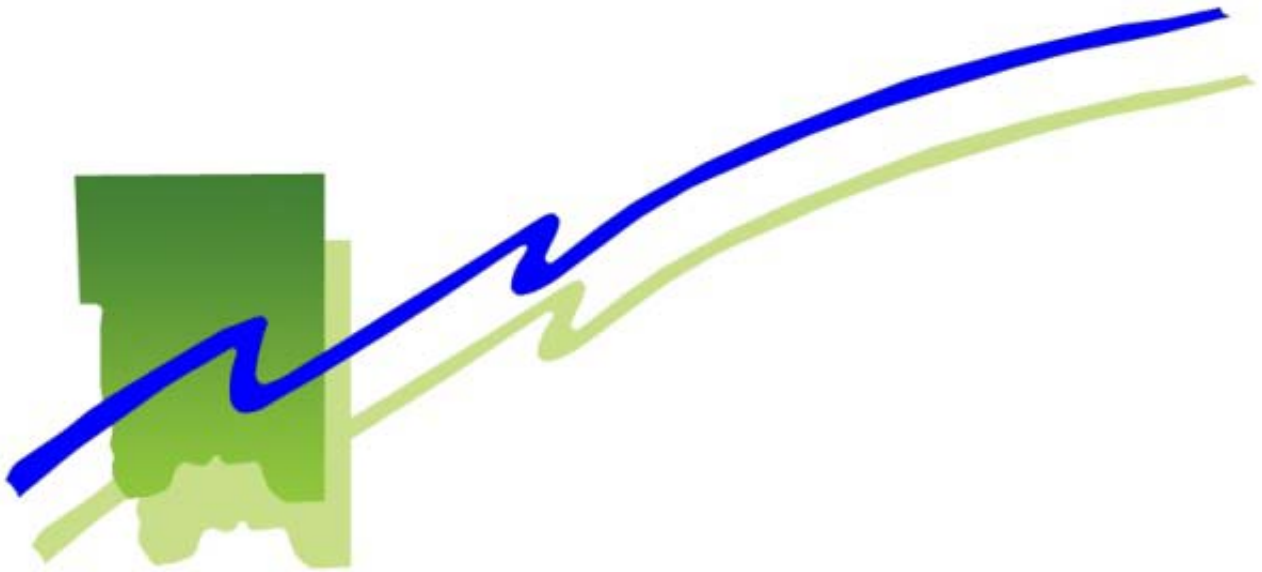


RAMSEY CONSERVATION DISTRICT

COMPREHENSIVE PLAN

2012 - 2016



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Conservation District Board of
Supervisors on April 9, 2012 with
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I. INTRODUCTION

The Ramsey Conservation District (RCD) has developed this Comprehensive Plan in accordance with requirements of the Minnesota Board of Water and Soil Resources (BWSR). This planning tool will guide natural resource management and environmental protection programs and activities over the next five years. The plan identifies accomplishments of past efforts and lists strategies and objectives of the RCD through the year 2016. Future annual work plans will be developed with specific tasks to address the priorities and goals within this plan. The plan's foundation is based upon the identification and study of natural resource problems specific to Ramsey County. Our intent is to solve those problems and incorporate the RCD Board's vision regarding natural resource protection and management.

The RCD, a Soil and Water Conservation District (SWCD), is a local, special-purpose unit of government responsible for natural resource protection and management within the geographic boundaries of Ramsey County. The RCD is governed by five nonpartisan elected officials called Supervisors. They meet monthly and more as needed and serve on Board Committees. Supervisors serve staggered four-year terms and are elected by the county at-large. SWCDs receive their authority from Chapter 103C of Minnesota Statutes. In addition to their individual resources, SWCDs use the expertise of the other state and federal organizations, including BWSR and the federal Natural Resources Conservation Service (NRCS). BWSR is the administrative agency of Minnesota's 90 SWCDs.

II. THE DISTRICT 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.”

Ramsey County's natural resources provide the industrial base, living space, drinking water, and recreational opportunities for more than a half million people on a daily basis. The major environmental problems we face can be traced to the effects urban land use has on our natural resources and the environment. The continued destruction and deterioration of these natural resources threaten the high quality of life in Ramsey County and require expensive restoration and remediation practices to sustain our quality of life. The RCD is an experienced, efficient, and inexpensive choice for natural resource protection and restoration. The RCD also serves as a consultant for local government, business, and citizens.

III. BACKGROUND INFORMATION

SWCDs are special-purpose units of state government responsible for natural resource protection and management within their boundaries. SWCDs do not have taxing authority. To finance their programs, they rely on county support, grants from state, federal, and other agencies, and self-generated revenues.

When SWCDs were first conceived in the 1930s, the principal concern was to reduce soil loss from agricultural lands. In Minnesota, SWCDs could not be formed in incorporated areas where non-agricultural land uses existed. Soil loss in non-agricultural areas was not recognized as an environmental problem till the late 1960's. In 1969, a modification of state law allowed the formation of SWCDs in incorporated areas such as Ramsey County. In 1973 the citizens of Ramsey County petitioned for establishment of a district. The Ramsey Conservation District was chartered on October 24, 1973.

The RCD has a long-standing history of promoting the value of environmental stewardship. Environmental stewardship and sustainable development continue to be the RCD's main goal and the focus of all its programs. Through existing staff resources and many interagency and other organization partnerships, the RCD provides a program of services to the citizens of Ramsey County.

IV. RELATIONSHIPS WITH OTHER ENTITIES

The RCD has official and unofficial liaisons with many governmental and non-governmental agencies and organizations. As an agency with countywide jurisdiction, it is in a central position to coordinate and simplify interagency and interjurisdictional solutions to natural resource management problems. It is also uniquely qualified to address the natural resource management and protection problems of private citizens and their personal property. An issue of primary importance to the RCD is cost-effective natural resource management. Through standardizing protection activities, increasing coordination among agencies, identifying and trying to minimize functional overlap among agencies, and promoting intergovernmental cooperative efforts, increased cost-efficiency can be accomplished.

To better serve the citizens of Ramsey County, the RCD will continue to facilitate relations between Ramsey County and local governmental officials and natural resource protection agencies. Some of the RCD partners and liaisons include:

- Ramsey County
- Board of Water and Soil Resources
- Natural Resource Conservation Service
- Minnesota Pollution Control Agency
- Minnesota Department of Natural Resources
- Watershed Management Organizations (WMOs)
- Watershed Districts (WDs)
- Cities
- Ramsey County Nonprofits
- Minnesota Department of Health

V. SOIL SURVEY

In general, the soils of Ramsey County are the result of the last glaciers to cover Minnesota approximately 10,000 years ago. The glaciers brought an assortment of geologic materials from points to the far northwest and northeast. For example, rocks of all shapes and sizes, minerals, and fine materials from the fracturing of large rocks, called sands, silts, and clay, were deposited

by several advances and retreats of the glaciers. Depending on where you are in Ramsey County, your soils may be coarse sand mixed with gravel, fine sands with layers of silts and clays, a mixture of sands, silts and clays called Loam, or a combination of all. In addition to the geologic material, soils are also influenced by the actions of water, vegetation, and slope.

The General Soils Map of Ramsey County, shown in Appendix A, outlines the major soil associations you will find in our county.

- The light-yellow areas of the map are soils that were formed from glacial outwash materials. Soils are usually sandy to fine sand in texture. These soils typically drain well, especially at the high points of the landscape.
- The dark blue area is dominated by very fine textured soil material. This area was once a large glacial lake. These soils drain very slowly and wetness is a common problem. These soils are very fertile and are used with great success for gardening.
- The light green areas are soils formed in what is known as glacial till. You will find a mixture of soil textures in these areas ranging from clay to course sands and gravels. When building in these soils, it is important to examine the soils at many locations as soils can vary greatly within short distances.
- The dark-green areas are very shallow soils over bedrock. The depth to bedrock may only be inches in some places.
- The dark-yellow areas on the map are the most dynamic of all our soils. They continue to form to this day. This area is the Mississippi River flood plain. The soils in this area are altered with every major flood.

Much of Ramsey County's natural soil resource has been significantly modified by the actions of mankind creating what is known as urbanized soil classes. With urbanization of the landscape, natural soils have been moved from place to place, debris has been deposited from the demolition of our structures, and soils have become compacted, altering their natural capacity to infiltrate storm water. Soils in Ramsey County have also become polluted with petroleum and chemicals.

VI. GOALS AND OBJECTIVES OF THE RAMSEY CONSERVATION DISTRICT

The actions that must be taken to achieve the RCD's goals and address its natural resource protection and management problems fall into the following categories. An annual evaluation of these activities shapes each year's district plan of operation (annual work plan).

A. Promote environmental protection and stewardship

1. Continue the current RCD organizational culture that holds environmental stewardship and eco-sustainability as the foundation for all district programs and public policy recommendations
2. Promote awareness and respect for the natural environment, its ecosystems, and humanity's long-term dependence on a healthy environment
3. Promote and participate in partnerships for environmental protection

B. Protect and improve groundwater quality

1. Seek funding for and promote cost-share programs and administrative programs to seal abandoned wells
2. Review surrounding agencies Well Head Protection Plans (WHPPs) and survey for highest priority groundwater protection activity and coordinate implementation as appropriate for Ramsey County
3. Work with Ramsey County as approved to coordinate and facilitate the implementation of the Ramsey County Groundwater Protection Plan
4. Promote public education and outreach on topics related to Ramsey County groundwater

C. Protect and improve surface water quality

1. Encourage the prevention of nonpoint source pollution and its damaging effects on surface waters
2. Facilitate the acquisition of funding for local governmental surface water quality management activities
3. Encourage the creation and utilization of uniform minimum management and protection standards for surface water resources in Ramsey County
4. Encourage diagnostic study, ongoing monitoring, and establishment of Total Maximum Daily Loads (TMDLs) of all major streams, lakes, and select wetlands in Ramsey County
5. Promote the use of native vegetation for surface water protection, erosion control, urban wildlife habitat management and urban beautification
6. Promote the use of low-impact development technologies to protect water quality and conserve natural resources

D. Preserve wetlands

1. Fulfill statutory obligations pursuant to the Wetland Conservation Act of 1991 (WCA), as amended, including reporting violations of the law to the appropriate authorities
2. Promote biodiversity among wetlands in Ramsey County and improve and protect wildlife habitat, especially where endangered or threatened species exist
3. Monitor local governments' implementation of and compliance with the WCA and seek the appropriate action when noncompliance is established
4. Seek the preservation and/or wise management of all wetlands within Ramsey County.
5. Facilitate state funding for the continued implementation of WCA
6. As necessary, seek amendments to WCA for the continued preservation of wetlands.
7. Pursue a net gain in diversified wetland acreage in Ramsey County
8. Assist local governmental units to develop wetland banks

E. Minimize flooding

1. Assist municipal storm-water runoff management activities
2. Promote flood plain protection policies among local units of government
3. Encourage the use of storm-water infiltration technologies to prevent flooding

F. Discourage inappropriate land use

1. Recommend against land use change that is not compatible with the inherent limitations of the soils resource as described in the Ramsey County Soil Survey and/or changes that will have a significant negative effect on the environment
2. Encourage and facilitate the assessment (by municipalities and WMOs) of land use changes and the effects they will have on natural resources and the environment

G. Preserve unique landforms and ecosystems

1. Promote and facilitate the identification of unique landforms and ecosystems within Ramsey County
2. Encourage public acquisition and/or the protection of unique landforms and ecosystems both on a local and national level
3. Encourage land use regulations that include recognition and protection of unique landforms, ecosystems, and historical and cultural resources
4. Encourage the maintenance and restoration of green space within the urban core

H. Protect and improve wildlife habitat

1. Where appropriate, promote and aid land management activities on public lands that protect, improve, and diversify wildlife habitat
2. Promote and assist land management activities on private lands that increase and improve wildlife habitat
3. Encourage public and private funding of wildlife management activities in urban areas
4. Promote shoreline restoration, raingardens, and the use of native vegetation for landscaping

I. Facilitate intergovernmental cooperation for cost-effective natural resource management and environmental protection

1. Facilitate Ramsey County interagency environmental protection and natural resource management consortium(s)
2. Continue to support environmental education efforts such as Blue Thumb.
3. Advocate efficient and effective environmental protection
4. Maintain natural resource Geographic Information System (GIS) information that can be accessed by all agencies, local governmental units, and citizens in Ramsey County
5. Showcase our partnerships to promote efficiencies and intergovernmental cooperation
6. Provide technical and project management assistance to local units of government on a fee-for-services basis to maximize operating revenues

VII. STATE COST-SHARE AND ADDITIONAL SUPPORT

A. BWSR Cost-Share Program

Since 1978, the BWSR has operated a statewide cost-sharing program for the application of soil and water conservation practices. This program provides conservation practice funding to the SWCDs on an annual basis. The general purpose of this program is to provide an economic incentive to private and public landowners for the proper installation and maintenance of permanent soil and water conservation practices. To qualify for an annual conservation practice cost-share grant, a district must identify areas of high priority erosion, sedimentation, and water quality problems. The RCD will apply to the BWSR for cost-share assistance on an annual basis.

To protect water quality, implement proper land-use management practices, and prevent further environmental degradation, the RCD will use future cost-share funds for technical staff to provide for the following natural resource conservation activities:

- Streambank, lake shoreline, and road side protection and restoration activities
- Storm-water conveyance system management and stabilization
- Grade-stabilization structures
- Critical-area stabilization and restoration;
- Steep-slope stabilization and restoration
- Sediment and water quality treatment basins
- Wetland nutrient treatment systems
- Abandoned-well sealing
- Hydrologic and geohydrologic analysis
- Raingardens and other bioretention technologies
- Retrofit practices installation and analysis
- Low-impact development Best Management Practices (BMPs)
- Other existing, new, and/or innovative conservation practices/activities as approved by the BWSR

Our highly urbanized land-use patterns include large acreage of impervious surface areas and highly efficient stormwater conveyance systems (i.e., curb and gutter storm sewer systems). These practices subject all lakes and most larger wetlands to large amounts of non-point source pollutants.

Storm-water runoff is one of the most highly concentrated and contaminated sources of non-point pollution to our water resources. The RCD considers all lakes, wetlands, and waterways that receive storm-water runoff from disturbed soil areas and storm-sewered watersheds as most in need of protection and subject to chronic water-quality problems. Therefore, the RCD considers these areas as high priority for the acquisition of cost-share dollars.

Because urban runoff patterns usually increase runoff velocities and quantities, natural or newly constructed water conveyance systems are either severely eroded or subject to erosion. We also consider all natural water conveyance systems as areas of high priority for cost-share practice protection. This is also a high prioritization for the use of cost-share dollars.

B. Grant Funding

Grants have been an increasing portion of the RCD's revenue stream. This trend, however, may change in the next five years depending on how successful the RCD is at acquiring grants. In the past the RCD has received grants mainly through state agencies including the MPCA, the MN DNR, and the BWSR, however, the RCD relies on grant funding provided mainly through the BWSR. BWSR grants provide funding to local units of government to deliver soil and water conservation services to their communities. Grant funds support and increase local capacity to implement programs and provide cost-share with landowners who install conservation practices on their land to benefit state water and soil resources.

In the next five years the RCD anticipates that 25% of our revenue will come from grants. Typically, grants from the BWSR can be lumped into two general categories: (1.) conservation practice cost-share; and (2.) conservation services. With conservation practice cost-share grants, up to 20% of the grant can be used by the RCD to cover technical and administrative costs

associated with implementing the grants. The conservation services grants can be utilized to fund between 50% and 100% of RCD program costs. Available BWSR grants that the RCD has applied for and will continue to apply for annually include:

- General Services Grant (BWSR Cost-Share Program) – Funding is explained above in:
A. BWSR Cost-share Program.
- Natural Resource Block Grant (NRBG)- Since 1992 Ramsey County has given the RCD delegation of the NRBG.
 - Wetland Conservation Act (WCA) Implementation – The purpose of WCA is to maintain and protect Minnesota's wetlands and the benefits they provide. The BWSR requires that under this grant program, a county must agree to transfer a minimum of \$5,000 (or 15 percent of its allocation, whichever is greatest) to the local SWCD for the implementation of WCA. The RCD provides a portion of WCA funding to surrounding WD and WMO partners that also provide WCA administration.
 - Comprehensive Local Water Management - The Comprehensive Local Water Management Program is a voluntary program that requires counties to use local task forces to develop and implement water plans based on their priorities.
- Nonpoint Technical Assistance Grant – (NPEAP) These grants are used to help fund the costs of providing shared engineering and associated technical assistance for the implementation of soil and water conservation, water quality, and wildlife habitat practices and projects on private lands through member SWCDs and partners. Technical assistance and administrative activities necessary to implement this purpose are considered essential to the success of private lands conservation programs administered by the BWSR and other state and federal agencies.
- Clean Water, Land and Legacy Amendment – Minnesota voters approved the Amendment in 2008 to increase the state sales tax by three-eighths of one percent and dedicate this funding for natural resources and cultural heritage. These dollars are dedicated to four funds: Outdoor Heritage Fund, Clean Water Fund, Parks and Trails Fund, and Arts and Cultural Heritage Fund.
 - Clean Water Fund Grant – (CWF) This was established to protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater and drinking water sources from degradation. The RCD is eligible for CWF subsets including Clean Water Assistance, Accelerated Implementation Grants, and Community Partners Grants.

C. Partnerships and Fee for Services

The RCD has become increasingly dependent on revenues that are generated by staff providing technical and administrative services to other units of government (fee for service revenue). The services we deliver are consistent with the RCD's priorities to assist landowners as stewards of land and water resources. In 2011 fees for service revenues were approximately 30% of the

RCD's revenue stream. By 2016, we anticipate fee for service revenues to be approximately 44% of the revenue stream. To sustain this revenue source, RCD staff will need to maintain technical capacity in applied technologies for natural resource management and to further diversify staff capacity to meet changing demands for services.

The state and federal governments are requiring local governmental units to comply with stringent standards for natural-resource protection. The RCD offers a cost-effective option to assist local-government agencies accomplish natural-resource protection standards. The RCD assists Ramsey County, watershed districts, water management organizations, and cities in assisting landowners solve soil-erosion and water-management problems, manage conservation practice cost-share programs, conduct sediment and erosion inspections, complete subwatershed retrofit studies, provide GIS support through mapping and analysis of conservation data, and support the internal technical needs of their organization.

D. Ramsey County Contribution

To finance programs the RCD relies on funding and in-kind services from Ramsey County. Although policies are determined by a separate elected Board with oversight from the BWSR, the RCD benefits greatly from both financial and in-kind Ramsey County resources including:

- In-kind Services – Accounting and payroll oversight, cash-flow management, liability insurance, legal (Ramsey County Attorney), technical, and access to office equipment and fleet vehicles. RCD employees participate in the County Employee Benefit Plan.
- Financial – Ramsey County approves the RCD's biennial budget and provides approximately \$30,000/year in tax levy funding to the RCD. In addition, half of the \$5.00 Agricultural (Agr) Conservation Fee paid to counties for registration of all property title and deeds has been designated for RCD operations by the Ramsey County Board of Commissioners since 1988. This funding is directly related to real estate/mortgage finance transactions in Ramsey County and consequently has been significantly reduced since the beginning of the current recession. Currently collections are down to about \$70,000/year – less than half of the 2005 level. Since SWCDs do not have taxing authority, they must rely on county government to supplement their operating expenses.
- Office space – Since October 2004, the RCD has been a partner in the ownership and occupancy of the Ramsey County Public Works campus in Arden Hills.

VIII. PRESENT AND PROJECTED STAFF AND BUDGET

A. Current and Future Staffing

Presently (January 2012) the permanent RCD staff consists of three full-time employees:

- Administrator
- GIS and Conservation Specialist
- Urban BMP Specialist

An issue of primary importance to the RCD is cost-effective natural-resource management. Through standardizing protection activities, increasing coordination among agencies, identifying and trying to minimize functional overlap among agencies, and promoting intergovernmental cooperative efforts, increased cost-efficiency can be accomplished.

To better serve the citizens of Ramsey County, the RCD will continue to facilitate relations between Ramsey County and local governmental officials and natural resource protection agencies.

We have an informal agreement with Ramsey County Public Works to provide adjunct staff assistance on an as-needed basis. We also share the services of a conservation engineer(s) with the Association of Metro Conservation Districts.

The RCD does not have the services of a full-time NRCS District Conservationist. However, there is NRCS assistance available through the area and state offices and a tri-county district conservationist stationed in Dakota County.

It is evident that the natural resource and environmental protection challenges of the early 21st century will require new sources of revenue and innovative staffing alternatives. The RCD will continue to seek new revenue sources to maintain current staff levels and:

1. Further develop a natural resource database for public access;
2. Provide conservation technology to the general public;
3. Provide support services to local units of government in Ramsey County.

Assessing the staffing and financial resources needed to support future programs is an ongoing function of the RCD Board. Through the process of organizational and programmatic strategic planning a continuing assessment of staffing needs and financial resources will be completed.

B. Budget Needs 2012 to 2016

To sustain our current (January 2012) level of operations, we will need approximately \$ 1.6 million in total operating revenue and at least \$100,000 in state conservation practice cost-share assistance in the forthcoming five-year period. Due to the uncertainty of budgets, forecasts were projected with a 2% increase for the following year. Operation budget projections for the next five years are shown below.

With the decrease of Ramsey County tax levy and Agr. Fee revenues, the RCD will continue to seek and strengthen fee-for-service relationships with local units of government to maintain financial viability and consistency. In strengthening relationships and providing services for local government entities the RCD has become more fiscally stable and in 2011 revenues exceeded expenditures for the first time in many years. For financial stability RCD's fee-for-service programs will continue to be top priority; however, BWSR's many grant programs will also continue to be increasingly important in providing funding to the RCD in its role in implementing programs.

Ramsey Conservation District Operations Budget Projection							
2011 - 2016							
		2011 Actual	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected
Revenues							
	County Funds	31,058	29,195	27,443	27,992	28,552	29,123
	Ag Fee Appropriation	60,200	64,805	60,000	61,200	62,424	63,673
	Grant Funding	68,114	77,000	82,000	83,640	85,313	87,019
	Charges for Tech Services	146,093	135,000	139,257	142,042	144,883	147,780
	Other	849					
	Total Revenue	306,314	306,000	308,700	314,874	321,172	327,595
Expenditures							
	Personnel Services	230,087	233,279	234,534	239,225	244,010	248,890
	Operating Expenses	66,512	70,921	72,366	73,813	75,289	76,795
	Supplies	2,603	1,800	1,800	1,836	1,873	1,910
	Total Expenditures	299,202	306,000	308,700	314,874	321,172	327,595
	Project Fund Balance as of January 2012	351,184					

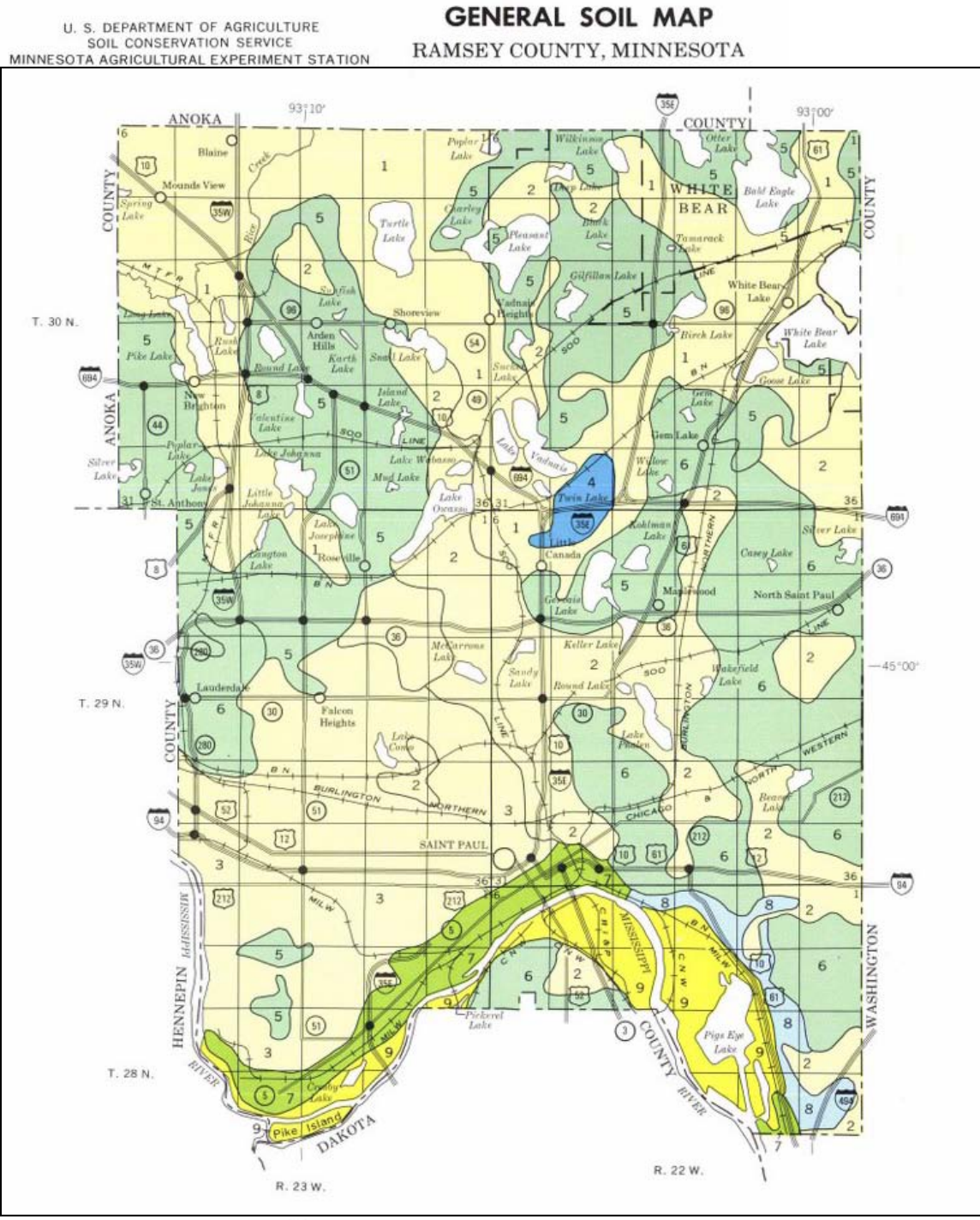
IX. CONCLUSION

As threats to the environment increase, there will continue to be great changes for local-governmental natural-resource management activities and environmental-protection agencies.

Most levels of government are experiencing severe funding reductions and citizens continue to demand more efficient and effective government services. At the same time, the need for government involvement in environmental protection continues to rise as a result of current land-use procedures.

The RCD will continue to seek new ways to coordinate conservation efforts by encouraging new and innovative partnerships in order to more efficiently utilize government spending. In addition, the public must be made more aware of conservation practices and the agencies that work to protect Ramsey County's natural resources.

APPENDIX A. RAMSEY COUNTY SOIL SURVEY MAP



SOIL LEGEND*

- | | |
|--|--|
| SOILS FORMED DOMINANTLY IN OUTWASH | |
| <p>1 Zimmerman—Urban Land—Rifle: Level to gently rolling, excessively drained and very poorly drained, coarse textured soils and organic soils and Urban land; on uplands</p> <p>2 Urban Land—Chetek—Mahtomedi: Urban land and nearly level to very steep, somewhat excessively drained and excessively drained, moderately coarse textured and coarse textured soils; on uplands</p> <p>3 Urban Land—Waukegan—Chetek: Urban land and nearly level to moderately steep, well drained and somewhat excessively drained, medium textured and moderately coarse textured soils; on uplands</p> | <p>6 Kingsley—Urban Land: Undulating to steep, well drained, moderately coarse textured soils and Urban land; on uplands</p> |
| SOILS FORMED DOMINANTLY IN LACUSTRINE SEDIMENTS | |
| <p>4 Barronett—Grays: Level to gently sloping, poorly drained and moderately well drained, medium textured soils; on glacial lake plains</p> | <p>7 Urban Land—Copaston: Urban land and level to moderately sloping, well drained, medium textured soils; on uplands</p> |
| SOILS FORMED DOMINANTLY IN GLACIAL TILL | |
| <p>5 Hayden—Urban Land: Undulating to steep, well drained, moderately coarse textured soils and Urban land; on uplands</p> | <p>8 Kingsley—Mahtomedi: Undulating to very steep, well drained and excessively drained, moderately coarse textured and coarse textured soils; on uplands</p> |
| SOILS FORMED DOMINANTLY IN RECENT ALLUVIUM | |
| <p>9 Udorthents, wet substratum—Alganssee: Nearly level to very gently sloping, variably textured fill material and nearly level, somewhat poorly drained, coarse textured soils; on flood plains</p> | |