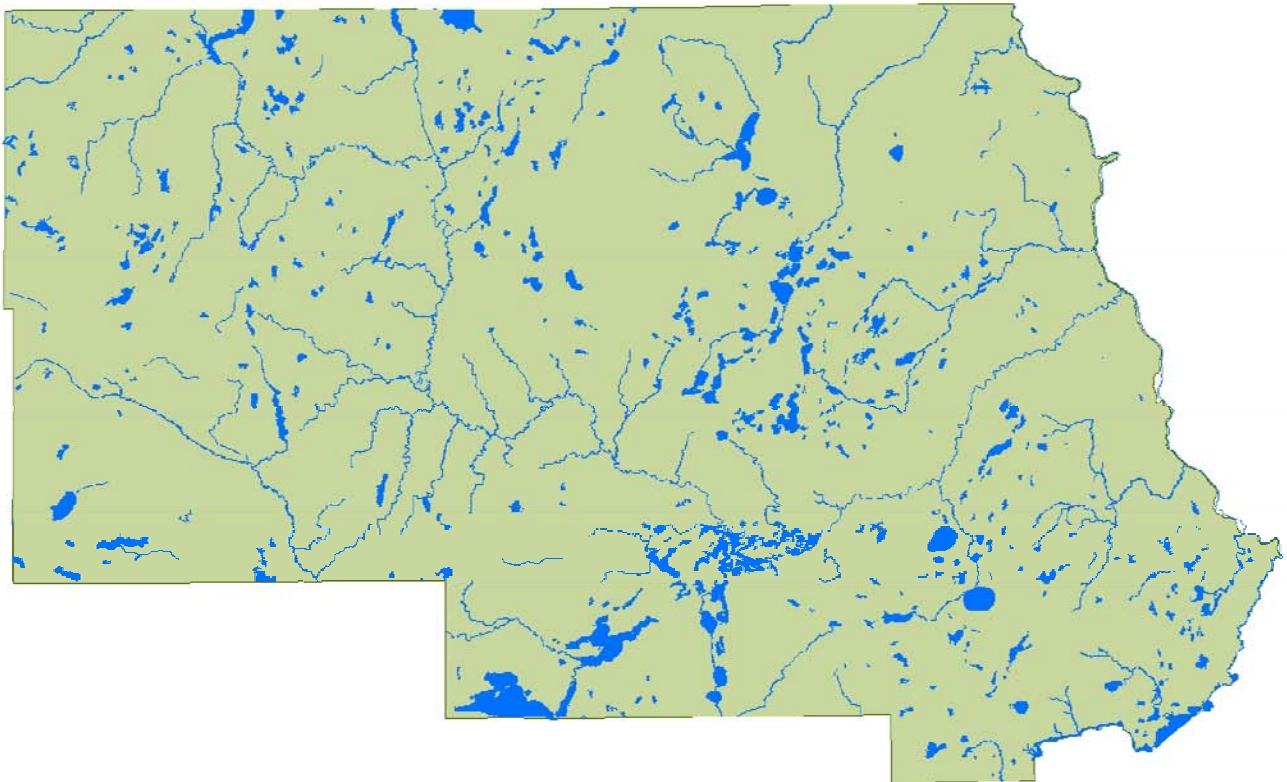


STEARNS COUNTY LOCAL WATER MANAGEMENT PLAN 2010 ANNUAL REPORT



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STEARNS COUNTY WATER MANAGEMENT PLAN GOALS

The *Stearns County Local Water Management Plan 2008-2017* is administered by the Environmental Services Department. Many natural resource partners are essential to efforts to preserve and protect the natural resources of the County. The Environmental Services Department works closely with the Stearns County Soil and Water Conservation District, Watershed Districts, State agencies, Municipalities, Townships and citizens regarding natural resources management.

The *Stearns County Local Water Management Plan 2008-2017* identifies three priority concerns:

- Impaired Waters
- Development Impacts
- Source Water Protection

Local citizens and agencies worked together to pinpoint these concerns and to develop strategies for addressing the concerns. This Annual Report describes some of the initiatives undertaken in 2010 that further the goals and objectives of the *Stearns County Local Water Management Plan 2008-2017*.

FUNDING

The Natural Resources Block Grant (NRBG) is a composite of State of Minnesota base grants available to local government units that help them implement programs designed to protect and improve water resources. Local Water Management Planning (LWMP) is one of the programs under NRBG. Stearns County received \$11,083 in 2010 from NRBG funds to administer the Water Management program. In 2011 the Stearns NRBG for LWMP will be \$7,958. This money is used to partially offset the County's costs for staff and administration. Counties are required to contribute local levy funds as a match. Stearns County's required contribution is \$33,822 regardless of the amount of the NRBG grant.

Most of the initiatives undertaken to meet the goals of the Stearns Water Management Plan are funded through grants and/or are built into ongoing responsibilities.

MONITORING AND DATA COLLECTION

IMPAIRED WATERS

The Clean Water Act requires States to assess all waters of the State and publish bi-annually a List of Impaired Waters. After a water is listed as impaired a study is then required to determine the Total Maximum Daily Load (TMDL), i.e., how much of a pollutant can be loaded into the water and

still allow the water to meet designated uses, such as drinking, fishing and swimming. For a more detailed discussion of impaired waters, please see the website of the Minnesota Pollution Control Agency (MPCA) <http://www.pca.state.mn.us/water/tmdl/>

The following table shows the lakes, rivers and streams in Stearns County that are on the 2010 Final List of Impaired Waters for non-mercury impairments. Mercury impairments are largely the result of air-borne emissions and will be dealt with on the State level rather than the local level.

Stearns County Lakes on 2010 Impaired Waters List						
Water body	ID	Stressor	Year Listed	Target Start Date	Target End Date	Project Status
Marie	73-0014-00	Excess nutrients	2008	2004	2010	Approved
Louisa	86-0282-00	Excess nutrients	2002	2004	2010	Approved
Caroline	86-0281-00	Excess nutrients	2008	2008	2012	Approved
Augusta	86-0284-00	Excess nutrients	2008	2008	2012	Approved
Rice Lake	73-0196-00	Excess nutrients	2008	2009	2013	Underway
Sauk Lake	77-0150-02	Excess nutrients	2004	2004	2010	Underway
Pearl Lake	73-0037-00	Excess nutrients	2008	2004	2010	Underway
Schneider	73-0082-00	Excess nutrients	2004	2004	2010	Underway
Great Northern	73-0083-00	Excess nutrients	2004	2004	2010	Underway
Knaus	73-0086-00	Excess nutrients	2004	2004	2010	Underway
Krays	73-0087-00	Excess nutrients	2004	2004	2010	Underway
Bolting	73-0088-00	Excess nutrients	2004	2004	2010	Underway
Zumwalde	73-0089-00	Excess nutrients	2004	2004	2010	Underway
Cedar Island (Main)	73-0133-01	Excess nutrients	2004	2004	2010	Underway
Cedar Island	73-0133-03	Excess nutrients	2004	2004	2010	Underway
Long	73-0139-00	Excess nutrients	2004	2004	2010	Underway

North Brown	73-0147-00	Excess nutrients	2004	2004	2010	Underway
Horseshoe	73-0157-00	Excess nutrients	2004	2004	2010	Underway
Maria	73-0215-00	Excess nutrients	2006	2015	2019	Not underway
Eden Lake	73-0150-00	Excess nutrients	2010	2010	2015	Not underway
Vails Lake	73-0151-00	Excess nutrients	2010	2010	2015	Not underway
Sand Lake	73-0199-00	Excess nutrients	2010	2010	2015	Not underway
McCormic Lake	73-0273-00	Excess nutrients	2010	2010	2015	Not underway
Two Rivers Lake	73-0138-00	Excess nutrients	2010	2015	2021	Not underway

Stearns County Rivers and Streams on 2010 Impaired Waters List						
Water body	ID	Stressor	Year Listed	Target Start Date	Target End Date	Project Status
Clearwater River (Clearwater Lk to Mississippi R)	07010203-511	Low Oxygen	2006	2008	2011	Proposed for de-listing
Sauk River (Mill Ck to Mississippi)	07010202-501	Turbidity	2008	2004	2009	Underway
Mississippi River (Sauk R to CSAH 7 in St Cloud)	07010203-574	E coli	2010	2008	2015	Underway
Sauk River (Mill Ck to Mississippi)	07010202-501	Fecal Coliform	1994	2004	2009	Underway
Mill Creek	07010202-537	Fecal Coliform	2006	2004	2009	Underway
Spunk River (Lower Spunk Lk to Mississippi R)	07010201-525	Fecal Coliform	2008	2015	2022	Not underway

Ashley Creek	07010202-503	Low Oxygen	1998	2010	2011	Not underway
Ashley Creek	07010202-503	E coli	2010	2010	2015	Not underway
Sauk River (Melrose Dam to Adley Cr)	07010201-506	Invertebrate IBI	2006	2010	2015	Not underway
Sauk River (Getchell Cr to St Hwy 23)	07010202-508	E coli	2010	2010	2015	Not underway
Adley Creek (Sylvia Lk to Sauk R)	07010202-527	E coli	2010	2010	2015	Not underway
County Ditch 6 (unnamed to Ashley Cr)	07010202-521	Fish IBI	2002	2010	2015	Not underway
County Ditch 6 (unnamed to Ashley Cr)	07010202-521	Invertebrate IBI	2006	2010	2015	Not underway
Stony Creek (headwaters to Sauk R)	07010202-541	E coli	2010	2010	2015	Not underway
Getchell Creek (County Ditch 2)	07010202-562	Invertebrate IBI	2006	2010	2015	Not underway
Unnamed cr to Sauk R	07010202-542	Turbidity	2008	2009	2012	Underway
Eden Lake outlet	07010202-541	Low Oxygen	2010	2010	2015	Not underway
Kolling Creek	07010202-575	Low Oxygen	2010	2010	2015	Not underway

WATER QUALITY MONITORING

SURFACE WATER MONITORING

A first step in the process of addressing impaired waters is the determination of which of the water bodies meet the definition of impaired and which do not. This process was started in Stearns County in a focused manner in 2008. Funds from the Water Management project fund were used to assess lakes.

The County secured a Surface Water Assessment Grant (SWAG) from the MPCA to pay for monitoring in 2009 and 2010. After the 2010 monitoring season, the major lakes and rivers in the County have been assessed to the standard necessary to determine whether impairment exists or not. Because the North Fork of the Crow River, Clearwater River and Sauk River Watershed Districts have robust monitoring programs, the Watershed Districts and the County agreed that, in general, the District monitoring efforts were adequate to assess the district's waters. There are a few water bodies in the Sauk River Watershed that are not part of the District's monitoring schedule but the County felt it was important to monitor them. To facilitate this, the District agreed to do the sampling for these additional water bodies and the analysis was paid for by the SWAG.

The SWAG also includes monitoring that was added to meet the needs of the MPCA Intensive Watershed Monitoring initiative. This watershed approach includes a 10-year rotation for assessing waters of the state on the level of Minnesota's major watersheds. This initiative focuses on the watershed's condition as the starting point for water quality assessment, planning, implementation and measurement of results. The Mississippi River-St Cloud watershed Intensive Watershed Monitoring began in 2009.

Stearns County contracted with RMB Environmental Laboratory to do the SWAG monitoring. The report submitted by RMB includes monitoring results, maps of the locations of the monitored lakes and streams and the lakes' Trophic Status Indices. The report also includes a summary of which lakes and streams probably will meet the level of impairment necessary to be listed as impaired. The RMB report is included as an attachment to this Water Management Plan report.

The Sauk River Watershed District monitored many lakes and streams within Stearns County in 2010. Some of these were part of their established monitoring program and some were added as part of the SWAG. For a description of the locations and the sampling results, please visit the Sauk River Watershed District website <http://www.srwdmn.org/>.

The Clearwater River Watershed District's monitoring program results can be found on the Clearwater River Watershed District website <http://www.crvd.org/>.

The North Fork of the Crow River Watershed District monitored Rice Lake, Lake Koronis and Pirz Lake in 2009. Detailed monitoring information can be found on the website of RMB Laboratory <http://www.rmbel.info/>)

All monitoring data can also be found on the MPCA Environmental Data Access website <http://www.pca.state.mn.us/data/edaWater/index.cfm>

SURFACE WATER QUALITY TRENDS

It is important to not only know what the current water quality is but also whether the quality is improving, deteriorating, or staying the same. Monitoring programs are often too short lived to provide the long-term water quality data that is needed to make those determinations. The MPCA's Citizen Lake Monitoring Program (CLMP) has been in existence since 1973. The CLMP is cooperative program between the MPCA and citizen monitors. The CLMP monitors collect water transparency data using an 8-inch, circular, all-white metal plate attached to a calibrated rope. About once a week during the summer, volunteers boat to a designated spot on their lake to collect transparency readings. The transparency depth is the depth at which the disc is no longer visible. At the end of the summer, volunteers send their data sheets to the MPCA to be recorded and compiled.

The MPCA compiles all the submitted data and, if there are at least 8 years of data, runs a statistical program to determine if there is a trend. The following table contains this information.

TREND IDENTIFIED BY SECCHI READINGS (THROUGH 2009)		
LAKE NAME	LAKE ID	TREND
		WATER CLARITY IMPROVING
Bear	73-0190	Water clarity in this lake is possibly improving, with an estimated increase of 3.2 feet per decade.
Big	73-0159	Water clarity in this lake is almost certainly improving, with an estimated increase of 1 feet per decade.
Big Fish	73-0106	Water clarity in this lake is almost certainly improving, with an estimated increase of 2.4 feet per decade.
Big Watab	73-0102	Water clarity in this lake is almost certainly improving, with an estimated increase of 1.3 feet per decade.

Bolfing	73-0088	Water clarity in this lake is almost certainly improving, with an estimated increase of 0.2 feet per decade.
Cedar Island (Main Bay)	73-0133-01	Water clarity in this lake is almost certainly improving, with an estimated increase of 0.4 feet per decade.
Cedar Island (Koetter Lk)	73-0133-03	Water clarity in this lake is very likely improving, with an estimated increase of 0.2 feet per decade.
Grand	73-0055	Water clarity in this lake is almost certainly improving, with an estimated increase of 0.8 feet per decade.
Koronis (main lake)	73-0200-02	Water clarity in this lake is possibly improving, with an estimated increase of 0.2 feet per decade.
Long	73-0107	Water clarity in this lake is possibly improving, with an estimated increase of 3.8 feet per decade.
Long	73-0139	Water clarity in this lake is almost certainly improving, with an estimated increase of 0.6 feet per decade.
Lower Spunk	73-0123	Water clarity in this lake is almost certainly improving, with an estimated increase of 1.5 feet per decade.
Maria	73-0215	Water clarity in this lake is likely improving, with an estimated increase of 1.6 feet per decade.
Middle Spunk	73-0128	Water clarity in this lake is almost certainly improving, with an estimated increase of 0.8 feet per decade.
Sand	73-0199	Water clarity in this lake is almost certainly improving, with an estimated increase of 1.2 feet per decade.
Zumwalde	73-0089	Water clarity in this lake is possibly improving, with an estimated increase of 0.1 feet per decade.
Otter	73-0015	Water clarity in this lake is almost certainly improving, with an estimated increase of 2.6 feet per decade.
Pelican	73-0118	Water clarity in this lake is very likely improving, with an estimated increase of 0.5 feet per decade.
Pirz	73-0144	Water clarity in this lake is possibly improving, with an estimated increase of 1.3 feet per decade.

Pleasant	73-0051	Water clarity in this lake is almost certainly improving, with an estimated increase of 1 foot per decade.
		NO TREND EXHIBITED
Long	73-0004	This lake exhibits no clear water clarity trend.
Crooked	73-0006	This lake exhibits no clear water clarity trend.
Marie	73-0014	This lake exhibits no clear water clarity trend.
School Section	73-0035	This lake exhibits no clear water clarity trend.
Pearl	73-0037	This lake exhibits no clear water clarity trend.
Watab	73-0070	This lake exhibits no clear water clarity trend.
Rossier	73-0072	This lake exhibits no clear water clarity trend.
Schneider	73-0082	This lake exhibits no clear water clarity trend.
Great Northern	73-0083	This lake exhibits no clear water clarity trend.
Knaus	73-0086	This lake exhibits no clear water clarity trend.
Krays	73-0087	This lake exhibits no clear water clarity trend.
Kreigle	73-0097	This lake exhibits no clear water clarity trend.
Big Spunk	73-0117	This lake exhibits no clear water clarity trend.
Cedar Island (East Lk)	73-0133-04	This lake exhibits no clear water clarity trend.
Two Rivers	73-0138	This lake exhibits no clear water clarity trend.
Eden	73-0150	This lake exhibits no clear water clarity trend.
Vails	73-0151	This lake exhibits no clear water clarity trend.
Horseshoe	73-0157	This lake exhibits no clear water clarity trend.
Rice	73-0196	This lake exhibits no clear water clarity trend.
Sylvia	73-0249	This lake exhibits no clear water clarity trend.

Melrose Deep Quarry	73-0701	This lake exhibits no clear water clarity trend.
Eleven Quarry	73-0703	This lake exhibits no clear water clarity trend.
		WATER QUALITY DETERIORATING
Becker	73-0156	Water clarity in this lake is almost certainly declining, with an estimated decrease of 1.8 feet per decade.
Kraemer	73-0064	Water clarity in this lake is almost certainly declining, with an estimated decrease of 6.5 feet per decade.
North Brown's	73-0147	Water clarity in this lake is almost certainly declining, with an estimated decrease of 2.3 feet per decade.
St. Anna	73-0183	Water clarity in this lake is likely declining, with an estimated decrease of 3.3 feet per decade.

GROUND WATER MONITORING

MDA Pesticide Monitoring Program

Monitoring ground water for the presence of agricultural chemicals is done annually by the Minnesota Department of Agriculture (MDA). The monitoring is conducted in agricultural areas, where agricultural pesticides would potentially be used. In general, the MDA looks for pesticides that are widely used and/or pose the greatest risk to ground or surface water.

Stearns County lies within the MDA sampling Region 4, Central Sands. In Region 4 the most commonly found pesticides and degradates of the pesticides are Acetochlor, Alachlor, Atrazine, Metolachlor and Metribuzin. The following summaries are based on data in Region 4 through 2009. It should be noted that all detections were considerably below the levels set by Minnesota as health standards for drinking water.

Acetochlor was first applied to crop land in 1995. In Region 4, the concentrations have remained fairly stable. The concentrations are consistently below the Health Risk Level (HRL). The detection frequency has a statistically significant downward trend. Detection of Acetochlor and its degradates was in 21% of the samples in 2009.

Alachlor has been monitored since 1985. Detectable levels for Alachlor and its degradates have been generally declining in magnitude since 2002. Detection frequencies of Alachlor or its degradates have shown a statistically significant decrease over time. Percent of detections for Alachlor and its degradates was 25% in 2009.

Atrazine has been detected more frequently over more years and across more locations, including differing land uses, than any other single pesticide. The concentration of Atrazine and its degradates in Region 4 have been declining. Detection frequencies for Atrazine and deethylatrazine (the most frequently occurring species) are relatively high and display a small, but statistically significant, increase over time. The detection frequency of Atrazine and its degradates in 2009 in Region 4 was 76%.

Dimethenamid shows increasing trends in maximum concentrations and detection frequency in Region 4. The results are not statistically significant, however, possibly as a result of few detections. Dimethenamid and its degradates were found in 6% of the samples in Region 4 in 2009.

Metolachlor has been analyzed for since 1985. Overall, concentrations for Metolachlor and its degradate compounds appear to be in general decline over time. Higher level concentrations are not as prevalent compared to earlier monitoring data. Detection frequency of Metolachlor parent material is declining at a statistically significant rate; however, its degradates show no statistically significant trends. The detection frequency for Metolachlor and its degradates in Region 4 in 2009 is 62%.

Metribuzin and its degradates have been found primarily in Region 4, which is characterized by glacial outwash sand plains. Much of the cropped land in this region is irrigated and includes potatoes in the cropping rotation. There is no clear trend over time. Metribuzin and its degradates were found in 25% of the samples in Region 4 in 2009.

The complete report can be found on the MDA website

<http://www.mda.state.mn.us/chemicals/pesticides/~media/Files/chemicals/reports/2009waterqualitymonrpt.ashx>

MDA Central Sands Project

MDA also sampled groundwater for nitrate-nitrogen in 2009. Of the 84 samples in Region 4 (Central Sands), 95 percent had detectable levels of nitrate-nitrogen and 59 percent exceeded the health risk limit of 10 mg/L. The highest value of 51.6 mg/L was recorded in Region 4. Region 4 displayed the highest median value of 15.2 mg/L. These samples were taken from wells in agricultural fields.

The MDA monitoring data shows that nitrate levels in some areas are trending upward. Because of the upward trend the MDA decided to expand nitrate monitoring to find out the extent of nitrate

concentrations in private drinking water wells. With funding from the Clean Water Fund, MDA is initiating a project to obtain the current conditions of nitrate concentrations in 2,500 private wells throughout Region 4. From the current condition, the areas of concern will be determined and a long-term trend monitoring network developed.

EDUCATION

Education is one of the primary focus areas of Stearns County Water Management. Education leads to better understanding of the environment, land stewardship and a greater sense of ownership of natural resources. Many in-kind hours and resources were allocated to educational activities by many people and organizations, including the Environmental Services Department, Soil and Water Conservation District, Watershed Districts, the Department of Natural Resources, Lake Associations, Townships and Cities.

CENTRAL MINNESOTA WATER EDUCATION ALLIANCE

Central Minnesota Water Education Alliance (CMWEA) is a coalition that provides educational outreach to promote water quality stewardship. The mission of CMWEA is to develop and implement educational programs that encourage individuals to protect water resources by increasing their knowledge and making simple behavior changes.

MEMBERSHIP

CMWEA was initially formed to help fulfill the stormwater education requirements of National Pollutant Discharge Elimination System (NPDES) permits. The Cities of St. Cloud, St. Joseph, Sartell, Waite Park and Sauk Rapids, Stearns County, and the Townships of St. Joseph and LeSauk are NPDES permit holders and members of CMWEA.

A number of communities joined CMWEA to aid in the implementation of their Wellhead Protection Plans. These communities include Cold Spring, Melrose, Rockville, Paynesville and Richmond. The Sauk River Chain of Lakes Association and St. Cloud State University are also members. Funding of CMWEA comes from membership dues and a grant from the Upper Mississippi River Source Water Protection Project. The Stearns County Soil & Water Conservation District plays a much appreciated and active advisory role.

Private sponsors have been critical to the success of CMWEA. These sponsors are Thelen Advertising, St. Cloud Times, Charter Communications, Townsquare Media, Gander Mountain, Cold Spring Record, St. Joseph/Sartell Newsleaders, Sauk Rapids Herald, KVSC-FM and First Fuel Banks. The value of in-kind sponsorship in 2010 was \$28,826.

CAMPAIGN SUMMARY

Much of the CMWEA efforts are intended to induce people to go to the CMWEA website and read the Top Ten Tips and other water conservation information. The CMWEA website www.mnwaterconnection.com had 79,626 unique hits in 2010. The number of unique hits has continued to go up significantly every year, starting with 5,692 unique hits in 2007.



The 2010 CMWEA public education campaign included a rain barrel sale (101 sold), a video ad contest for high school students, and booths at the Stearns Stormwater Training, the Central MN Builders Association Home Show, and the MN Rural Water Association Annual Conference.

The 4th annual TV ad contest remains popular. The contest requires the students to develop a video ad that illustrates one of the CMWEA "Top Ten Water Protection Tips". In 2010, 75 students participated. The videos are shown on the websites of CMWEA and St. Cloud.

Radio and newspaper ads are developed based on each year's "Top Ten Water Protection Tips".

Quarter-page ads, such as the following, were placed in the St. Cloud Times (circulation of 28,000 daily) six times each; ads were placed in 6 of the other newspapers in the County.

DETOUR YOUR DOWNSPOUT

Bypass Hard Surfaces — Redirect Runoff onto Your Lawn or Garden

During a one-inch rainfall, each downspout on your home drains about 12 gallons of water a minute. When all that water runs down sidewalks or driveways and into the storm sewer, it picks up a variety of contaminants that end up in our already vulnerable lakes and rivers. By redirecting your downspouts, you can use the runoff to keep your lawn and gardens green and lower your water bill. A variety of downspout extensions are available, from fixed and flexible chainpipe, to PVC and automatic systems. Send runoff on the scenic route, and put the water to work!



Clean water. It starts with you.

Make the Water Connection is a program of Central Minnesota Water Education Alliance (CMWEA) with support from: Stearns County; the cities of Cold Spring, Mahone, Paynesville, Richmond, Rockville, St. Cloud, St. Joseph, Sartel, Sauk Rapids and White Park; St. Joseph and Le Sauk townships; St. Cloud State University; Sauk River Chain of Lakes and Koronia Lake associations; the Upper Mississippi River Source Water Protection Project; Sauk River Watershed District; Stearns County Soil & Water Conservation District; and the Minnesota Rural Water Association

Learn 10 simple ways to protect the water at mnwaterconnection.com

Thanks to our sponsors:



THIS DRAIN'S JUST FOR RAIN

Protect Our Water by Keeping Grass, Leaves & Litter Out of the Storm Drain



Clean water. It starts with you.

Storm drains are basically rainwater expressways leading to our lakes and rivers, it's time to pay attention to what clogs through the grates. By cleaning away grass clippings, leaves, debris from storm sewer grates, and keeping your driveway, water for all of us and the maintain the drain for rain.

Get the water at mnwaterconnection.com



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MAKE YOUR YARD A SUPER SOAKER

Making the most of a rainy day isn't just about what you do indoors — it's about doing more *outside* to put rainfall to work in your yard. Help restore the natural water cycle by planting trees, shrubs and native plants with thirsty root systems. Replace hard surfaces with natural groundcovers and porous paving that encourage rain to soak into the ground. Keeping excessive runoff from reaching the storm sewer helps protect our lakes and rivers, and recharges our underground aquifers. Thinking green looks great, too!



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Learn 10 simple ways to protect the water at mnwaterconnection.com

Thanks to our sponsors:





CMWEA hosted a fishing game to bring awareness of the impacts of polluted surface water runoff at “Take a Day OFF on the Mississippi River” (Outdoor Family Fun). The event, supported by the local community and sponsored by the MN DNR, Stearns County SWCD, the Stearns County Parks Department and Benton County, proved to be a huge success with 650 attendees.

COUNTY WATER FESTIVALS

Water festivals are held each year to expose grade school students to a broad range of water resource related topics and give them an opportunity for some hands-on fun.



Students at the Middle Sauk Festival look for macro-invertebrates (above) and learn how to judge water clarity (right).

The Sauk River Watershed District sponsors three Stearns County fests, one for the Lower Sauk area with co-sponsorship from St. Cloud, St. Joseph and Waite Park, one for the Middle Sauk area with co-sponsorship from Melrose and Sauk Center and one for the Sartell area. Richmond, Cold Spring, Rockville and Eden Valley combine efforts to put on a Water Fest for their communities as part of their Wellhead

Photos courtesy of the Sauk River Watershed District.



Protection Plan education goals. The City of Paynesville puts on a Water Fest to help fulfill its Wellhead Protection education goals. The Sauk River Watershed District also hosts a River Rally Event in the summer for ROCORI fifth graders.

The Sauk River Watershed District's SHORE Program was awarded the 2009 Program of the Year Award by the Minnesota Association of Watershed Districts.

If your school is interested in enhancing your science curriculum with the SHORE Program, please contact the office to schedule an event!

Sauk River
Watershed District

Sauk River Watershed District
524 Fourth Street South
Sauk Centre, MN 56378

Phone: 320-352-2231
Fax: 320-352-6455
Web: www.srwdmn.org

SHORE Program

In 2009 the Sauk River Watershed District expanded the water festivals to senior high school, initiating the SHORE program (Senior High Outdoor Resources Education). In 2010 the SHORE Program included Melrose, Albany, ROCORI, and Sauk Centre Schools.

WATER MANAGEMENT ADVISORY COMMITTEE MEETINGS

The Water Management Advisory Committee guides the water management planning efforts in Stearns County. This Committee is comprised of 12 individuals representing various sectors – township government, watershed districts, lake associations, City of Saint Cloud, Stearns County Municipal League, farming, Stearns County Planning Commission, County Board of Commissioners, interested citizenry, post-secondary education/local legislation, education, and the Stearns County Soil and Water Conservation District. The Committee meets approximately bi-monthly to share information on the activities and perspectives of the group which they represent as they relate to natural resource issues in Stearns County.

Each year one of the meetings is centered on a field trip. In past years the destinations have included Big Sauk Lake, Koronis Lake, Clearwater Chain of Lakes and a restored wetland. The field trips bring home the purpose of the Water Management program, demonstrating situations that can cause deterioration of water quality, such as steep banks with high erosion potential and

lakeshore lots with manicured lawns to the edge of the water. Effective means of remediation were also viewed, such as shoreland re-vegetation and the capture and routing underground of roof runoff.

Photo courtesy of Stearns County SWCD.



2010 was the 60th Anniversary of the Stearns County Soil and Water Conservation District. To celebrate this milestone, the Stearns County SWCD hosted a day-long social at the Richmond Community Park. A tour highlighted some of the conservation practices enacted to preserve the County's natural resources. The Water Management Advisory Committee accepted the invitation to participate in the tour in lieu of a separate field trip.

Greg Berg of the Stearns County SWCD explains the process and benefits of a shoreland re-vegetation project.

SCHOOL AND CIVIC PRESENTATIONS

Stearns County Soil and Water Conservation District engaged the community at 92 different venues in 2010. Fourteen of these were presentations to elementary and high school students on subjects such as native vegetation, stormwater pollution, soil erosion and groundwater contamination. Thirty-three presentations were given to civic groups, County, Township and City elected or appointed officials, focusing on the Mississippi River Renaissance project to gain support for the long term protection of the Mississippi River in Central Minnesota. Fifteen specialized field days and workshops related to water quality and land stewardship were offered. In addition, there were over thirty unique presentations and outreach activities focusing on a variety of water related activities, such as source water protection credits, ecosystem services market framework and the Mississippi River Basin Initiative.

STEARNS COUNTY SHORELAND, EROSION CONTROL & STORMWATER TRAINING

This is an annual training event put on by Stearns County Environmental Services and Stearns County SWCD. All contractors working in shoreland are required to attend the training at least once every two years. Many other developers, shoreland property owners and local government officials also attend. There were 190 attendees at the 2010 training. Presentations included BMP Installation/Maintenance, NPDES Industrial Permit Update, and Raingardens.

LAND AND WATER TREATMENT

SUBSURFACE SEWAGE TREATMENT SYSTEM INITIATIVES

Sauk River Chain of Lakes

An inspection of all the Subsurface Sewage Treatment Systems (SSTS) in the shoreland of the Sauk River Chain of Lakes was funded by Clean Water Legacy dollars. The initiative began in 2008 and concluded in 2010. The Sauk River Chain of Lakes Association pursued this initiative partly because of the negative impact of failing systems in shoreland on the water quality of the lakes and partly to demonstrate that the association is willing to “clean up its own backyard”. All the lakes in the Chain of Lakes have been listed as impaired due to excess nutrients. The County applied for and was awarded funding of \$130,000 for this project. The SRCL Association and the Water Management project fund each contributed \$10,000 toward the cost of the project.

Of the 1395 systems which were reviewed, 237 (17%) were found to be non-compliant. The property owners are required to upgrade their system so that it meets current regulations. One hundred and twenty four of the 237 non-compliant systems were voluntarily failed by the property owners. An additional 30 property owners did not allow an inspection to take place and have been referred to the County Attorney.

North Fork Crow River

Another SSTS inspection initiative is underway in the North Fork Crow River Watershed District. This project is the result of collaboration between the Watershed District and Stearns County. The intent is to inspect all SSTS throughout the district. The project is supported by Pope County, Kandiyohi County and Meeker County through joint powers agreements.

Of the 1,466 SSTS in the North Fork Crow River Watershed District, 1132 have completed inspections. Of the completed inspections, 299 (26%) have been found to be non-compliant. This project will continue through 2011.

SSTS Abatement Grants

Stearns County requested and was granted \$420,285 from the Clean Water Fund to upgrade 47 failing SSTS. One of the qualifications for the program is that the household be low income. Many of these failing systems were identified as part of an area inspection program. The more typical circumstance initiating an inspection is sale of the property, a bedroom addition, or a landuse permit requested in shoreland. The property owners located in the area inspections sometimes do not have financial means to upgrade their systems. These systems will be upgraded in 2011.

SOIL AND WATER CONSERVATION DISTRICT AND NATURAL RESOURCES CONSERVATION SERVICE PROJECTS

The Soil and Water Conservation District, along with the Watershed Districts, is the implementation arm of the Water Management Plan. The following shows the conservation structures and practices which were implemented by the Soil and Water Conservation District. Well sealing and native buffer plantings have been done in the past but are first shown for 2009.

Conservation Structures and Practices Implemented by Stearns Soil and Water Conservation District and Natural Resources Conservation								
	2003	2004	2005	2006	2007	2008	2009	2010
Nutrient Management Planning (# of acres)	9,000	20,000	22,000	28,732	33,279	26,307	16,767	17,992
Waste Management Systems	7	15	24	19	19	23	15	25
Lakescaping Projects (# of projects)	9	2	8	11	3	7	7	8
Unpermitted Manure Basin Investigations	37	15	14	24	30	34	13	14
Environmental Quality Assurance Assessments	22	2	19	22	25	23	18	10
Continuous Conservation Reserve Program of CCRP contracts) (#	53	90	76	46	70	113	120	52
CCRP (# of acres)	409	412	730	401	902	1885	2020	647
Conservation Reserve Program (General) (# of CRP contracts)							59	49
CRP General (# of acres)							2337	1689
Total Active Conservation Reserve Program Contracts (# of CRP & CCRP contracts)		1,374	1,446	1,336	1,332	1446	1400	1469
Total Active Contracts (# of CRP & CCRP acres)		31,683	32,379	34,236	32,996	29,971	27,928	28,442
Environmental Quality Incentives Program Contracts (EQIP contracts) (# of	48	54	53	52	28	53	54	70
Total Active EQIP Contracts (# of contracts)		251	304	197	186	128	139	137
Conservation Security Program (# of contracts)				110	110	110	58	47
Conservation Security Program (# of acres)				30,600	30,600	30,600	15,846	23,011
Sealing of unused wells							9	6
Native buffer projects (# of projects and sq ft)							4 (54,349)	—

Note: This table represents a small portion of the projects completed during 2009 by the Stearns County SWCD and NRCS. This also does not include Watershed District projects or other initiatives implemented by other local, state, or federal agencies.

REGULATION AND PLANNING

HEALTHY LAKES AND RIVERS PARTNERSHIP PROGRAM

The Healthy Lakes and Rivers Partnership Program (HLRP) helps local citizens protect and improve their lakes and rivers. The Program provides leadership and capacity-building training for lake and river associations to assist them in developing and implementing their own lake or river management plan. The Central Minnesota Initiative Foundation sponsors the program, which is facilitated by local agencies. Stearns Soil and Water Conservation District and Stearns Environmental Services facilitated the HLRP in 2010.

Big Fish Lake, Rice and Koronis Lakes, and Pelican Lake of St Anna, will be updating an existing management plan. Long and Crooked Lakes, North (Albany) Lake, Pearl Lake, Pirz Lake, and Two Rivers Lake will be developing new management plans.

SOURCE WATER PROTECTION

One of the three primary concerns of the Stearns Water Management Plan is protection of the county's drinking water. Stearns County has a number of communities that utilize vulnerable aquifers to provide drinking water to the residents. The Stearns County Soil and Water Conservation District assists local communities with the development and implementation of their Source Water Protection Plans.

In 2010, the following communities developed Source Water Protection Plans: Holdingford; Kimball; St. Joseph; and Roscoe. Amendments were made to the Plans of Richmond, Rockville, Cold Spring Granite, and Viking Industries.

MISSISSIPPI RIVER INITIATIVES

There are currently a number of initiatives centered on the section of the Mississippi River that includes Stearns County. Stearns County, the Stearns County SWCD, local municipalities, and the watershed districts are participating at different levels in all of them. A brief description of each follows.

Mississippi River Renaissance

The Mississippi River Renaissance (MRR) project assists river communities along a 27-mile stretch of the Mississippi River within Stearns and Benton Counties. In 2009, the Stearns County SWCD was successful at securing a McKnight Foundation grant to hire a full-time MRR Coordinator for two

years. The goal of MRR is to unite decision makers in the urban, suburban, and rural segments of the Mississippi River by bringing resources and information to the people whose decisions and actions can help keep the river healthy. After two years of having a full-time coordinator, MRR was successful at coordinating and developing a mutually acceptable formally endorsed vision for the Mississippi River with actionable goals to achieve Mississippi River protection in the near term and built and maintained a strong advocacy presence within the community laying a foundation for long term protection of the Mississippi River in central Minnesota.

St. Cloud Urban Area Mississippi River Corridor Plan

The St. Cloud Urban Area Mississippi River Corridor Plan is focused on the area of the Mississippi that flows through Saint Cloud. This plan is intended to establish a community based vision and implementation strategies to maintain the Mississippi River as a regional asset through appropriate stewardship and enhance utilization of the urbanized area's riverfront. The St. Cloud Urban Area Mississippi River Corridor Plan will build upon the success of the Mississippi River Renaissance initiative that is defining a broader vision for the Mississippi River corridor through Central Minnesota.

Upper Mississippi River Bacteria TMDL Project

The goal of the Upper Mississippi River Bacteria TMDL Project is to address the levels of E coli bacteria in the Mississippi River from St. Cloud to St. Paul. It is a joint project between the MPCA and the MN Department of Health. All of Stearns County is within the project area.

Mississippi-St. Cloud Watershed Plan

The Mississippi-St. Cloud Watershed Plan is part of the MPCA's new Watershed Approach for monitoring and condition assessment of Minnesota's surface water resources. The Mississippi St. Cloud watershed is one of the watersheds selected for the first cycle of this approach. This initiative focuses on the watershed's condition as the starting point for water quality assessment, planning, implementation and measurement of results