



Assessing and listing impaired waters

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The assessment of Minnesota's rivers, streams and lakes is tied to the goals of the 1972 Clean Water Act (CWA) for restoring and protecting the ecological integrity of America's waters.

One CWA strategy used to meet these goals is identifying, listing and restoring "impaired waters." The CWA requires states to:

- Assign designated uses to waters and develop standards to protect those uses
- Monitor and assess their waters
- List waters that do not meet standards
- Identify pollutant sources and reductions needed to achieve standards
- Develop a plan to implement restoration activities

This fact sheet describes the process of assessing and listing impaired waters in Minnesota.

What are "impaired waters"

The CWA requires states to adopt water quality standards to protect waters from pollution. These standards define how much of a pollutant can be in a water and still allow it to meet designated uses, such as drinking water, fishing, swimming, irrigation or industrial purposes.

"Impaired waters" are those waters that do not meet water-quality standards for one or more pollutants, thus they are "impaired" for their designated uses.

Section 303(d) of the CWA requires states to assess all of their waters for impairments and publish a list of impaired waters every two years, called the Total Maximum Daily Load (TMDL) List.

Assessing Minnesota's waters and developing the list involves a rigorous process that takes more than two years to accomplish.

How are impaired waters identified and listed?

The assessment and listing process involves dozens of agency staff, other state agencies and local partners. The goal of this effort is to use the best data and best science to assess the condition of Minnesota's water resources.

The process requires a high level of planning and cooperation among Minnesota Pollution Control Agency (MPCA) staff and partners. The many tasks that go into developing the list can be grouped into six major milestones, as follows:

Call for data

The first step in identifying impaired waters involves collecting all of the monitoring data available for Minnesota's water resources.

The MPCA relies on data it collects along with data from other sources, such as sister agencies, local government and volunteers, to assess a lake or stream. The data must meet rigorous quality-assurance protocols before being used. Some sources of data, such as Secchi disk monitoring by volunteers, are used only in association with other data.

Early in the assessment process, the MPCA publishes a "Call for Data" in the *State Register* and contacts partner organizations directly to request their monitoring data.

Data analysis

Once all available data are checked for accuracy and entered into a database, MPCA scientists analyze the data to identify potential water impairments. Assessments are based on established water-quality standards (see MPCA Web site) and the *MPCA Guidance Manual for Assessing the Quality of Minnesota Surface Waters*. The guidance contains information on standards, data collection, data-assessment requirements, and minimum data needed to conduct an assessment. In addition to completing the very detailed, science-based assessments, MPCA staff evaluate waters currently on the list for potential de-listing and revise the assessment and listing guidance as needed.

Professional judgment teams (PJT)

Once the preliminary assessments are complete, “professional judgment team” meetings are held with resource managers from around the state. These teams consist of MPCA staff, the collectors of the data under review, and other local and regional scientific experts.

The PJTs are peer-review groups that discuss the preliminary assessments and provide a local perspective. The preliminary assessments are either confirmed by the group or refined based on additional knowledge of the water resources. Waters are assigned to categories such as “not impaired,” “more data needed to complete an assessment,” and “impaired.” A record of the PJT discussion is maintained on the MPCA Web site.

Informational meetings

Following the PJT meetings, MPCA staff compile a draft Impaired Waters List consisting of all the waters that have been assessed as impaired. The MPCA then holds meetings across the state to review the draft list with interested parties and answer questions about the assessment and listing process, the draft list, and impaired waters in general.

Public notice

The next step is the formal public notice period. The draft list and request for comments are noticed in the *State Register* and the notice is also mailed to more than 400 contacts. Following the comment period, responses to comments are developed and the draft list modified as necessary based on the comments received.

U.S. Environmental Protection Agency (EPA) approval

For the last step in this biennial process, the final draft Impaired Waters List is provided to the EPA for approval. States are required to submit their final draft list to EPA by April 1 of even-numbered years.

Timeline for listing cycle

The entire assessment and listing process spans more than two years. For example, work on the 2008 list began in August 2005 with an evaluation of the previous listing cycle. The MPCA published the “Call for Data” in the *State Register* on June 26, 2006, and completed preliminary assessments during the winter of 2006/07. PJT meetings were scheduled for the spring of 2007. The MPCA hosted informational meetings during the late summer of 2007 and noticed the final draft list in early winter 2008. The EPA approved the 2008 TMDL List in June 2008.

Beyond the impaired waters list

CWA requirements do not stop with the approval of the TMDL List. States are also required to prepare TMDL studies for every impairment on the list. A TMDL defines the

maximum amount of a pollutant that a water body can receive and still meet standards. TMDLs also set limits and reduction goals for restoring impaired waters so they meet standards. More information about TMDLs can be found at the MPCA’s Web site.

The TMDL List is not the complete list of all impaired waters in Minnesota. The MPCA also maintains an Inventory of Impaired Waters list. It includes those needing a TMDL plan and those for which plans has already been developed and approved by EPA. The Inventory also includes waterbodies that are naturally impaired, such as the arsenic exceedances in the Red River of the North.

For more information

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