



MPCA's Watershed Approach

A framework for protecting and restoring water quality in Minnesota's watersheds

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Water is one of Minnesota's most abundant and precious resources. The Minnesota Pollution Control Agency (MPCA) helps protect the state's water through a number of programs that monitor and assess water quality conditions and impose limits on pollutants entering water bodies.

The challenge

MPCA's water resource management efforts are tied to the goals of the 1972 Clean Water Act (CWA) for restoring and protecting the multiple beneficial uses, including recreation, drinking water, fish consumption and ecological integrity of America's waters.

The CWA requires states to:

- Assign designated beneficial uses to waters and develop water quality standards to protect those uses,
- Monitor and assess their waters,
- List waters that do not meet water quality standards,
- Identify pollutant sources and reductions in pollution discharges needed to achieve standards, and,
- Develop a plan to implement water restoration and protection activities.

The passage of Minnesota's Clean Water Legacy Act (CWLA) in 2006 provided a policy framework and resources to state and local governments to accelerate efforts to monitor, assess, and restore impaired waters, and to protect unimpaired waters.

Since then, the MPCA has been ramping up its efforts to monitor and assess Minnesota's waters on a 10-year cycle, to restore waters that do not meet water quality standards and to protect those that do meet standards. These increased efforts present an opportunity to more fully integrate MPCA water resource

management efforts in cooperation with local government and stakeholders; and to allow for coordinated development and implementation of water quality restoration and improvement projects.

Watershed management

A watershed is the area of land that all drains to the same body of water. Water resource management by watersheds is an established organizing concept in Minnesota. Provisions of the CWLA provide additional support to this approach by creating a framework for organizing and scheduling work, and for engaging partners and stakeholders.

MPCA's water quality activities include: adoption and management of water quality standards, water monitoring and assessment; regulation of wastewater, stormwater, feedlots, and subsurface sewage treatment system (SSTS); environmental review, watershed management, and total maximum daily load (TMDL) studies.

Water quality protection and restoration

The watershed approach is a 10-year rotation for assessing waters of the state on the level of Minnesota's major watersheds. The primary feature of the watershed approach is that it provides a unifying focus on the water resource as the starting point for water quality assessment, planning, and results measures. This approach may be modified to meet local conditions, based on factors such as watershed size, landscape diversity and geographic complexity (e.g., Twin Cities metro area).

The overlapping steps of the Watershed Approach are as follows, with the goal of completing Steps 1 through 3 within four years of initiation in each watershed and Step 4 starting in the fifth year:

Step 1 — Monitor and gather data and information

MPCA uses an intensive watershed monitoring schedule that provides comprehensive assessments of all major watersheds on a ten-year cycle. This schedule provides intensive monitoring of streams and lakes within each major watershed to determine overall health of the water resources, to identify impaired waters, and to identify those waters in need of additional protection to prevent future impairments. Data from past and current local water monitoring are included in the process. Information on watershed characteristics, like land use, topography, soils, and pollution sources is also gathered in this step.

Step 2 — Assess the data

Based on results of intensive watershed monitoring in step one, MPCA staff and its partners conduct a rigorous process to determine whether water resources meet water quality standards and designated uses. Waters that do not meet water quality standards are listed as impaired waters.

Step 3 — Establish implementation strategies to meet standards

Based on the watershed assessment, a TMDL study and/or protection strategy is completed. Existing local water plans and water body studies are incorporated into the planning process. An overall water quality framework which details strategies and methods for meeting water quality standards is developed for each watershed with input from interested parties.

Step 4 — Implement water quality activities

Included in this step are all traditional permitting activities*, in addition to programs and actions directed at nonpoint sources. Partnerships with state agencies and various local units of government, including watershed districts, municipalities, and soil and water conservation districts, will be necessary to implement these water quality activities.

*MPCA will continue routine regulation during all steps of the watershed approach process, as appropriate.

Benefits of the Watershed Approach

The MPCA's improved system for integrating and managing water quality programs will yield considerable benefits in the form of efficiencies and environmental benefits, including:

- An ongoing, predictable cycle for water quality management and evaluation,
- Integrating watershed protection and restoration needs into a single management plan,
- A more efficient approach to addressing impairments,
- A common framework for monitoring, TMDL studies, and implementation strategies,
- Increased stakeholder interest and local support,
- Improved collaboration and innovation, and
- A reduction in the cost of improving the quality of waters.

Partners

In every step of the watershed approach, the MPCA depends on its external partners. Protecting and restoring water quality necessitates coordination between federal, state and local efforts. The watershed approach will provide for even better coordination with stakeholders and partners, because the resources in each watershed are the starting point of the process.

In its 2008 Report to the Legislature, the Clean Water Council endorsed the watershed approach as part of its Recommendation #1: *Develop a statewide watershed approach to prioritize and integrate monitoring and assessment, TMDL, and restoration and protection activities*. The Council concluded that this approach would more effectively engage the public and stakeholders in watershed planning and implementation activities. The Clean Water Council's 2008 Legislative Report can be found at:

www.pca.state.mn.us/water/cleanwatercouncil/index.html.

Contact information

Detailed information about MPCA's water quality programs can be found at:

www.pca.state.mn.us/water/index.html.

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