



# Impaired Waters

## Overview

### **D**escription and purpose

Impaired waters are lakes, rivers, and streams that do not meet state water-quality standards, set to protect a body of water's beneficial use, for one or more pollutants.

The federal Clean Water Act (CWA) requires states to:

- Assess all waters of the state to identify and list impairments;
- Conduct TMDL studies (see below) in order to set pollutant reduction goals;
- Implement corrective measures to meet a TMDL's pollutant reduction goals and restore waters to standards.

The Minnesota Pollution Control Agency's (MPCA) primary responsibilities in addressing impaired waters are in the areas of water quality assessment and TMDL development. The agency also coordinates closely with other state agencies, local units of government, and nongovernmental organizations on restoration activities.

### **Assessment and identification of impairments**

First published in 1992, the state's impaired waters list is updated every two years. The 2008 list identifies 1,475 impairments on 336 rivers and 510 lakes (a water body may have multiple impairments). Approximately 40 percent of water bodies assessed against impairment criteria are found to be impaired a rate comparable with what other states are finding. Only a small percentage of

Minnesota's river miles and lakes have been assessed so far. The list of impaired waters will expand as assessments continue throughout the state. A state's impaired waters list is used to prioritize funding and activities for restoring impaired waters.

### **TMDL development**

For each impairment on the list, the federal CWA requires that a TMDL be prepared. The term "TMDL" describes both a process and a number. The *process* typically involves two to four years of technical study and intensive stakeholder and public input. The *number* is a calculation of the maximum amount of a pollutant the water body can receive and still meet water quality standards. A TMDL results in a pollution reduction plan that identifies all the sources of the pollutant in the watershed and allocates needed reductions among them. It must include a margin of safety for uncertainties in the calculation, account for seasonal variation in water quality, and may leave room for future expansion in discharges (reserve capacity).

TMDLs may be developed by the MPCA, other state agencies, or local governments that have been determined by MPCA to be qualified to do this work. Work plans and draft TMDLs must be approved by the MPCA.

Throughout the process, the MPCA provides oversight, technical assistance, and training to ensure regulatory and scientific requirements are met. Following

a formal public comment period, the MPCA submits the TMDL report to the U.S. Environmental Protection Agency for final approval.

## Restoration of impaired waters

After a TMDL report is completed, a detailed implementation plan is developed to meet the TMDL's pollutant load allocation and achieve the needed reductions to restore water quality. Depending on the type, severity, and scale of the impairment, restoration may require years or even decades, and several million dollars.

Restoration activities typically include infrastructure improvements of wastewater treatment plants or urban stormwater systems, upgrading failing septic systems, and implementing "best management practices" to minimize polluted runoff or soil erosion in urban and agricultural settings.

When a water body is restored to meet applicable water quality standards, it can be removed from the impaired waters list. In addition, monitoring will continue over the long term to ensure standards are maintained.

## Clean Water Legacy Act

The Clean Water Legacy Act (CWLA) was signed into law on June 2, 2006.

This law will:

- Accelerate assessment of Minnesota's waters.
- Target additional financial resources to existing state and local programs designed to improve water quality.
- Leverage additional federal, local and private resources where possible.
- Provide resources to develop TMDLs.

The 2006 legislative session resulted in appropriations totaling approximately \$25 million for critical clean water priorities and the creation of a citizen/state advisory group called the Clean Water Council. In May 2007, the legislature passed \$31 million for continued Clean Water Legacy funding in 2008 and 2009.

For additional information on the CWLA, see the Governor's Clean Water Cabinet Web page at: <http://cwc.state.mn.us/>.

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## More information

For more information on the Clean Water Council, see the Council Web page at: <http://www.pca.state.mn.us/water/cleanwatercouncil/index/html>.

For more information on impaired waters e-mail Glenn Skuta at: [glenn.skuta@pca.state.mn.us](mailto:glenn.skuta@pca.state.mn.us), or

Jeff Risberg at e-mail: [jeff.risberg@pca.state.mn.us](mailto:jeff.risberg@pca.state.mn.us).

Additional information is available on the MPCA Web site at:

<http://www.pca.state.mn.us/water/tmdl/index.html>.

You may also contact the MPCA at 651-296-6300, or 800-657-3864, and ask for someone in the impaired waters area.

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