monthly board meetings and for special meetings.

Paul Gardner - District 1
Shoreview, North Oaks, White Bar Lake, White Bear Township

Gwen Willems - District 2
Roseville, Lauderdale, Arden Hills, Mounds View, New Brighton, Falcon Heights, Blaine, Spring Lake Park, St. Anthony

Mara Humphrey - District 3
City of St. Paul east of Rice Street, south of Larpenteur to I-94, west to Robert Street, south on Robert Street to County line

Carrie Wasley - District 4
City of St. Paul west of Rice Street, south of Larpenteur to I-94, east to Robert Street, south on Robert Street to county line

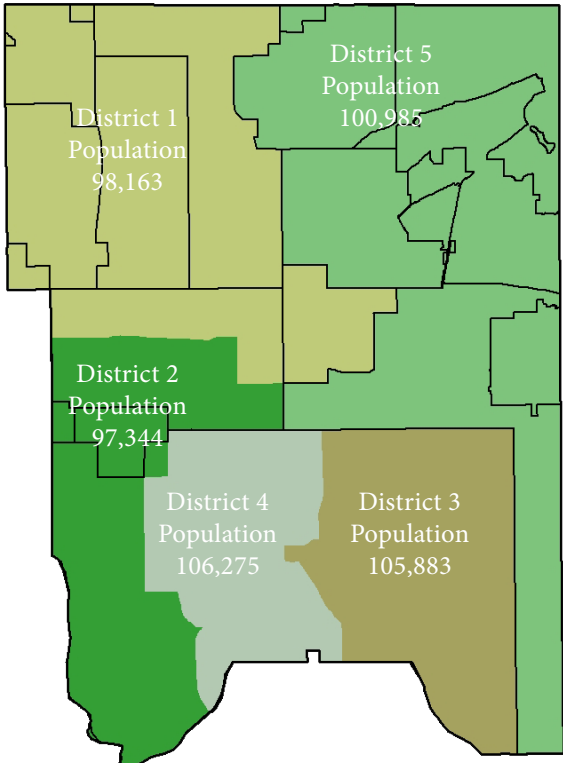
Margaret Behrens - District 5
Maplewood, North St. Paul, Little Canada, Vadnais Heights, Gem Lake

Board of Supervisors 2016 Redistricting

All board positions will be up for election in 2016 due to legislative changes and redistricting. Board members serve four-year terms, with three board positions open during presidential election years, and two board positions open the other election years. Board positions will follow the normal election cycle after the 2016 election.

Interested citizens should file a Minnesota Affidavit of Candidacy (available from the county auditor), along with a \$20 filing fee. All candidates for state and local offices must state on the Affidavit of Candidacy that they are eligible voters, will be at least 21 years of age when assuming office and will have been residents of their nominating district for at least 30 days before the general election. Supervisor candidates must live in and file from a nominating district.

New Board of Supervisors Districts



Staff, Volunteers, and Partners

2015 Staff

Ramsey Conservation District relies on technical staff to implement programs and projects throughout Ramsey County.



Ann WhiteEagle	District Manager
Joseph Lochner	Conservation Design Specialist
Michael Schumann	Natural Resource Specialist
Andrea Prichard	Environmental GIS Technician
Laura Triplett	Conservation Technician
Seth Ristow	Conservation Technician
Ashley Bennett	Assistant District Technician

Volunteers

Ramsey Conservation District appreciates the work volunteers do to make the District's programs run smoothly.

In 2015 Ramsey Conservation District had volunteers assist with the following programs:

- 66 Rain Gaugers
- 2 Observation Well Monitors

District staff have also volunteered time to assist elderly project participants in weeding their shoreline vegetation and planting rain gardens



Partners

Ramsey County
 Natural Resource Conservation Service
 Minnesota Pollution Control Agency
 Minnesota Department of Natural Resources
 Minnesota Department of Agriculture
 Minnesota Department of Health
 Ramsey County Cities

Ramsey County Schools
 Non-profits
 Capitol Region Watershed District
 Ramsey-Washington Metro Watershed District
 Rice Creek Watershed District
 Valley Branch Watershed District
 Vadnais Lakes Area Water Management Organization

Grants

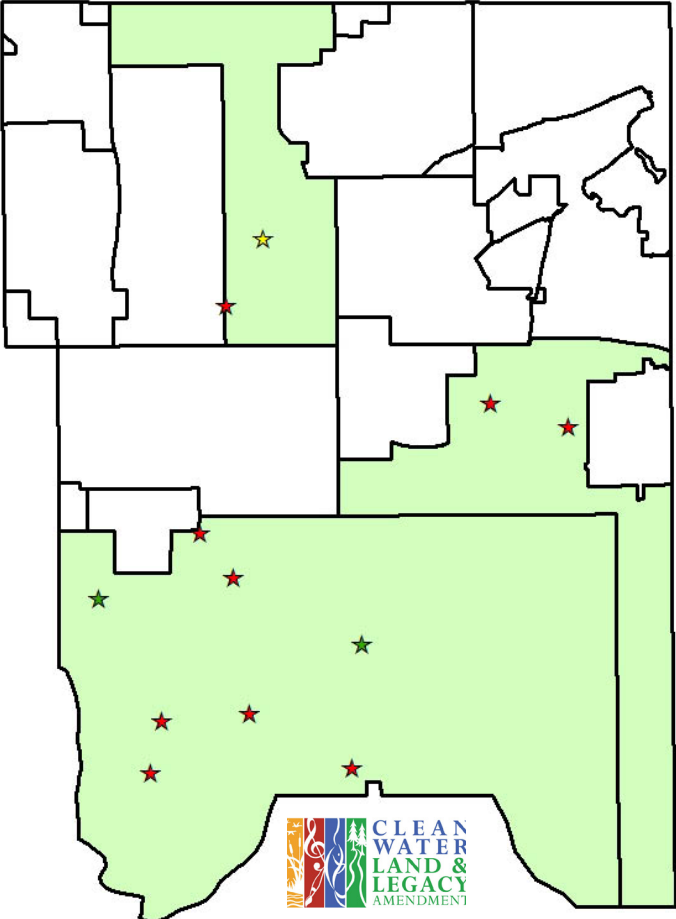
Community Partners

The Community Partners grant is funded through the Clean Water Land and Legacy Amendment funding. This program helps community organizations install projects that reduce stormwater runoff and decrease pollutants entering Ramsey County water bodies while increasing the aesthetic appeal of their properties.

Ramsey Conservation District was awarded the 2013, 2014, and 2015 Community Partners grants, each for the sum of \$150,000. This program has provided funding to the District to assist citizens with projects that reduce the phosphorus load by 9.26 pounds per year, the total suspended solids by 3729.33 pounds per year, and stormwater volumes by 12.6 acre-feet per year. All grant funding for 2013 has been used, but there are still funding opportunities through the 2014 and 2015 Community Partners grants.

Locations of projects can be seen in the Community Partners Projects graphic. Projects can occur anywhere in the county, but a local match must be available to be considered for funding.

2013, 2014, and 2015 Community Partners Projects in Ramsey County



In the map above, red stars indicate projects completed using 2013 grant funds, green stars used 2014 grant funds, and yellow stars used 2015 grant funds.



Lakeview Lutheran Church rain garden funded in part through the Community Partners grant.

Grants

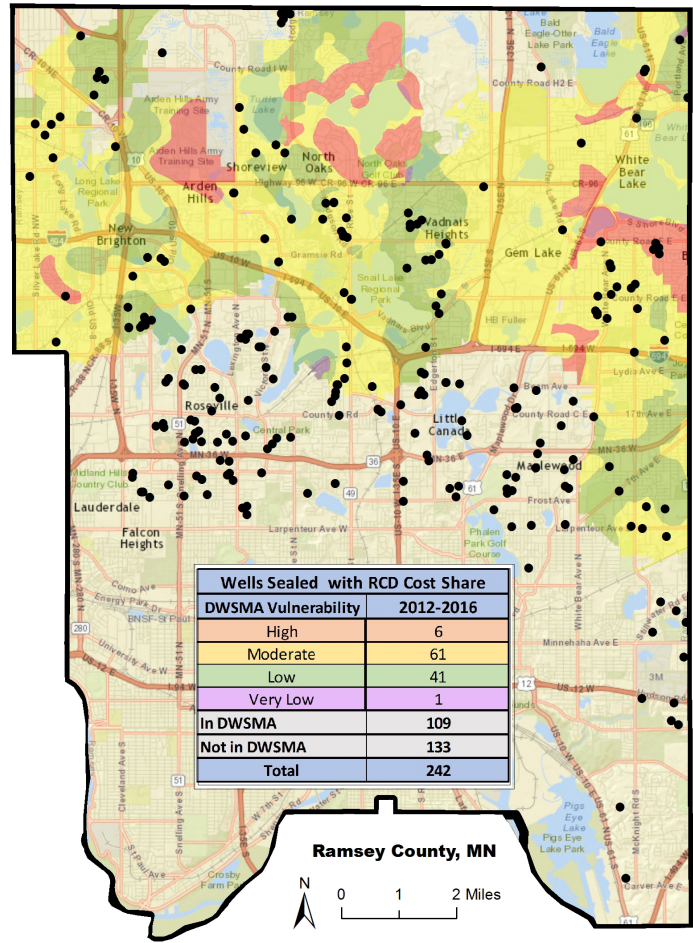
Clean Water Fund: Well Sealing

The Ramsey Conservation District provided funding to residents to seal 86 wells in 2015. Funding for this program was provided by the Clean Water Land and Legacy Amendment. Unsealed abandoned wells pose a threat because they can serve as a direct conduit for contamination to enter groundwater, which is an important drinking water source.

The Ramsey Conservation District estimates that there are 5,775 inactive wells within the Drinking Water Supply Management Area (DWSMA). The DWSMA prioritizes surface and subsurface areas that surround public water supply wells.

Future grants will focus on reducing the amount of unsealed wells within the DWSMA. Funding for well sealing will not be available in 2016. The Ramsey Conservation District will apply for additional funds for the 2017 fiscal year.

The map below shows the wells sealed through Ramsey Conservation District's Well Sealing Program.



Unused Wells Sealed through RCD Cost-Share Program 2012-2016



Well Sealing Priority Zones*

- High
- Low
- Moderate
- Very Low

- Sealed Wells
- Mapped: 242 wells sealed 2012-2016

* Priority zones identified using DWSMA (Drinking Water Supply Management Area) vulnerability data from September 1, 2014

Grants

Clean Water Fund: Wakefield Project

The Ramsey Conservation District was awarded a Clean Water Fund grant for \$56,000. This grant will be used to implement water quality improvement practices to reduce total phosphorus and chlorophyll-a impairments in the Wakefield watershed.

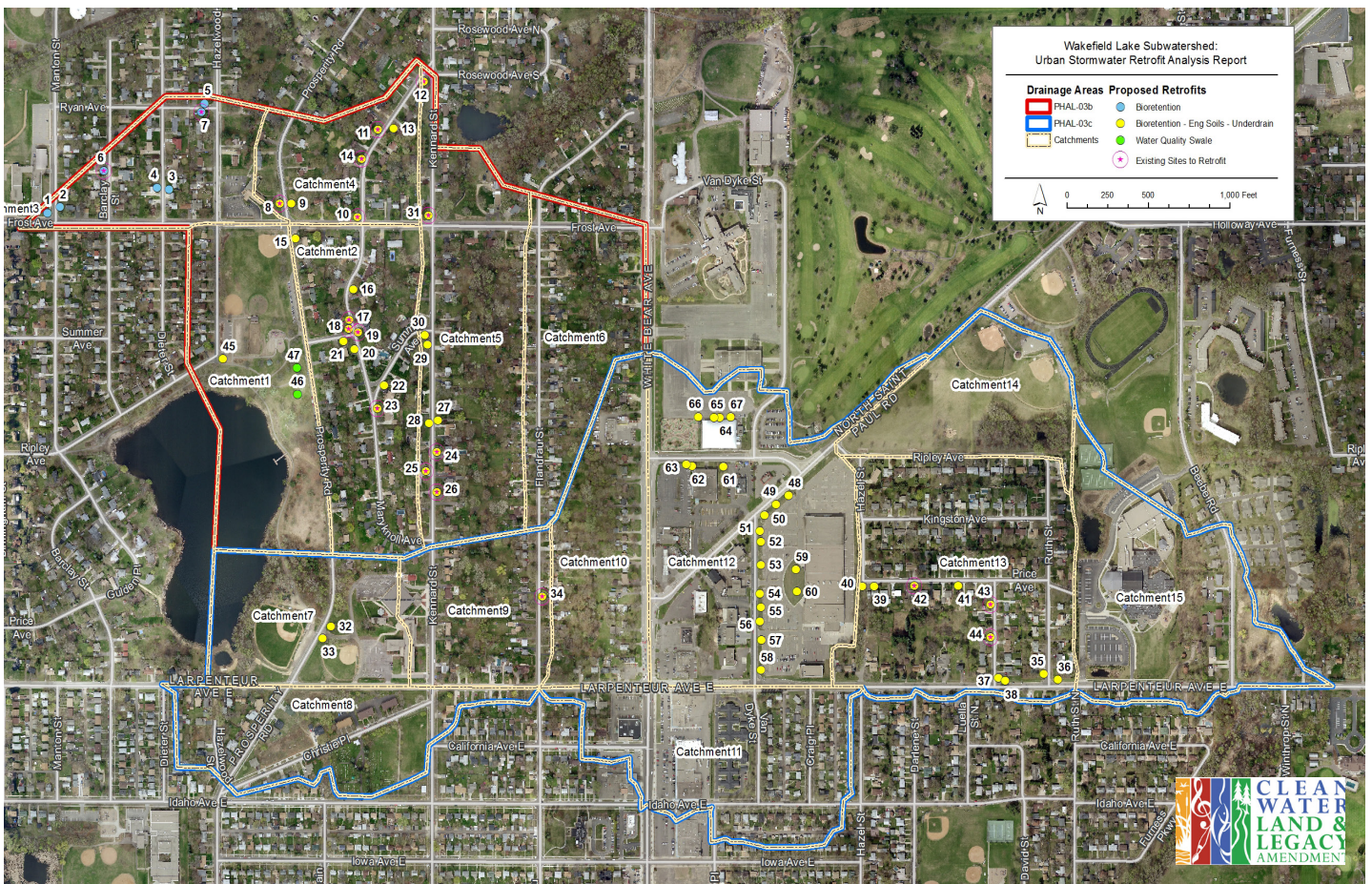
Presentation Church in Maplewood Minnesota was awarded \$20,000 from this grant to implement a series of water quality improvement practices throughout the property. Ramsey-Washington Metro Watershed District also provided \$79,492.00 to the project.

Future water quality improvement projects will be implemented with the remaining funds from this grant.



Two of the Presentation Church rain gardens funded by the Wakefield Grant and Ramsey-Washington Metro Watershed District.

Map of Wakefield drainage areas, catchments, and potential retrofit locations



Grants

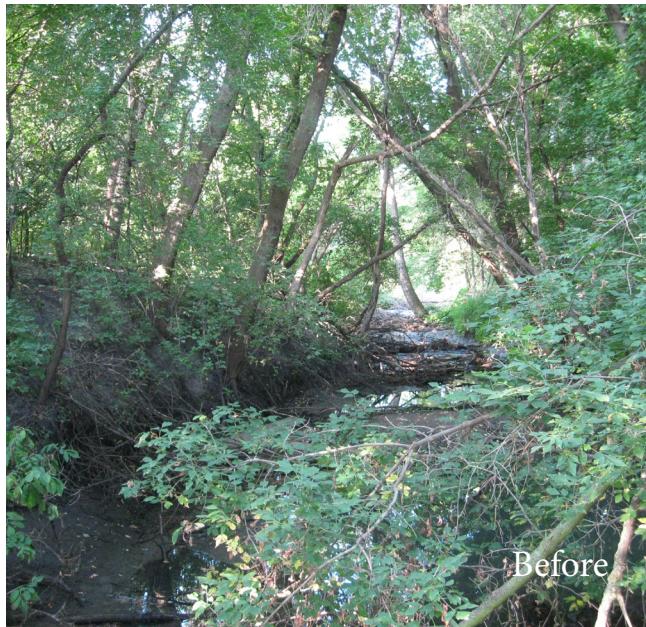
Clean Water Fund: Lambert Creek

The Lambert Creek restoration process is being completed in phases. There have been three phases of restoration completed on the creek since 2008. In 2015 Ramsey Conservation District began planning the fourth phase of restoration. The Clean Water Fund has provided \$59,766 for Phase 4 of the project, and Vadnais Lake Water Management Organization has provided the remaining funds necessary to complete the project.

Phase 4 of the project is expected to remove 5.14 pounds of phosphorus from the watershed each year and 6.05 tons of total suspended solids per year. The project will be installed in the summer of 2016.



Current condition of the Phase 4 reach of Lambert Creek.



Before



After

The 2013 Lambert Creek restoration before and after photos. The total project cost was \$72,420.00.

Previous phases of the Lambert Creek restoration have made a substantial difference in the amount of total phosphorus and total suspended solids in the watershed. All four phases of the project combined will remove a total of 13.73 pounds of phosphorus each year and 16.20 tons of total suspended solids each year. These projects have also reduced the nuisance geese population near the creek.

Grants

Cooperative Weed Management

The Ramsey Conservation District received a grant for \$15,000 to educate citizens on invasive species prevention and removal as well as to treat invasive species populations. There are 10 organizations that partner to form the Cooperative Weed Management Area.

Invasive species are harmful to ecosystems and can have adverse social and economic impacts. Invasive species infest approximately three million acres of land each year. Invasive species can cause erosion, alter waterways, limit plant and animal diversity, and lower property values.

The photo to the right shows an invasive population of phragmites on Bald Eagle Lake in White Bear Township. Native phragmites populations allow for other species to grow alongside it. The invasive phragmites is almost double the height of the native plant and crowds out almost all other species. Early detection of invasive species like the invasive phragmites is the best way to prevent an invasive species takeover. The Cooperative Weed Management Area is a one of the best tools for early detection and prevention.



An invasive phragmites population on Bald Eagle Lake in White Bear Township.

Wetland Conservation Act

The Ramsey Conservation District is one of the administrators of the Wetland Conservation Act. The purpose of the Wetland Conservation Act is to prevent further loss of wetland acres, functions and values.

As a local contact for the Wetland Conservation Act the Ramsey Conservation District uses grant funds to pay for staff time to conduct site visits and assist landowners through the permitting process of constructing around wetlands.



Wetland in Capitol Region Watershed District.

Grants

Minnesota Agricultural Water Quality Certification Program

The Minnesota Agricultural Water Quality Certification Program (MAWQCP) is a voluntary program for agricultural landowners to implement conservation practices that protect water quality. Participants will receive regulatory certainty from state legislation on water quality issues for 10 years if they are able to prove current water quality-related regulatory compliance and implement approved farm management practices. Benefits of the program are:

- Regulatory certainty
- Recognition
- Priority for technical assistance

In 2015 the Ramsey Conservation District was trained to assist in the administration process for the MAWQCP. The highly urbanized landscape does not have many agriculturally-zoned properties, but within the first week of being trained, Ramsey Conservation District staff assisted an urban farmer to begin the certification process.



Buffer Initiative

In 2015, Governor Mark Dayton signed into law the buffer initiative. This law requires a perennial vegetative buffer of up to 50 feet along rivers, streams, and ditches.

The Ramsey Conservation District will work toward this initiative by collaborating with the DNR to transfer local information on ditches within the public drainage area into digital data. The District will also assist the DNR by reviewing buffer maps. Finally, when the maps are finalized, the District will assist landowners to develop buffers if their properties are included in the required buffered area.



Lake McCarrons residential shoreline buffer.

Education and Outreach

Envirothon

Each year the Metro area hosts a regional Envirothon competition for local students. This event is a problem-solving natural resources competition for Junior High and Senior High students. The students are tested on their knowledge of aquatics, forestry, soils, wildlife, and a current topic.

Each year Ramsey Conservation District assists with the Envirothon by encouraging Ramsey County schools to participate, providing educational materials to the participants and volunteering at the event. Engaging young people in natural resources is important to the Ramsey Conservation District.



Middle school students participate in the Junior Envirothon.



Ramsey Conservation District staff encouraging a Waterfest participants to identify invasive species

Lake Phalen Waterfest

The Ramsey-Washington Metro Watershed District hosts the Lake Phalen Waterfest each year to celebrate Minnesota's water resources. The event is filled with hands-on learning opportunities such as fishing lessons, canoe and kayak adventures, arts and crafts, and natural resource games.

Ramsey Conservation District staff enjoys testing Waterfest participants on their invasive species identification skills. This is a great event to teach the next generation about natural resource preservation!

Aquatic Invasive Species

The Ramsey Conservation District staff was trained to be Level 1 Aquatic Invasive Species inspectors. Six public boat launches were inspected over the summer to educate boaters about the need to inspect boating equipment for aquatic invasive hitchhikers.

Ramsey County Parks and Recreation received funding to increase aquatic invasive species monitoring and education. The Ramsey Conservation District has been tasked with assisting the county with their efforts again in 2016.



Ramsey Conservation District staff during Level 1 Aquatic Invasive Species inspector training.

Education and Outreach

Children's Waterfest

The Metro area hosts a Children's Waterfest each year to introduce fourth grade students to water resources. The goal of this event is for every student to understand where their water comes from and how to preserve water for future generations. This event is filled with hands-on activities for students to play and learn about water resources.

Ramsey Conservation District provides staff volunteers for this event. With 2,000 to 3,000 students at Children's Waterfest, it is important to have knowledgeable professionals teaching students about water resources.



Children answer questions at the Science Museum of Minnesota's presentation.



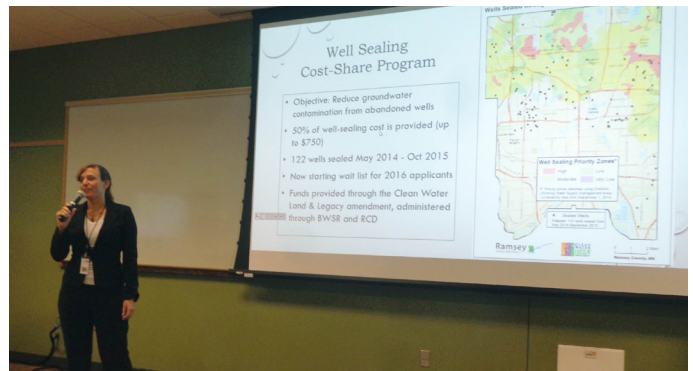
Ramsey County Commissioner Jim McDonough, Conservation Corps Director Len Price, and State Representative Peter Fischer view Phase 2 of the Lambert Creek Restoration.

Clean Water Tour

The Ramsey Conservation District showcased some of the clean water projects installed with community members and businesses. The Clean Water Tour provided an opportunity for elected officials and water resource professionals to see fully established projects that the Clean Water Land and Legacy Amendment has funded. Projects highlighted during this tour were the Keller Golf Course native prairie and shoreline restoration, the Lakeview Lutheran Church rain garden, and Phase II of the Lambert Creek stream bank restoration.

State of the Waters

The 3rd annual State of the Waters focused on Drinking Water Supplies in Ramsey County. Surface water supplies approximately 80% of all the drinking water in Ramsey County. This event highlighted the process of cleaning and supplying all of that water to Ramsey County users. Speakers for the event included Jim Bode of St. Paul Regional Water Services, Dr. Timothy LaPara of the University of Minnesota, Brian Erickson of the City of Mounds View, and Mark Burch of the City of White Bear Lake.



RCD staff member Andrea Prichard presents at the third annual State of the Waters.

2016 Work Plan

Project Type	Project Name	Priority	Project Description
Administration	General Administration	High	General administration of District operations
	Biennial Budget Request	High	Budget development for BWSR grants
	2017 Budget	High	Budget development for the RCD in 2017
	2015 Audit	Required	Audit performed by third party on the RCD's financial activity in 2015
	Comprehensive Plan	Required	Develop a Comprehensive Plan following BWSR's guidelines for year 2017-2025
Education and Outreach	Conservation Forum	Beneficial	Host a monthly water forum to discuss areas of concern and emerging issues in water resources
	Lake Phalen Waterfest	Beneficial	Host a booth at Lake Phalen Waterfest to engage members of the public about the need for water protection and habitat needs
	Children's Waterfest	Beneficial	Assist Carver County with Children's Waterfest activities
	Landscape Revival	Beneficial	Host a booth at Landscape Revival to educate citizens about native landscape options and benefits
	Social Media	Beneficial	Post District-related material biweekly
	Website	Beneficial	Maintain user-friendly website
Grants	Community Partners 2014	High	Partner with businesses, schools, and faith organizations to install water quality improvement projects
	Community Partners 2015	High	Partner with businesses, schools, faith organizations, and homeowner associations to install water quality improvement projects
	Wakefield	High	Install best management practices within Wakefield Lake watershed
	Well Sealing 2014	High	Financially assist landowners seal abandoned wells
	Cooperative Weed Management Area	High	Control terrestrial invasive species populations throughout the county

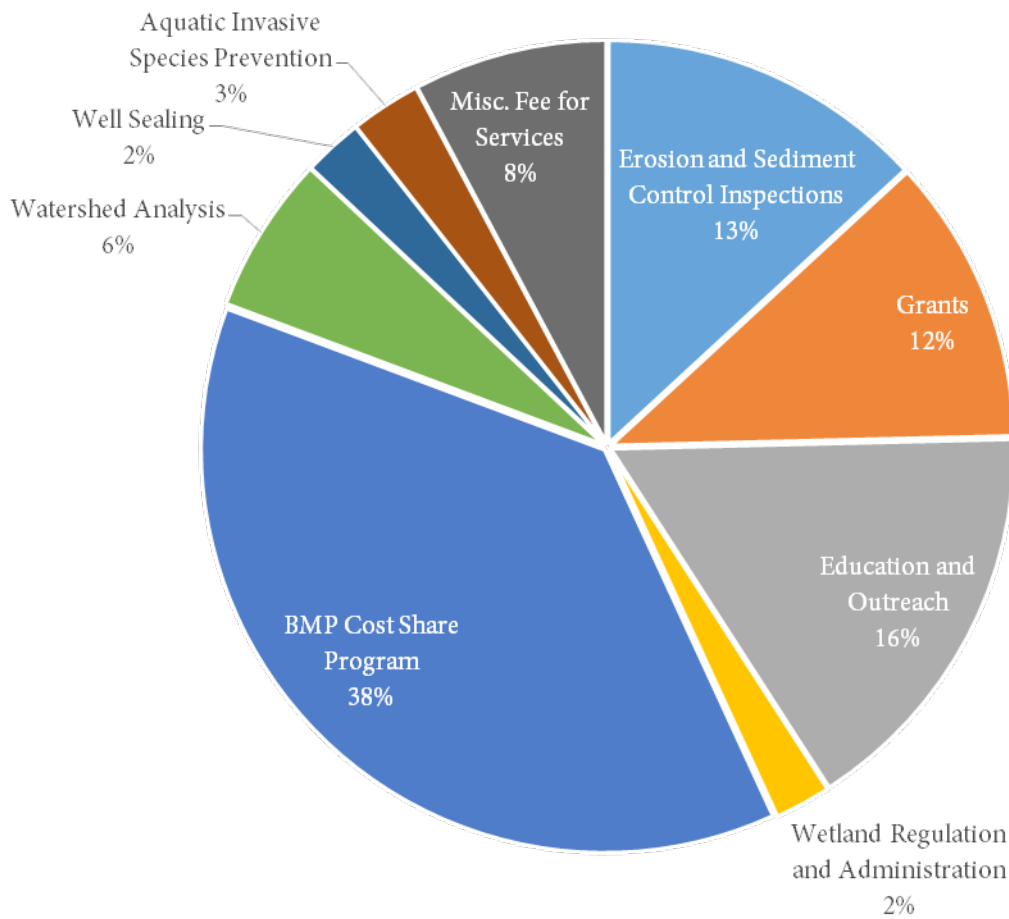
2016 Work Plan

Project Type	Project Name	Priority	Project Description
Grants Cont'd.	Flood Relief	High	Assist landowners repair water quality improvement projects damaged in the 2014 flood
	Lambert Creek	High	Stabilize the stream bank and install a vegetative cover on Phase 4 of Lambert Creek
	State Cost-Share Conservation Delivery	High	Provides stable operational funding for SWCDs in MN.
	SWCD Increased Capacity	High	Non-competitive grant that invests in building capacity of SWCDs
	Wetland Conservation Act	High	Maintain and protect MN wetlands by implementing WCA activities
	Local Water Management	High	Plan and coordinate water resource protection activities
	Buffer Law	High	Identify properties that require a vegetative buffer and assist landowners with Buffer Law compliance
	MAWQCP	High	Promote the MAWQCP program to agricultural landowners and provide technical assistance to landowners seeking certification
	MCD-SWA	High	Conduct SWAs in priority watersheds.
	Groundwater Conservation	High	Develop a systematic approach for ranking BMPs in terms of cost-effectiveness for campuses
Future Resource Acquisition	Well Sealing 2016	High	Apply for funding to assist landowners seal abandoned wells in priority drinking water supply management areas
	Pollinator Habitat	Beneficial	Seek funding for urban pollinator habitat improvement projects
Wetland Conservation	Wetland Conservation Act	High	Administer WCA program for Ramsey County
	Technical Evaluation Panel	High	Serve on TEP panels

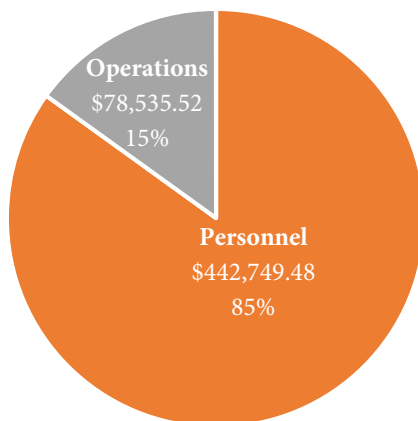
2016 Work Plan

Project Type	Project Name	Priority	Project Description
Fee for Service	Lake monitoring and biovolume assessments	High	Monitor 5 priority CRWD lakes for biovolume and contouring
	Stormwater Pollution Prevention	High	Assist cities and watershed districts with sediment and erosion prevention inspections
	Best Management Practice Design	High	Provide BMP Designs for Ramsey County landowners through watershed district programs
	Subwatershed analysis	High	Conduct a subwatershed analysis of Bald Eagle Lake
	Waterbody monitoring	High	Monitor and assess 3 lakes and 6 storm ponds for the city of Roseville
	Aquatic Invasive Species Prevention	High	Inspect watercraft entering Ramsey County Lakes
Geographic Information Systems (GIS)	GIS Program	Beneficial	Maintain RCD GIS records
	GIS Users Group	Important	Collaborate with GIS Users Group to maintain a beneficial GIS database within the county
Groundwater	Subsurface Sewage Treatment System Inventory	High	Inventory all subsurface sewage treatment systems in Ramsey County
	Well inventory	High	Inventory all wells within Ramsey County
Information Sharing	Local Agency Plan Review	Important	Review plans and provide input on local, state, and national committees related to water quality
	Citizen Service	Important	Provide resources to citizens to improve water quality and other natural resources
Volunteer Management	Conservation Corps	Beneficial	Mentor a Conservation Corps employee in natural resource management
	Rain Gauge Network	Beneficial	Enter rain gauge observer data

Projected 2016 Staff Time Allocations



2016 Projected Expenditures



2016 Projected Revenue

