

# Biennial Report of the Clean Water Council



**Clean Water Legacy Act: Progress and Recommendations**

December 2008



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### Clean Water Council membership (as of October 2008)



Left to right, back row: **William Moore** — Metropolitan Council, **Steve Woods** — Board of Water and Soil Resources, **Delvin Haag** (Buffalo) — cities, **David Bennett** (Burnsville) — fishing organization, **Marilyn Bernhardson** (Redwood Falls) — soil and water conservation districts, **Louis Smith** (Minneapolis) — lakes and streams nonprofit organization, **Terri Yearwood** — Department of Natural Resources, **Joe Martin** — Department of Agriculture, **Christopher Kolbert** (St. Charles) — hunting organization.

Front row: **Gary Pedersen** (Dover) — township officials, **Earl Bukowski** (Sauk Rapids) — rural counties, **Pamela Blixt** (Minneapolis) — watershed districts, **Sarah Strommen** (Ramsey) — environmental organization, **Victoria Reinhardt** (White Bear Lake) — metro-area counties, **Gaylen Reetz** — Minnesota Pollution Control Agency, **Keith Hanson** (Duluth) — businesses.

Not pictured: **Brian H. Davis** (St. Paul) — environmental organization, **Scott Hoese** (Mayer) — statewide farm organization, **Steven Pedersen** (Coon Rapids) — businesses, **Deborah Swackhamer** (Stillwater) — state higher education system, **Paul Torkelson** (St. James) — statewide farm organization

Our thanks to former members who served in 2007 & 2008: **David Jeronimus** — businesses, **Bob Vogel** — counties, and **John Greer** — cities.

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## Executive summary

Enacted in June 2006, the Clean Water Legacy Act (CWLA) established the Clean Water Council. The 23-member Governor-appointed Council's mission is to advise Minnesota's legislative and executive branches on the administration and implementation of the CWLA and to facilitate coordination between all stakeholders playing a role in achieving clean water for Minnesotans. The Council was officially launched in March 2007.

As required by the CWLA, the Clean Water Council has prepared policy and funding recommendations for FY2010 and 2011 (see detailed budget summary on page 9), including:

- **Funding for monitoring and assessment.** The Council recommends funding for monitoring and assessment at \$14.89 million in FY2010–2011. This is consistent with the one-time funding of \$14.89 million in FY2008–2009. At this funding level, 100 percent coverage of priority waters can be achieved in all major watersheds on a 10-year cycle.
- **Funding for TMDL development.** The Council recommends funding for TMDL development at \$20.61 million in FY2010–2011. This is equal to FY2008–2009 one-time funding levels, which increased the capacity of state and local governments to adequately develop TMDL studies on a timely basis. Progress will further improve if this funding level is met while adopting a major watershed approach (further described on page 4 of this report).
- **Ramp-up restoration and protection efforts.** There is a broad and growing need to restore impaired lakes, rivers and streams and to prevent clean waters from becoming impaired. The Council recommends \$61.42 million for FY2010–2011, compared to one-time funding of \$18.5 million in FY2008–2009, to begin meeting this need.
- **Infrastructure investments.** There is a growing need to improve wastewater and stormwater treatment. Specific budget recommendations from the Council will be provided for the 2009 Legislative session.
- **Invest in civic engagement to enhance long term success of restoration and protection efforts.** To meet the civic engagement goals of the CWLA, the Council recommends \$1.8 million for



*Mississippi River confluence with St. Croix River upstream of Lake Pepin shows impacts of turbidity on water clarity.*

the biennium to develop and test a civic science program in targeted watersheds.

- **Define and report on performance measures to track CWLA effectiveness.** The Council developed an effectiveness tracking and reporting framework to meet the CWLA's call for outcome related performance measures. State agencies will further define and begin reporting on specific measures in 2009.
- **Support high priority research to more effectively address impaired waters.** The Council sponsored and utilized the results of a research symposium, convened by the University of Minnesota Water Resources Center, that brought together over 150 policy-makers and practitioners to identify critical research needs. The Council recommends that state agencies prioritize their research dollars to meet these needs.

### Constitutional Amendment

The Council strongly supported the need for a long-term source of funding for water quality restoration and protection in Minnesota and adopted a resolution on this issue in January 2008 (see Appendix 2). Since the proposed "Clean Water, Wildlife, Cultural Heritage, and Natural Areas" amendment to the state constitution was adopted by the voters in the 2008 general election, the Council encourages the Legislature to fully fund the activities identified in this report. The Council will also be recommending additional funding and capital bonding to meet infrastructure and other critical needs.

# Introduction and purpose of this report

This report fulfills Clean Water Legacy Act requirements (see Appendix 1) for the Council to prepare the following:

- 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.

## Minnesota’s impaired waters and federal requirements

The federal Clean Water Act (CWA) requires states to monitor and assess all waters, list waters not meeting water quality standards, conduct Total Maximum Daily Load (TMDL) studies to identify the cause of each impairment, set pollution reduction goals to attain standards, and implement corrective measures to restore waters.

About 40 percent of Minnesota’s waters are impaired. As of 2008, a total of 2,575 impaired lake and stream segments have been identified. With only 14 percent of the state’s river miles and 18 percent of its lakes assessed, the number of impaired waters is likely to grow substantially in the years ahead.

## Minnesota’s Clean Water Legacy Act

To meet Clean Water Act requirements, Minnesota’s CWLA was enacted in 2006 to:

- Accelerate assessment of Minnesota’s waters.
- Provide resources to develop TMDL studies.
- Target additional financial resources to existing state and local programs designed to restore impaired waters and protect water quality for those waters that are unimpaired.
- Leverage additional federal, local and private resources where possible.

The 2006 CWLA provided one-time funding of \$24.95 million for identified clean-water priorities to be funded through the Minnesota Pollution Control Agency (MPCA),

Department of Natural Resources (DNR), the Board of Water and Soil Resources (BWSR), the Minnesota Department of Agriculture (MDA), and the Public Facilities Authority (PFA). The 2007 legislative session resulted in a one-time appropriation of \$53.975 million for the FY2008–2009 biennium.

The CWLA was created by the Legislature following several years of work by a broad coalition of state and local governments, environmental and conservation organizations, businesses, and agricultural interests who led efforts to secure passage of the bill. The Clean Water Council was formed with this spirit of collaboration in mind.

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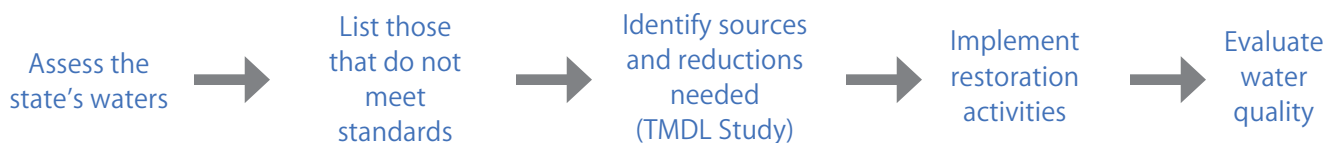
“The purpose of the Clean Water Legacy Act is to protect, restore, and preserve the quality of Minnesota’s surface waters by providing authority, direction, and resources to achieve and maintain water quality standards for surface waters as required by section 303(d) of the federal Clean Water Act.”

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— MN Statutes 114D.10, (sub. 1)

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## The TMDL process



## Accomplishments of the Clean Water Council

Since its formation in early 2007, the Clean Water Council has:

- Met on a monthly basis to develop policy and budget recommendations on the implementation of the Clean Water Legacy Act (see following pages).
- Discussed strategies with a wide range of experts in water policy and resource management.
- Provided input on agency CWLA-funded programs.
- Provided recommendations to the Governor on the PFA's 2008 capital budget request.
- Sponsored and utilized the results of a research symposium, convened by the University of Minnesota Water Resources Center, that included more than 150 scientists, policy makers and practitioners to discuss the current state of water-quality research in Minnesota and identify gaps for impaired waters (see Appendix 3).
- Developed an effectiveness tracking and reporting framework to meet the CWLA's call for outcome-related performance measures (see Appendix 4).

### Council strategies

The Council developed its "Mission, Authority and Organizing Principles" (Appendix 5), and a work plan further defining how it will fulfill its statutory requirement to advise the implementation of the CWLA. The work plan outlines strategies and tasks to address the following needs:

- **Civic engagement** in the impaired waters process.
- **Priority recommendations** for TMDLs, restoration and prevention activities.
- **Work integration** of state agencies to maximize effectiveness of program delivery.
- **Local partnerships** to identify effective solutions, enhance outreach, and seek ways to leverage local expertise and state funding.
- **Measurable outcomes** to gauge program performance.
- **Prevention activities** to protect water quality.
- **Strategic research** needed to protect and restore water quality.
- **Monitoring** needs and ways to better utilize government agencies and citizen volunteers.

The Council organized itself into four work groups in order to carry out the strategies listed above. See page 10 for work products.



*The Council gained insights into stormwater management and low impact development during an urban tour of the Minnehaha Creek Watershed District in September 2008.*



*Council member Paul Torkelson explains the farming process and the economics of agricultural production to other members, while visiting his farm in St. James, MN. This was part of an October 2007 agricultural and wastewater field tour in southern Minnesota.*



## Progress and recommendations

A critical goal of the Clean Water Council is to foster coordination and cooperation among all public agencies and private entities concerning water management, conservation, land use, land management, and development plans as relevant to the implementation of the Act. Progress on CWLA implementation from FY2007–2009 indicates that collaboration, particularly between state agencies and local government, is on track.

To build on this progress and implement its strategies, the Clean Water Council's four work groups developed the following policy and funding recommendations for FY2010–2011. The recommendations are designed to help improve the efficiency and effectiveness of Clean Water Legacy Act-supported programs. (See page 9 for a detailed summary of the budget recommendations).

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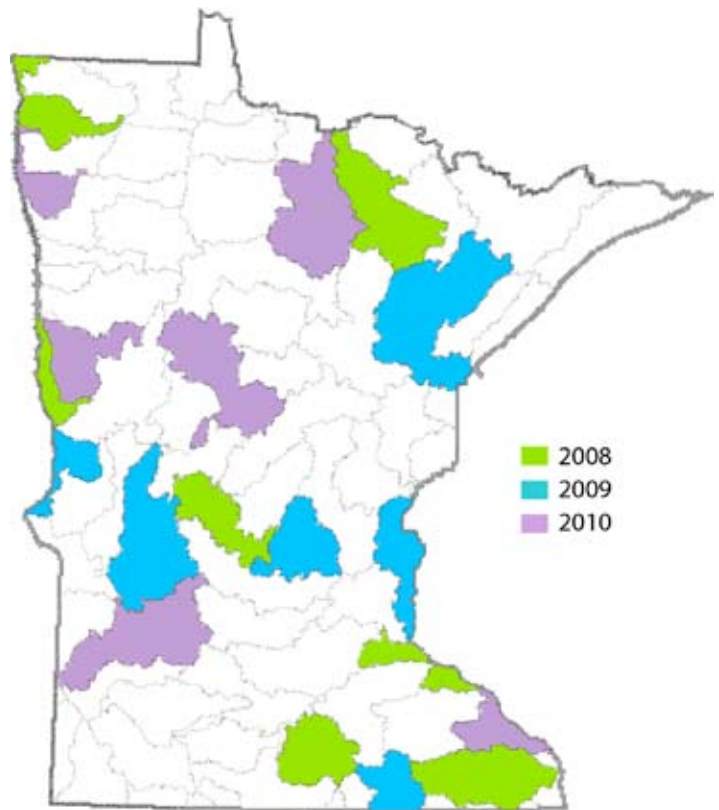
### Recommendation 1:

#### Develop a statewide watershed approach to prioritize and integrate monitoring and assessment, TMDL, and restoration and protection activities

The CWLA called for the Clean Water Council to develop prioritization strategies for restoration and protection activities. To achieve this goal, the Council endorsed a new strategy for a watershed management system (see Appendix 6).

The strategy is based on synchronizing monitoring and assessment, TMDL development, restoration and protection on the major watershed scale (8-digit level watershed, based on the hydrologic unit code). As described in the Council's report, (see Appendix 7), monitoring and assessments will be performed on a 10-year cycle (approximately eight major watersheds per year). The strategy integrates state agency, local government and citizen monitoring. TMDL studies will begin 2–3 years following completion of assessment. The planning process will ultimately result in a watershed plan that integrates both restoration and protection implementation activities.

While this watershed approach is currently being employed for monitoring, the state is in the early stages of integrating TMDL development and restoration/protection activities at the major watershed level. In FY2009 and FY2010, pilot projects will begin with local and state partners to fully integrate all activities into a comprehensive watershed plan.



*Major watersheds to be monitored 2008–2010. Pilot projects will begin in 2009 to integrate TMDLs, restoration and protection activities.*

Advantages of following an integrated watershed management approach include:

- Enables monitoring of all watersheds in 10 years.
- Integrates impaired and unimpaired waters into a single watershed management plan.
- Creates a predictable cycle of water management.
- More effectively engages public and stakeholders in watershed planning and implementation activities.

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### Recommendation 2:

#### Funding for monitoring and assessment

The Council recommends funding levels at \$14.95 million for FY2010–2011, with an emphasis on monitoring lakes and streams using a watershed framework. This is consistent with one-time funding levels in FY2008–2009. At this level of funding, 100 percent coverage of priority waters can be achieved in all major watersheds on a 10-year cycle.



**Progress report on monitoring and assessment:** The CWLA set a goal to identify the state's impaired waters within 10 years from the Act's passage and to ensure continued evaluation of surface waters for impairments. To achieve this goal, approximately \$2.1 million of one-time funding was appropriated for monitoring and assessment in FY2007 and \$14.9 million in FY2008–2009.

The Council found that the state's investment in monitoring and assessment activities is paying off. In 2006, only about 18 percent of Minnesota lakes had been assessed for conventional impairments and 14 percent of the state's stream miles. With the FY2008–2009 funding, state agencies are now monitoring at least 100 lakes and 500 stream sites each year, and are on track to assess all of the state's major watersheds on a 10-year cycle (see graphs).

This increased assessment coverage is further supplemented by local and volunteer monitoring efforts funded by CWLA surface water assessment grants, which totaled \$3 million in one-time funding in FY2007 and 2008. These grants to local government and citizen groups are being used to sample more than 475 lakes and 150 streams (see graphs). These local projects are integral to the overall monitoring strategy, which relies on local and volunteer efforts to help target state agency monitoring and to enhance the coverage (both spatially and over time) of the monitoring and assessment effort.

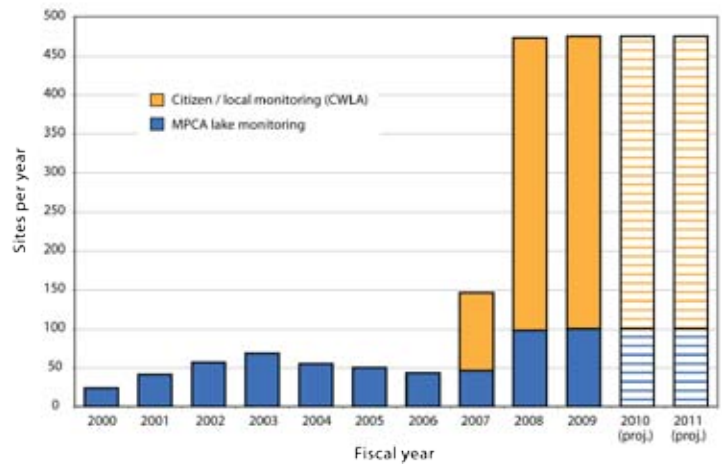
Finally, the CWLA has enabled the establishment of water flow and pollutant load monitoring stations at the outlets of each of the state's major watersheds, to provide a long-term record of watershed conditions. The CWLA has also allowed state agencies to monitor 160 additional sites for mercury in fish tissue.

### Recommendation 3:

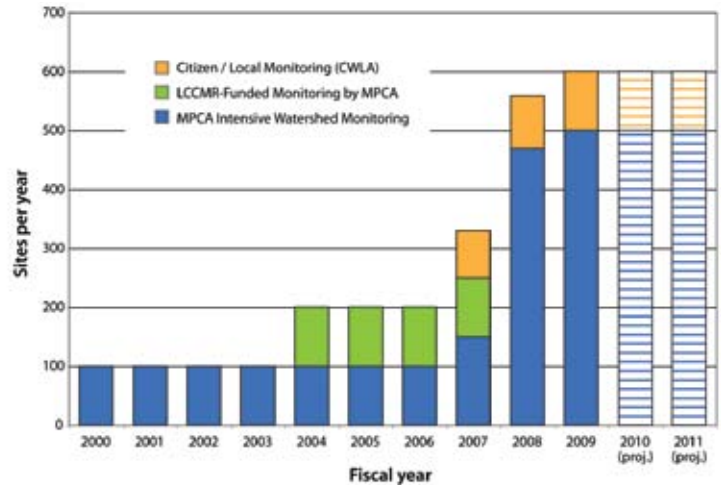
#### Funding for TMDL development

The Council recommends funding levels for TMDL development at \$20.61 million. This is consistent with one-time funding levels in FY2008–2009 and will provide state and local governments with the capacity to develop TMDL studies on a timely basis, and transition to a major watershed approach. This approach will facilitate TMDL studies that address multiple impairments throughout a watershed and more efficiently engage local water management entities and stakeholders. In addition, \$0.9 million is recommended in new funding for civic engagement activities in watersheds for TMDL development (see Recommendation 7 for further explanation).

**Lake assessment monitoring**



**Stream assessment monitoring**

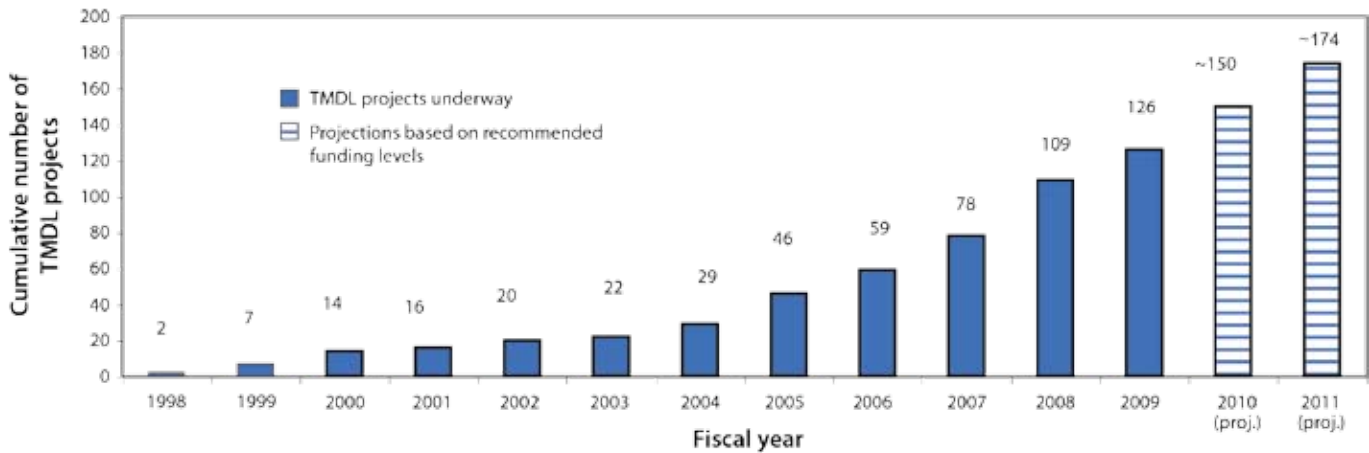


*Monitoring progress from local government, citizens and state agencies, and projections in FY2010–2011 (at recommended funding levels). 'LCCMR' funding refers to a grant from the Legislative-Citizens Commission on Minnesota Resources.*

**Progress report on TMDLs:** The CWLA requires the completion of TMDL studies in a timely manner to meet federal Clean Water Act requirements. An approved TMDL is required prior to permitting new or expanded point sources and is critical for planning environmentally sustainable growth. Prior to CWLA funding, Minnesota had fallen far behind in completing TMDLs on schedule. To remedy this situation, one-time funding of approximately \$3.2 million in FY2007 and \$20.6 million in FY2008–2009 was appropriated for TMDL development.

As a result of CWLA funding, nearly 50 percent of all waters impaired by conventional pollutants like nutrients, bacteria and sediment (535 of 1,090 total listings), are now being addressed by TMDL projects that are underway (see graph). At this rate, the state is now on track to complete all studies within 15 years after appearing on the impaired waters list, as required by the U.S. Environmental Protection Agency.

## TMDL project ramp-up



The cumulative number of TMDL projects underway has significantly increased from FY2007–2009 due to CWLA appropriations. Projections for FY2010–2011 show continued progress at recommended funding levels.

In addition, more than 80 percent of TMDL projects are led by local government agencies. This was an important goal of the CWLA to provide grants for “third-party TMDLs” to qualified local public agencies who can connect with key stakeholders and who often have the best understanding of effective and equitable solutions to pollution problems.

Finally, in 2007, Minnesota achieved a national first when it gained EPA-approval of a statewide mercury TMDL addressing nearly 1,000 mercury impaired lakes and rivers. A year-long stakeholder effort followed that resulted in consensus on an implementation plan that includes unprecedented reductions in mercury from air sources, including an 86 percent reduction from Minnesota’s coal-fired power plants.

### Recommendation 4:

#### Ramp-up restoration and protection efforts

To better meet the growing demand of eligible restoration and protection projects, the Council recommends nonpoint source restoration and protection be increased to a level of \$61.42 million for FY2010–2011. This total includes \$54.92 million for restoration and protection, plus \$5.60 million for the Ag BMP loan program and technical assistance. In addition, \$0.9 million is recommended in new funding for civic engagement activities related to restoration and protection activities (see recommendation 7).

In FY2007–2008, CWLA grant applications from local units of government for restoration and protection projects exceeded available funds on about a 5 to 1 ratio: \$14.3 million was available for \$71.9 million in requests. Demand for restoration funding has been growing as more and more TMDL studies and their implementation plans are

approved. Approximately \$530 million in restoration needs have been identified in the 13 currently approved TMDL implementation plans alone. Total costs for each plan ranged from approximately \$300,000 to \$108 million, largely depending on the size of the watershed and severity of the problem.

Because of the growing competitive pool of potential applicants, the Council recommends using the following criteria to prioritize grant requests:

- *Fund ongoing projects that have demonstrated success:* The Clean Water Council recommends funding the continuation of restoration projects that are clearly accomplishing their proposed work plans in a timely manner.
- *Fund projects that will show improved water quality in a reasonable amount of time:* It is important to fund a critical mass of projects that can show beneficial effects, particularly for nonpoint sources.
- *Establish grant size requirements that improve cost-effectiveness:* Grant administration costs should be reduced and local cooperation enhanced by utilizing a grant minimum as well as a maximum.

#### What is a TMDL?

The Clean Water Act requires that states complete a Total Maximum Daily Load study for each water on a state’s impaired waters list. The TMDL results in a calculation of the maximum amount of a pollutant the water body can receive and still meet water-quality standards. It also allocates needed pollutant reductions among all the pollution sources. TMDLs involve intensive stakeholder and public input and they must be approved by the U.S. Environmental Protection Agency (EPA). Following approval of the TMDL, restoration activities are implemented to achieve the pollutant reduction goals set in the TMDL.



*Buffers on a stream located in the Red River Basin.*

- *Require MPCA approval of TMDL implementation plans to attain eligibility for restoration funds:* A TMDL Implementation plan should be approved by the MPCA prior to the opening of the application period to be eligible for restoration funds.

The Council also recommends prioritizing funding for threatened waters that are on the verge of becoming impaired. Specifically, the Council recommends the MPCA, which administers the Clean Water Partnership (CWP) program, to dedicate all CWP appropriations (currently about \$5 million per biennium) to protection needs.

In addition, to further enhance statewide protection efforts, the Council recommends the following:

- Provide \$0.6 million in new funding for agricultural-related pilot projects, including research on farms evaluating the relationship between water quality and agricultural production practices.
- Fund DNR forest stewardship plans and shoreland management, and better target them to enhance protection.
- Research the connection between incentives, education, regulation and local action to encourage voluntary action by citizens to protect water quality.

#### **Progress report on nonpoint source activities:**

Approximately \$12.3 million in one-time funding was appropriated in FY2007 and \$18.5 million in FY2008–2009 to nonpoint source restoration and protection activities. Restoration funding is available for TMDL projects with approved implementation plans, while protection funding is available to activities in approved local water plans that will prevent degradation of unimpaired waters or improve the quality of listed waters prior to the completion of a TMDL.

As a result of pollution reduction activities over the past six years, nine previously impaired waters are now fully meeting

water quality standards. Successful restoration can take decades, depending on the severity of the problem.

Nonpoint-source restoration and protection activities are being led by local government and supported by state agencies. In FY2007–2008, there were 98 grants awarded totaling \$14.3 million in one-time funding including: 32 led by soil and water conservation districts, 24 led by counties, 17 led by joint powers authorities, 11 led by cities, 10 led by watershed districts, and three led by watershed management organizations. Grant recipients in the initial rounds are constructing an array of urban and agricultural practices, including lakeshore restorations, streambank and gully stabilizations, buffer strips, alternative agricultural drain tile intakes, and bioretention and sedimentation basins.

In addition, \$2 million in one-time CWLA-funded agricultural BMP loans have been awarded in watersheds of approved TMDL implementation plans, including upgrading livestock waste systems and rural on-site sewage systems, and purchasing conservation tillage equipment. The agricultural sector also is the focus of continuing research projects on agricultural BMP effectiveness including agricultural drainage BMPs to support TMDL implementation. Also, by early 2009, more than 350 technical service providers will receive training to assist agricultural producers in designing and implementing BMPs.

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## **Recommendation 5:**

### **Infrastructure investments**

The Council recognizes that cities across the state have a need for improved infrastructure to provide wastewater and stormwater treatment. The Public Facilities Authority will be providing financial assistance for projects through the Wastewater Infrastructure Fund and TMDL grant programs. The Council will be making additional recommendations to meet these needs, including capital bonding.

**Progress report on point source activities:** A total of \$14.2 million for CWLA programs was appropriated to the Public Facilities Authority (PFA) in 2006–2008 to assist communities with upgrades to wastewater and stormwater facilities discharging directly to impaired waters. An additional \$94.9 million was appropriated to the PFA for point source restoration and protection projects through the Wastewater Infrastructure Fund (WIF) and Clean Water Revolving Fund programs (see Appendix 8 for a detailed summary).



In FY2007–2008, PFA funded 26 point source restoration and protection projects (totaling \$9.4 million) through CWLA programs, including six technical assistance grants for unsewered communities. During that same timeframe, PFA also provided \$26.9 million for eight TMDL implementation projects from the WIF and the Clean Water Revolving Fund programs, approximately eight percent of the total funding through those programs during that period. That percentage is expected to increase significantly in the future due to the growing number and size of TMDL implementation projects. In FY2009, PFA expects to fund up to 12 TMDL implementation projects for \$145.6 million from the WIF and Clean Water Revolving Fund programs, more than 60 percent of the total project funding expected from those programs.

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### Recommendation 6:

#### Advance research for effective CWLA implementation

“The Clean Water Council and public agencies and private entities shall make use of available public and private expertise from educational, research, and technical organizations, including the University of Minnesota and other higher education institutions, to provide appropriate independent expert advice on models, methods, and approaches used in identifying impaired waters, developing TMDLs, and implementing prevention and restoration” (MN Statutes 114D.35, subdivision 2).

The Council recommends that state agencies continue to allocate funds to research, focusing on the needs identified in the 2008 Impaired Waters Research Symposium Final Report (see Appendix 3). For example, the Council



*Lake Byllesby (Dakota County) is impaired for recreational use due to excessive nutrients.*

recommends development of a searchable database of past and current Minnesota water-related research. This database inventory will help to ensure that TMDL studies and other impaired waters initiatives will be better equipped with comprehensive, up-to-date technical information on water quality.

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### Recommendation 7:

#### Invest in civic engagement to enhance long-term success of restoration and protection efforts

The Clean Water Council is charged by the CWLA to “develop strategies for informing, educating, and encouraging the participation of citizens, stakeholders, and others regarding the identification of impaired waters, development of TMDLs, development of TMDL implementation plans, and implementation of restoration for impaired waters” (MN Statutes 114D.35, subdivision 3).

A work group of the Council is focused on developing methods to effectively engage Minnesota citizens in water quality protection and restoration, including utilizing local watershed partnerships in the development and implementation of TMDLs. This work group has met with a number of experts on stakeholder involvement and citizen education, and researched civic science approaches employed in other states related to water quality.

The work group found that best practices for using civic science principles for water quality projects and a training program need to be developed to increase the number of civic science practitioners and their ability to engage and sustain involvement of citizens and stakeholders. Several models of civic science are being demonstrated in projects in Minnesota and in other states. These should be studied and synthesized for testing in pilot watersheds throughout the State, and ultimately developed into a curriculum for training practitioners.

The Council recommends \$1.8 million in the next biennium for the development of civic science best practices, and to test these practices in pilot watershed projects statewide. This total has been split evenly between TMDL and Restoration & Protection funding needs.



## Clean Water Council Budget Recommendations

As discussed in the report, the following table summarizes CWLA appropriations in FY2007–2009, and the Council’s proposed budget recommendations for FY2010–2011.

CWLA Funded Activities (dollars in millions)	FY07 (one-time funding)	FY08–09 (one-time funding)	FY10–11 Recommendations
<b>Water Quality Assessment &amp; Monitoring</b>			
State, citizen and local monitoring activities	\$2.140	\$14.524	\$14.524
Endocrine disruptor monitoring/analysis	–	\$0.375	\$0.375
Subtotal	\$2.140	\$14.899	\$14.899
<b>TMDL Development</b>			
TMDL development and technical assistance	\$3.170	\$20.610	\$20.610
Civic engagement in TMDL development	–	–	\$0.900
Subtotal	\$3.170	\$20.610	\$21.510
<b>Nonpoint Source Protection &amp; Restoration</b>			
Nonpoint restoration/cost share/ incentive payments	\$1.500	\$3.316	\$19.320
Nonpoint restoration engineering/technical assistance	\$2.250	\$3.000	\$6.000
Nonpoint protection activities	\$1.410	\$1.000	\$10.000
Stream bank, stream channel, lakeshore, roadside protection and restoration projects (SLR)	\$1.000 (bonding)	–	\$4.000
Reporting, evaluation & research	\$0.600	\$0.400	\$0.600
County ISTS	\$0.730	\$2.450	\$5.000
Imminent threat/failing ISTS grants	–	\$1.000	\$2.000
Feedlot water quality grants	–	\$3.000	\$6.000
AgBMP Loan Program	\$1.200	\$2.500	\$5.000
Agricultural technical assistance (including pilot projects)	\$0.400	\$0.400	\$0.600
Research on agricultural BMP effectiveness & load allocations	\$0.800	\$1.100	\$2.000
Riparian land protection	\$1.340	–	–
Civic engagement in restoration & protection activities	–	–	\$0.900
Subtotal	\$11.230	\$18.166	\$61.420
<b>TOTAL</b>	\$24.950*	\$53.975	\$97.829**

\* Includes \$8.41 million for point source restoration and protection funding. See Appendix 8 for a detailed summary of 2006–2008 capital bonding appropriations and FY2007–2009 spending for point source protection and restoration projects.

\*\* As noted in the report, the Clean Water Council will be recommending additional funding and capital bonding to meet infrastructure and other critical needs.

## Appendices

1. Complete text of the Clean Water Legacy Act: [www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT\\_CHAP&year=2006&section=114D](http://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT_CHAP&year=2006&section=114D)
2. "Resolution to support long term funding of the Clean Water Legacy Act", adopted January 28, 2008. Available on the Clean Water Council website at: [www.pca.state.mn.us/water/cleanwatercouncil/resolution-12808.pdf](http://www.pca.state.mn.us/water/cleanwatercouncil/resolution-12808.pdf)
3. Impaired Waters Research Symposium Final Report: <http://wrc.umn.edu/newsandevents/impairedwaters/index.html>
4. Effectiveness Tracking and Reporting Framework for Implementing the Clean Water Legacy Act
  - a. Final report and addendum: <http://wrc.umn.edu/outreach/cwlatracking/index.html>
  - b. For more information on this project and the series of meetings which led to the development of the effectiveness tracking framework, see: <http://wrc.umn.edu/outreach/cwlatracking/>
  - c. Clean Water Council "Resolution to endorse effectiveness tracking and reporting framework for clean water protection and restoration measures" (adopted August 18, 2008) available at: [www.pca.state.mn.us/water/cleanwatercouncil/resolution-81808.pdf](http://www.pca.state.mn.us/water/cleanwatercouncil/resolution-81808.pdf)
5. Clean Water Council "Mission, Authority and Organizing Principles"

This document was created and approved by the Council in November 2007 to clarify their statutory charge and the principles around which they would base their work plan. Available on the Clean Water Council website at: [www.pca.state.mn.us/water/cleanwatercouncil/cwc-mission.pdf](http://www.pca.state.mn.us/water/cleanwatercouncil/cwc-mission.pdf)
6. Clean Water Council "Resolution to endorse watershed framework for monitoring, assessment, planning and restoration of impaired waters" (adopted June 16, 2008) available at: [www.pca.state.mn.us/water/cleanwatercouncil/resolution-61608.pdf](http://www.pca.state.mn.us/water/cleanwatercouncil/resolution-61608.pdf)
7. "Watershed Approach to Condition Monitoring and Assessment". Available on the Clean Water Council website at: [www.pca.state.mn.us/water/cleanwatercouncil/cwc-publications.html](http://www.pca.state.mn.us/water/cleanwatercouncil/cwc-publications.html)
8. Point Source Protection and Restoration Funding. Available on the Clean Water Council website at: [www.pca.state.mn.us/water/cleanwatercouncil/cwc-publications.html](http://www.pca.state.mn.us/water/cleanwatercouncil/cwc-publications.html)





