

Biennial Report of the **Clean Water Council**



December 2010

Biennial Report of
the Clean Water
Council

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- A biennial report to the Legislature on the activities for which money has been or will be spent for the current biennium, and the activities for which the money is recommended to be spent in the next biennium.
- An implementation plan that explains Minnesota’s framework for identifying and cleaning up impaired waters, addressing general procedures and timeframes, and establishing priorities.

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Clean Water Council members (July 2010)



Left to right, back row: Mike McKay (Red Wing)—environmental organization, Gary Pedersen (Dover)—township officials, Gene Merriam (Coon Rapids)—environmental organization, Deb Swackhamer (Stillwater)—state higher education system, Del Haag (Buffalo)—cities, Steve Woods—Board of Water and Soil Resources, Keith Hanson (Duluth)—businesses, Mark Knoff (Mankato)—cities, Dave Bennett (Burnsville)—fishing organization, Steve Pedersen (Coon Rapids)—businesses, Rob Sip—Department of Agriculture.

Left to right, middle row: Scott Hoesel (Mayer)—statewide farm organization, Marilyn Bernhardson (Redwood Falls)—soil and water conservation districts, Gaylen Reetz—Pollution Control Agency, Paul Torkelson (St. James)—statewide farm organization, Todd Renville (Minneapolis)—statewide hunting organizations, Keith Buttleman (St. Paul)—Metropolitan Council.

Left to right, front row: Victoria Reinhardt (White Bear Lake)—metro-area counties, Pam Blixt (Minneapolis)—watershed districts, Earl Bukowski (Sauk Rapids)—rural counties.

Not pictured: Louis Smith (Minneapolis)—lakes and streams nonprofit organization, Larry Kramka—Department of Natural Resources.

Thanks to our former members who previously served: John Howe (Red Wing)—cities, Joe Martin—Department of Agriculture, William Moore—Metropolitan Council, Sarah Strommen (Ramsey)—environmental organizations.

The Clean Water Council

Established by the Clean Water Legacy Act in 2006, the Clean Water Council advises the Legislature and the Governor on state programs to restore and protect Minnesota's waters. The Council's statutory charge is to focus on existing restoration and protection programs, as well as to identify innovative approaches that may strengthen or complement those programs. Its diverse membership represents interests and organizations with a major role in achieving clean water, enabling consensus-building and

coordination on a wide array of issues critical to the people of Minnesota.

The Clean Water Council consists of 23 members: 19 members appointed to represent key interests and organizations from around the state, plus a non-voting representative from each of the following four state agencies: Pollution Control Agency, Board of Water and Soil Resources, Department of Natural Resources, and Department of Agriculture.

Executive summary

The voters of Minnesota expressed strong support for protecting and restoring the state's lakes, streams, and groundwater by approving the Clean Water, Land and Legacy Amendment in November 2008. The funds directed towards the Amendment's Clean Water Fund are earmarked *to protect, enhance, and restore water quality in lakes, rivers, streams, and groundwater with at least five percent of the fund spent to protect drinking water sources.*

Since passage of the Clean Water Legacy Act (CWLA) in 2006 and subsequent appropriations, progress was made in assessing Minnesota's waters and implementing water quality improvement projects. Through the Amendment, stable funding will enhance the state's ability to meet the Amendment's objectives over the next 23 years.

The Clean Water Council's (Council) charge is to provide advice to the legislative and executive branches of government on the administration and implementation of the CWLA. The Council prepared policy and funding recommendations for FY12–13 (see detailed budget summary on page 12). The Council recommends \$176.5 million be appropriated from the Clean Water Fund for the following activities:

- **Continue current funding levels for monitoring and assessment activities.** The Council recommends funding monitoring and assessment activities at \$20.96 million. This level of funding will support the continued implementation of the 10-year watershed monitoring cycle. The Council anticipates that funding these activities will remain steady over the life of the Amendment.
- **Continue current funding levels for watershed restoration and protection planning strategies.** The Council recommends funding for this activity at \$22.71 million. Restoration and protection planning strategies not only guide implementation efforts, but they are required by the Clean Water Act. As the life of the 25-year Amendment progresses, the Council anticipates that this funding may decrease once the watershed strategies are completed for all 81 major watersheds, while implementation funding recommendations will increase.
- **Increase funding for drinking water protection activities.** The Council recommends funding at \$14.22 million, exceeding the Amendment's requirement of at least five percent of the Clean Water Fund to be targeted to protect drinking water sources. This funding will support a variety of activities, including enhanced groundwater monitoring and sealing of unused wells, nutrient best management practices, modeling and new health-based guidance for contaminants of emerging concern, and aquifer protection activities.
- **Increase funding for nonpoint source implementation activities.** The Council recommends funding at \$69.7 million, which will leverage millions of dollars from other funding sources to protect and restore Minnesota's waters. Demand for this funding has far exceeded available dollars. For example, in the first round of Clean Water Fund competitive grants in 2010, local government units submitted 210 applications, totaling more than \$44 million; only \$12 million was available.
- **Increase funding for point source implementation activities.** The Council recommends funding at \$35.02 million, which will leverage millions of dollars from other funding sources. This appropriation, coupled with other bonding and federal dollars, will support needed upgrades to the state's municipal wastewater and stormwater infrastructure. Municipalities requested \$26 million from the Total Maximum Daily Load (TMDL) Grant program in FY11, but only \$15 million was available. This recommendation will help meet some of that unmet need.
- **Increase funding for education and civic engagement.** The Council recommends funding at \$0.9 million for this activity. The Council's education funding focuses on those individuals whose behavior can have the most important impact on improving water quality. Point and nonpoint source implementation activities will only be successful if communities and watersheds have adequate resources to help citizens work together to identify and address water quality problems.
- **Increase funding for applied research and tool development.** The Council recommends funding at \$12.95 million to develop tools and applied research to better target critical areas and ensure implementation efforts are effective. This includes investments in several data management and interactive web tools to make watershed data more accessible and measurable, as well as in applied research for improving best management practices (BMP).
- **Continue current funding levels for Legislative Coordinating Commission (LCC) oversight of Clean Water Fund administration.** The LCC current funding is \$25,000 annually to maintain a public information web site on Clean Water Fund activities. The Council recommends that funding for this function remain steady over time.

Introduction and purpose of this report

The report fulfills the requirements of the Clean Water Legacy Act for the Council to prepare:

- A biennial report to the Legislature on the activities for which money has been or will be spent for the current biennium, and the activities for which money is recommended to be spent in the next biennium.
- An implementation plan that explains Minnesota's framework for identifying and cleaning up impaired waters, addressing general procedures and timeframes, and establishing priorities.

The Council recognizes that statewide water management is a long-term process. The degradation of Minnesota's lakes and rivers occurred over many decades and restoring those same waters to meet standards will be a lengthy process. Protecting the state's waters to prevent degradation is just as important as restoration, as restoration efforts are far more costly than preventative measures.

The Council's recommendations, therefore, address three basic functions in developing a statewide management process: monitor and assess existing water quality, restore and protect surface water and drinking water, and guide implementation activities.

In addition, the Council believes building civic engagement and local capacity are critical to ensure restoration, protection and implementation strategies are successful. Landowners, in cooperation with resource professionals, must be engaged at the local level to implement BMPs on the critical source areas in watersheds. Education and civic engagement opportunities are important at the local level, helping stakeholders understand the importance of making land management changes, which directly impacts water quality.

The Council's recommendations in this report represent a water management system that informs citizens about the condition of the state's waters, targets critical areas where implementation activities need to occur, and engages local stakeholders to make the changes needed to restore and protect the state's waters. These activities take time to complete and environmental outcomes are not immediate. However, staying the course and allowing the system to work is necessary to maintain the integrity and purpose of the Constitutional Amendment.

Following this systematic approach will produce positive outcomes that address citizens concerns by supporting abundant fishing and wildlife, lakes and rivers that are safe for swimming and other recreational activities—all together keeping Minnesota a great place to live.



Clean Water Council activities and priorities

Activities

The Council has continued to increase its knowledge on statewide water issues since the last biennial report. The Council invited various speakers, including federal and state agency representatives, members of environmental organizations and educators to provide their perspectives on groundwater strategies, implementation and delivery mechanisms, regional/local capacity and funding, tools for creating targeted implementation needs, and funding priorities. The input received enabled the Council to determine appropriate funding levels, program priorities and efficiencies. See the Council's Web site for more information on all meeting topics at: www.pca.state.mn.us/index.php/about-mpca/mpca-overview/councils-and-forums/clean-water-council/clean-water-council.html

The Council also continued to provide input on CWLA programs, offering guidance to state agencies and other entities on the implementation of statewide water programs.

Priorities for 2011

The Council will continue to investigate significant issues relevant to protecting and restoring the state's waters. In 2011, the Council's priorities will pursue the following:

- **Funding Priorities.** The Council will continue to investigate funding priorities, and understand the public's funding expectations and opportunities for program efficiencies among state agencies.
- **Targeted Implementation.** The Council will seek to better understand what regulatory tools apply to nonpoint sources, and investigate how to address precision targeting in non-agricultural areas of the state, so that implementation dollars are effectively utilized for maximum water quality improvements and expectations are met for funding public and private projects.
- **Groundwater.** The Council will focus on understanding the connectivity between surface and groundwater, how groundwater fits into the watershed approach and what is known about the regional quality and quantity of the groundwater supply and drinking water. This information will pave the way for future recommendations on groundwater protection and implementation strategies.



Clean Water Council members join Lessard-Sams Outdoor Heritage Council and Legislative Citizen-Commission on Minnesota Resources members at a field excursion on the Minnesota River, July 21, 2010. Hosted by the Renville and Redwood County Soil and Water Conservation Districts, the groups learned how the river's water quality has changed and viewed agricultural and conservation practices.

- **Applied Research and Tool Development.** The Council intends to investigate processes to determine BMP cost effectiveness, BMP effectiveness, identifying geographic needs and research priorities.
- **Education and Civic Engagement.** The Council will discuss its role in the education process, understand the public's expectations and address education and civic engagement needs of watershed stakeholders to ensure implementation projects are meeting the water quality goals established by restoration and protection strategies.
- **Local Capacity.** The Council intends to explore capacity issues of local units of government to ensure adequate resources are available for implementation activities to achieve water quality improvements across the state.
- **Program Coordination.** The Council will continue to seek opportunities to interface with the Lessard-Sams Outdoor Heritage Council, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) and other organizations to improve the effectiveness and efficiency of the state's natural resource programs.

Summary of Clean Water Fund progress and activities for FY10

Several water management activities are underway since the Legislature appropriated Clean Water funding in the 2009. The following are selected highlights of some of those activities from FY10. A complete summary of FY11 progress will be reported by the Council in its December, 2011 report. (In addition, each state agency maintains a comprehensive list of its activities and contact information can be found on the Council's web site—see inside front cover of this report for the web address).

It is important to note that these activities mark incremental progress toward outcomes; final success can take several years or even decades to achieve depending on the severity of the problem. As projects reach maturity, outcomes will be better understood. Additionally, the Clean Water Fund is an important portion of the water management funding picture in Minnesota, but it is also supported by other federal, state and local programs that fund ongoing efforts to preserve and restore Minnesota's water resources.

A long-term mix of local expertise and investment, combined with state and federal support is beginning to pay off. The MPCA reports that to date, there are 13 impairments (2 lakes and 11 river segments) that have been restored, and we anticipate ongoing success in the future as this work continues.

Monitoring and assessment

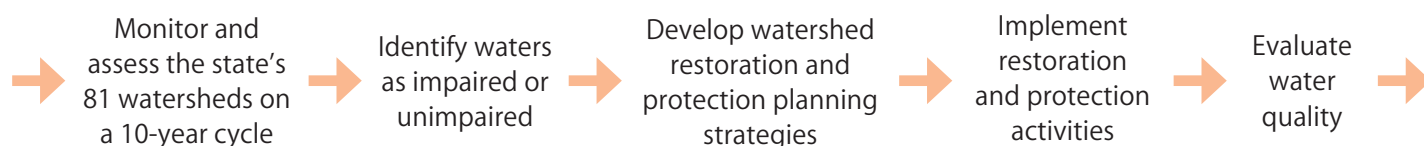
Required by the federal Clean Water Act, monitoring and assessment examines the current condition of the state's waters and determines whether they meet established water quality standards. With more than 11,800 lakes and 105,000 miles of streams and rivers in the state—the most in the lower 48 states—this is an enormous task. The state's "watershed approach" is a strategy to assess the condition of Minnesota's waters via a 10-year cycle relying on a combination of state agency monitoring; monitoring by other local, and federal agencies; citizen monitoring; and remote sensing. The outcome of this monitoring is the identification of waters that are impaired (i.e., do not meet

standards and need restoration), and waters in need of further protection to prevent impairment.

Highlights

- At the conclusion of the 2010 field season, monitoring work on seven of the state's 81 major watersheds was completed. Overall work is on pace and nearly 30 percent of the state's major watersheds have been monitored or monitoring is underway. Following the state's watershed approach, 100 percent of the watersheds will be monitored by 2018 (see the map on next page).
- Pollutant load monitoring, which characterizes water quality in all watersheds, continued for the fourth year at the outlets of all of the state's major watersheds.
- To significantly supplement statewide monitoring, 27 Surface Water Assessment Grants totaling just over \$1 million, were awarded to local government units and nonprofit organizations.
- To help provide detailed trend information on the concentration of pesticides in some of the most vulnerable aquifers in the state, more than 150 wells and springs are being monitored for a revised and more extensive list of current use pesticides. The majority of these wells are adjacent to farm fields, and were located and constructed specifically to evaluate groundwater impacts from the common use of pesticides.
- 187 stream flow gages were monitored to provide watershed information for the 81 major watersheds. Stream flow data are used to help establish TMDL limits and provide an understanding of how water flows off the landscape.
- Clean Water funds allow fish mercury assessments on 80 sites annually; General Fund revenues allow assessment of an additional 60 sites. With this information, the status of mercury-impaired waters and the outcomes of mercury reduction efforts can be tracked over time.

Watershed Restoration and Protection Process



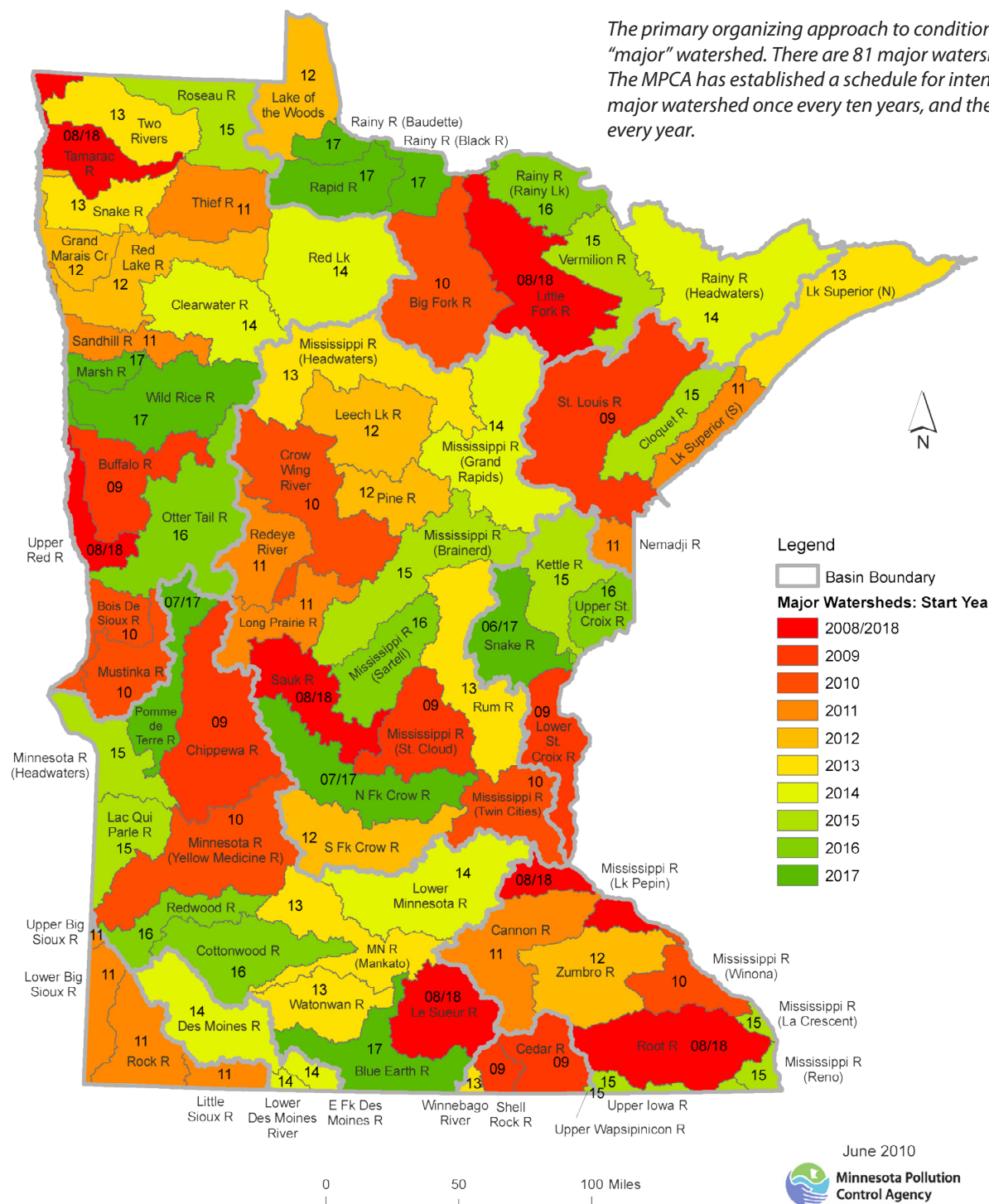
Watershed restoration and protection planning strategies

Based on the results of watershed monitoring and assessment activities, a watershed planning strategy is developed. This includes: a federally required TMDL study to calculate needed pollutant reductions to restore

impaired waters, and a protection strategy for maintaining and improving unimpaired waters. Existing local water plans and water body studies are incorporated into the planning process. An overall water quality framework which details restoration and protection strategies is developed for each watershed with input from interested parties.

Intensive watershed monitoring

The primary organizing approach to condition monitoring is the "major" watershed. There are 81 major watersheds in Minnesota. The MPCA has established a schedule for intensively monitoring each major watershed once every ten years, and the watershed outlets every year.



Highlights

- Watershed restoration and protection planning strategy development has started in all seven watersheds where intensive monitoring work has been completed. Strategy development is on pace to begin activities within 1-2 years following the completion of monitoring work in a watershed.
- Approximately 70 percent of all 2008 listed impairments have TMDL projects underway or are in the implementation phase.
- Specialized sampling is being done on biologically-impaired waters to effectively target TMDL efforts, and on some rivers with turbidity impairments.

Drinking water protection activities

These programs and activities are designed to ensure safe and sufficient drinking water for all Minnesotans through a strategic series of safeguards from source to tap.

Highlights

- To date, 35 source water implementation grants were awarded, totaling nearly \$284,000. These grants enable public water suppliers to protect drinking water sources by preventing or managing potential contamination.
- Technical assistance for developing source water protection plans was provided to 43 public water suppliers. This additional assistance accelerates progress towards the goal of a source water protection plan for every public water supply by the year 2020.
- Health-based drinking water guidance values for three contaminants of emerging concern* (metribuzin degradates; 1, 2, 3-trichloropropane; and triclosan) were developed. This new program allows for staff to develop guidance for these contaminants in advance of detections in drinking water sources.
- Currently six projects are being developed at the local level to improve nitrogen fertilizer use or irrigation efficiency, and quantify BMP effectiveness in groundwater sensitive areas of the state that have row crop agriculture. Local partners are typically soil and water conservation districts (SWCD) and environmental offices with expected participation from 15-20 counties.

- An ambient groundwater quality monitoring network is monitoring for an extensive suite of non-agricultural contaminants in urban and undeveloped parts of the State. The network serves as an early warning system for contamination to groundwater, with 110 wells monitored in FY10–11 and 170 wells expected to be monitored in FY11–12. Forty of the network's monitoring wells were sampled to determine concentrations of more than 120 contaminants of emerging concern*.
- The 11-county metropolitan groundwater level monitoring network plan was developed to improve understanding of water supply quantity and quality problems. This network will provide essential data on how water moves through aquifers, and helps local and state water managers make decisions to protect the future sustainability of drinking water supplies.
- Surface waters across the entire metropolitan area were assessed for their vulnerability to impacts from groundwater withdrawals.



Volunteers learned how to monitor water quality at Swan Lake for a Surface Water Assessment Grant given to the Todd Soil and Water Conservation District. The project was a joint effort between the Todd SWCD, lake associations and landowners. Ten trained volunteers, partnering with professional local and state staff, found that Long Lake is not impaired and that protection projects should be implemented. Big Swan Lake, however, was determined to be impaired and will be listed on Minnesota's 2010 impaired waters list.

* Contaminants of emerging concern are defined as substances that have been released to or detected in Minnesota waters or have the potential to migrate to Minnesota waters and that are characterized by a perceived or real threat to public health; Minnesota drinking water health-based standards that currently do not exist or need to be updated to reflect new toxicity or occurrence information; insufficient or limited toxicological information or toxicity information that is evolving or being re-evaluated; or, significant new source, pathway, or detection limit information. (Minnesota Department of Health definition)

Nonpoint source implementation activities

Nonpoint source implementation includes programs and actions directed at preventing polluted runoff from fields, streets, lawns, roofs and other similar sources. Partnerships with state agencies and various local units of government, including watershed districts, municipalities, and SWCDs, are critical to implement these water quality activities.

Highlights

- \$12 million in competitive state grants were awarded to local governments (watershed management organizations, SWCDs, counties, etc.) for implementation projects. Local match and leveraged federal funds increased the project dollars available by an additional \$7.5 million.
- \$1.69 million in loans were awarded to local governments, supporting more than 40 water quality projects through the AgBMP Loan Program.

Point source implementation activities

The focus of point source implementation activities is to improve municipal wastewater and stormwater treatment to meet pollution reductions called for by TMDLs, upgrade aging infrastructure, and to help small communities invest in new infrastructure.

Highlights

- 15 implementation TMDL grants were awarded, totaling \$9.4 million. This leveraged more than \$66 million in other project funding.
- Eight phosphorus reduction grants were awarded, totaling \$3.3 million. This leveraged more than \$100 million in other project funding.
- Six small community technical assistance grants were awarded totaling \$146,500, and 13 more projects are preparing for construction in 2011.

Education and civic engagement

The goal of this activity is to enhance education about Minnesota's water needs and increase civic engagement to ensure long-term protection and restoration of Minnesota's waters. The CWLA charged the Council with developing strategies for educating and encouraging the participation of citizens, stakeholders and others to identify, restore and protect Minnesota's waters.

Highlights

- As charged by the Legislature in 2009, the University of Minnesota's Water Resources Center created a comprehensive, 25-year framework for the sustainable management of Minnesota's water resources and the Clean Water Fund. The plan, titled *Minnesota Water Sustainability Framework*, will be presented for recommendation to the Legislature in January of 2011.
- A task group is providing advice and assistance to the contaminants of emerging concern program to develop a process for selecting and prioritizing chemicals for future assessment based on potential risks to people. This cutting edge collaboration between MDH scientists, industry, academics and environmental advocacy groups will allow MDH to select chemicals that are of highest priority within a unique Minnesota context.
- Developed curriculum and held training for technicians performing on-farm assessments at livestock operations as part of the Livestock Environmental Quality Assurance (LEQA) program. Assessments were conducted at livestock operations located within impaired watersheds, and in addition to the training, meetings were conducted with stakeholder groups to answer questions and discuss environmental benefits of the LEQA program.
- Digital Terrain Analysis with LiDAR workshops were held, training more than 70 professionals to use digital elevation data to identify critical areas of the landscape.

Clean Water Council FY12–13 recommendations

When the citizens of Minnesota voted on the Clean Water, Land and Legacy Amendment, protecting and restoring the state's waterbodies was a key factor in getting the initiative passed.

The Council strongly agrees with what they perceive as the public's desire to see successful implementation efforts. The Council also appreciates the importance of completing federally-required restoration and protection planning strategies prior to initiating implementation activities. These strategies will indicate critical areas in watersheds where implementation activities will effectively improve water quality and quantity.

Council members considered the needs of the various water management activities as proposed by state agencies because of the 25-year life span on the funding. The Council concluded that some activities will need long-term funding to continually produce necessary data, others may be decreased over time after studies have been completed, and yet other activities, like implementation of on-the-ground projects, will need to be ramped up to address the

most serious water quality and quantity issues. The Council also concluded that building civic engagement and local capacity are integral components of a successful water management process.

In its recommendations, the Council includes funding for the following seven agencies: the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Agriculture (MDA), the Public Facilities Authority (PFA), the Minnesota Department of Natural Resources (DNR), the Board of Water and Soil Resources (BWSR), the Minnesota Department of Health (MDH) and the Metropolitan Council. Additionally, the Council recommends continued funding to the Minnesota Legislative Coordinating Commission for its administrative oversight of the Clean Water Fund.

To achieve the Amendment's long-term goals, the Council recommends appropriating \$176.485 million* for the FY12-13 biennium from the Clean Water Fund to the following activities.

Recommendation 1 **Continue current funding levels for monitoring and assessment activities**

The Council recommends funding monitoring and assessment at \$20.96 million. This funding will support monitoring and assessment needs for the next biennium, as well as continue the 10-year intensive watershed monitoring schedule and statewide major watershed outlet pollutant load monitoring. Other activities included in this recommendation are: monitoring activities for pesticides, stream flow monitoring, lake IBI (Index of Biological Integrity) assessments and fish mercury assessment activities. Completing assessments is a Clean Water Act requirement. The Council anticipates that funding these activities will need to remain steady over time, first to complete the monitoring schedule, then to fund effectiveness and trend monitoring activities.

* As of June 17, 2010, the Minnesota Department of Management and Budget estimated the Clean Water Fund will have approximately \$176.485M available in FY12-13. This Council used this budget estimate to guide its recommendations.



Minnesota Department of Agriculture field staff doing a flow measurement on the Le Sueur River.

Recommendation 2

Continue current funding levels for watershed restoration and protection planning strategies

The Council recommends funding for this activity at \$22.71 million. This will enable development of watershed restoration and protection planning strategies and to provide technical assistance. These activities not only guide implementation efforts, but are required by the Clean Water Act. Additionally, protection strategies are needed to guard the state's high quality waters. The Council anticipates this funding may decrease after the first 10-year cycle for monitoring and preparing restoration/protection strategies for the 81 major watersheds are completed.

Recommendation 3

Increase funding for drinking water protection activities

The Council recommends funding at \$14.22 million, exceeding the Amendment's requirement that at least five percent of the Clean Water Fund to be targeted to protect drinking water sources.

Activities included in this recommendation are:

- Groundwater assessment activities to enhance the ambient network, modeling to support groundwater and drinking water interactions and contaminants of emerging concern monitoring.
- Nitrate monitoring and promotion of nutrient BMPs.
- Water supply planning, aquifer protection and monitoring activities.
- Continued implementation to the Twin Cities metro water supply plan.
- Assessment, evaluation, and development of health-based guidance for emerging contaminants, and the acceleration of source water protection through plan development and grants to local governments.
- Increased cost share for sealing unused wells. This will help protect groundwater used for drinking water from contamination by assisting public and private well owners to seal unused wells by sharing up to 50 percent of the cost.

In addition, a new recommended activity includes \$900,000 in funding for a water appropriation electronic permitting system. This will capture essential information about water quality appropriation use and users through an online application process to more effectively and efficiently manage water supplies.

The Council anticipates that funding for drinking water activities will increase over time.

Recommendation 4

Increase funding for nonpoint source implementation activities

The Council recommends funding for this activity at \$69.7 million. Adequate funding for this activity is pivotal to implement watershed restoration and protection strategies and to invest in on-the-ground activities that target nonpoint source pollution.

In 2009, BWSR opened an interagency competitive request for proposal round from Clean Water Funding. Local government units submitted 210 applications, totaling more than \$44 million. Only \$12 million was available.

The Council recognizes that funding requests will always exceed the amount of money that is available, however, this recommendation includes an increase from FY10-11 funding levels to begin addressing the vast needs for nonpoint source protection, restoration and preservation activities. Many of these grant programs require local matches. The Clean Water Fund dollars provide opportunities to leverage funding from other local and federal entities.

This recommendation includes the following:

- Funding for surface and drinking water protection and restoration projects (\$27.5M); targeted local resource protection and enhancement grants (\$6M); measures, results and accountability (\$1.8M); conservation drainage management and assistance (\$2M); permanent land and water protection (\$14M) and the Community Partners Clean Water Program (\$3.0M). This funding also includes resources to help build local capacity for conservation targeting.
- Funding for the AgBMP Loan Program (\$10M), supporting crop and livestock producers that implement agricultural BMPs and construct conservation and pollution abatement structures on the landscape.
- Funding for the Great Lakes restoration (\$1.5M)—to be leveraged by federal grant funds, and Clean Water Partnership Program grants (\$2.5M).

The Council anticipates that funding nonpoint source implementation activities will increase over time, as polluted waterbodies are targeted and as strategies are developed.

Recommendation 5

Increase funding for point source implementation activities

The Council recognizes that there is a need to improve infrastructure to meet wastewater and stormwater treatment requirements to both prevent and restore impaired waters. The Council recommends a total of \$35.02 million for the following Clean Water Legacy programs:

- TMDL Grant Program (\$22.37M);
- Phosphorus Reduction Grant Program (\$8.55M); and
- Small Community Wastewater Treatment Grant and Loan Program (\$2.5M).

Additionally, the Council recommends \$1.6 million for wastewater and stormwater implementation activities. This appropriation, coupled with other bonding and federal dollars, will help to support needed upgrades to the state's infrastructure. The Council anticipates that funding for point source protection and restoration activities will need to be maintained or increased over time.

Recommendation 6

Increase funding for education and civic engagement

The Council recommends \$900,000 for this activity in FY12-13. Point and nonpoint source implementation activities need adequate civic involvement, allowing citizens to identify water quality problems and implement solutions. The Council recommends funding \$300,000 to develop products and services that will help local governments assess and improve civic engagement opportunities in Minnesota watersheds during restoration and protection strategy development. An additional \$600,000 is recommended for resources that will enhance local capacity to engage the public during restoration, protection and implementation projects and activities. The Council supports building community capacity and developing targeted education programs based on community needs during implementation activities.

The Council anticipates a small increase in funding for these activities during the first 10 years of the Amendment when watershed strategies are being developed, then a steady level of funding for implementation activities in following years.

Recommendation 7

Increase funding for applied research and tool development

Tens of millions of dollars will be invested in water management activities over the life of the Amendment funding. To help ensure these dollars are spent to best serve the environment, the Council recommends \$12.95 million to invest in tools that will target critical areas and develop applied research to ensure implementation efforts are effective. Funding the recommendations in this category will assist in the production of indicators of environmental outcomes.

Activities included in this recommendation include:

- Investing in applied research for agricultural and stormwater best management practices, and TMDLs.
- Developing decision support tools such as LiDAR, the Watershed Assessment Tool, and the Restore Your Shore Interactive Web Tool.
- Supporting interagency data management needs that will interface existing systems to provide a central location for reporting, analysis and data management of watershed data, and development of a biomonitoring database. In addition, the Council recommends development of a database to inventory and search for relevant water-related research.

The Council anticipates that funding for applied research and tool development activities will remain steady over time, as new pollutant sources and emerging contaminants are identified, and as new tools are needed.

Recommendation 8

Continue current funding levels for Legislative Coordinating Commission (LCC) oversight of Clean Water Fund administration

The Council recommends continued funding of \$25,000 to the Legislative Coordinating Commission (LCC) for oversight of Clean Water Fund administration, and to maintain a public information Web site to inform Minnesota's citizens about water management activities. The Council recommends that funding for this oversight will remain steady over time.

Clean Water Council budget recommendations

As discussed in this report, the following table summarizes the Council's proposed budget recommendations for FY12-13.

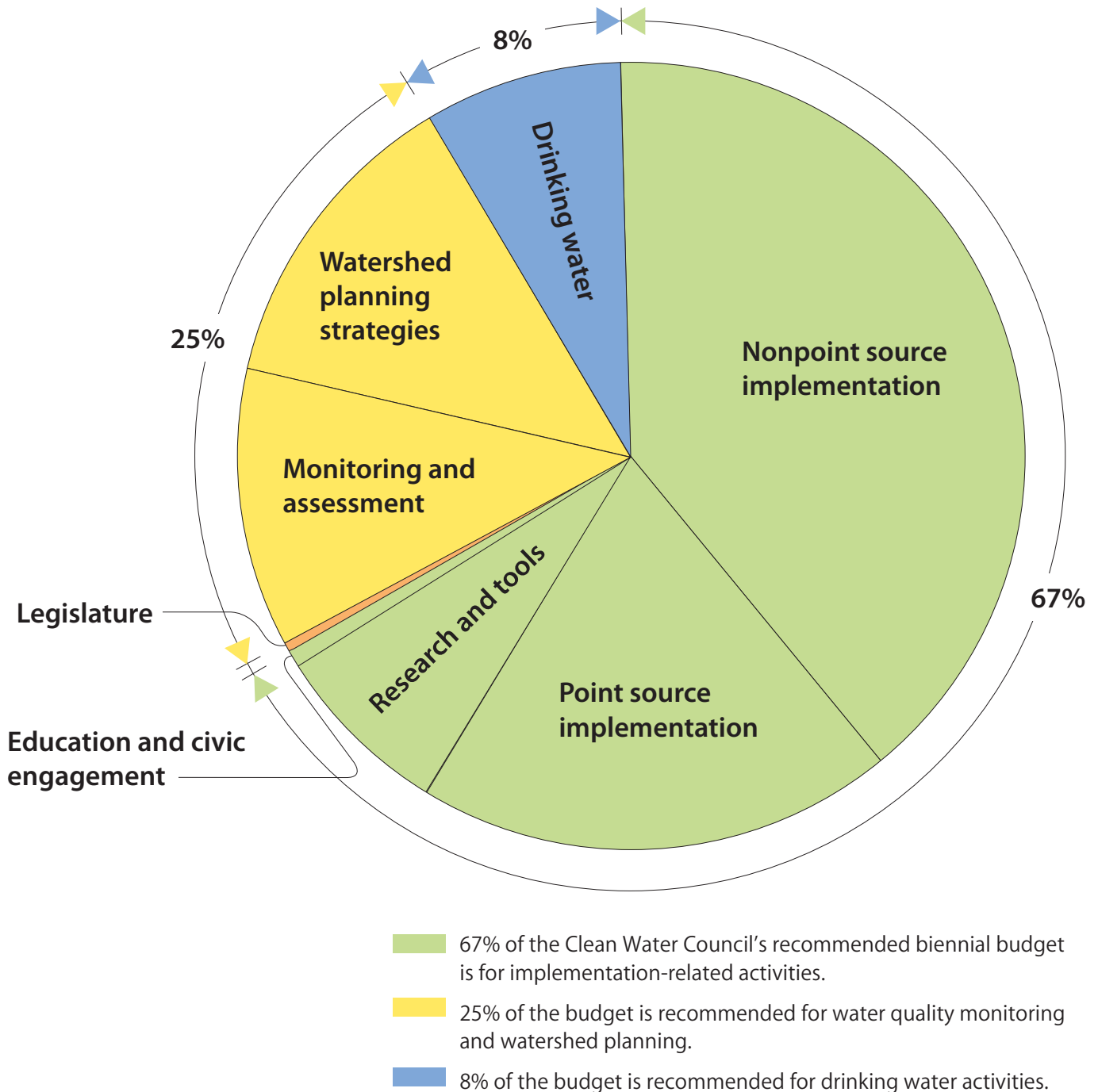
Clean Water Fund activity	Clean Water Council FY12-13 recommendations* (in millions)
Monitoring and assessment	\$20.960
Continue monitoring and assessment efforts to meet the 10-year cycle.	\$15.000
Pesticides monitoring in surface water and groundwater	\$0.700
Stream flow monitoring	\$2.700
IBI lake assessments	\$2.300
Fish mercury assessments	\$0.260
Watershed restoration and protection planning strategies	\$22.710
Fund watershed restoration and protection strategies	\$18.800
Ecological, hydrological and biological technical assistance for strategies	\$3.910
Drinking water protection	\$14.220
Ambient network groundwater assessment	\$2.250
Monitoring and trend evaluation of nitrates; crop specific BMP promotion	\$1.700
Water supply planning, aquifer protection and monitoring	\$3.000
Water appropriation electronic permitting	\$0.900
Continued implementation of Twin Cities metro water supply plan	\$1.000
Development of health-based guidance contaminants of emerging concern	\$2.040
Source water protection grants	\$2.830
Well sealing cost share	\$0.500
Nonpoint source implementation activities	\$69.700
Great Lakes restoration	\$1.500
Clean Water Partnership grants	\$2.500
AgBMP Loan Program	\$10.000
Technical Transfer, Pilot Projects and Demonstration Sites	\$1.400
Surface and drinking water protection and restoration projects	\$27.500
Targeted local resource protection and enhancement grants	\$6.000
Oversight, assessment and reporting of local government performance and results	\$1.800
Conservation drainage management and assistance	\$2.000
Riparian buffer and wellhead protection easements	\$14.000
Community partners clean water program	\$3.000

* As of June 17, 2010, the Minnesota Department of Management and Budget estimated the Clean Water Fund will have approximately \$176.485M available in FY12-13. The Council used this budget estimate to guide its recommendations.

Clean Water Fund activity	Clean Water Council FY12–13 recommendations* (in millions)
Point source implementation activities	\$35.020
NPDES wastewater/stormwater TMDL implementation	\$1.600
TMDL grants for WWTP and stormwater	\$22.370
Phosphorus reduction grants	\$8.550
Small community WWT grants and loans	\$2.500
Education and civic engagement	\$0.900
Civic engagement activities in local watershed projects	\$0.300
Enhance local capacity for targeted education	\$0.600
Applied research and tool development	\$12.950
Stormwater research and guidance	\$0.800
TMDL research and database development	\$2.300
Research and evaluation of agricultural contributions to impaired waters	\$2.100
Shoreland stewardship, implementation coordination and biomonitoring database development	\$3.950
Complete LiDAR data collection	\$2.700
Delivery of decision support tools (Watershed Assessment Tool, GSSHA Model, and Restore Your Shore interactive web tool)	\$0.600
Research inventory database	\$0.500
Legislature	\$0.025
Legislative Coordinating Commission Web site and fund auditing	\$0.025
Total	\$176.485

* As of June 17, 2010, the Minnesota Department of Management and Budget estimated the Clean Water Fund will have approximately \$176.485M available in FY12-13. The Council used this budget estimate to guide its recommendations.

FY12–13 CWF recommendations (\$176.485M)



The Clean Water Council acknowledges that funding recommendations for these activities will change over time. Some activities will need long-term funding, others may be decreased over time and yet other activities will need to be ramped up to address the most serious water quality and quantity issues. As the life of the Amendment progresses, the Council anticipates that it will recommend more funding for implementation projects that will protect and restore the state's waters for years to come.

Note: this graph shows how funds from the Clean Water Fund will be used, but does not include other major funding sources from federal, bonding, and other sources.



The city of Lester Prairie was awarded \$404,000 in Clean Water Funds from the Phosphorus Reduction Grant program to upgrade the city's wastewater treatment plant. The project will help the city meet new permit requirements to reduce phosphorus discharged to the South Fork of the Crow River by over 1,000 pounds each year.



Volunteers assisted with the construction of rain gardens and swales as part of a \$233,000 Clean Water Fund grant through the Board of Water and Soil Resources to the Crow Wing Soil and Water Conservation District (SWCD). Partners with the SWCD included the City of Fifty Lakes, Fifty Lakes Property Owner Association, Minnesota Conservation Corps, Master Gardeners, and Boy Scouts.



Approximately \$4.5 million in Clean Water Funds will be awarded to farmers, rural landowners, and farm supply businesses via the AgBMP Loan Program. These loans can be used for projects ranging from feedlot improvements to septic system upgrades. One example of an eligible project is the construction of a manure storage basin (lower right portion of photo), which protects water quality by keeping manure contained and out of waterways.

