IMPAIRED WATERS

ASK an EXPERT
ABOUT THE MINNESOTA RIVER

What are Impaired Waters?

A water body is considered impaired if the water quality in the stream or lake does not allow it to meet its designated use (such as swimming, fishing or for maintaining a healthy population of fish and other aquatic life). Water quality standards are set on a wide range of pollutants, including bacteria, nutrients, turbidity and mercury. A water body is "impaired" if it fails to meet one or more of Minnesota's water quality standards. The waterbody is then placed on the "303(d)" list, commonly known as the "impaired waters list." It is named after the section of the Clean Water Act in which the impaired waters law is found. Lakes, rivers and streams on the list are known to exceed water quality standards. Every two years, the Minnesota Pollution Control Agency (MPCA) releases the 303(d) list of impaired waters in Minnesota.

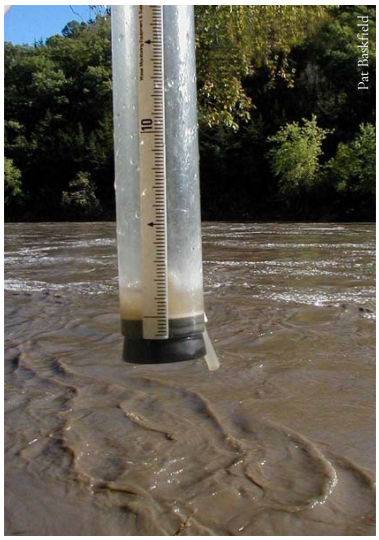
TMDL Program

The process of dealing with "impaired waters" comes under the 303(d) Total Maximum Daily Load (TMDL) program. Each state is required to publish and update a list of "impaired waters" under Section 303(d) of the Clean Water Act. According to this act, a TMDL is a calculation of the maximum amount of pollutant from both point and non-point sources, that a waterbody can receive and still meet water quality standards. Once placed on the impaired waters list, the stream or lake needs a water quality improvement (TMDL) plan written.

Minnesota's Impaired Waters

The most recent list of Minnesota's TMDLs came out in 2008 with a total of 1,475 impairments on 336 rivers and 510 lakes. A significant decrease occurred between this latest list and the 2006 TMDL list, which recorded 2,250 impairments on 284 rivers and 1,013 lakes. The major reason for the dramatic change was the approval of the statewide Mercury TMDL by the U.S. Environmental Protection Agency (mercury impairments made up two-thirds of the 2004 TMDL list). A second part of the 2008 TMDL List is an Inventory of all impaired waters that contains a total of 2,575 impairments including the approved Statewide Mercury TMDL and Southeast Regional Fecal Coliform TMDL. According to MPCA, "waters in the Inventory of impaired waters will remain there until they meet water quality standards."

The Minnesota River Basin has 336 impaired waters on the 2008 TMDL list and 546 on the Inventory of impaired waters. Pollutants or stressors for the basin include: fecal coliform bacteria, turbidity, chloride, mercury, fish bioassessments, dissolved oxygen, ammonia, PCB, Acetochlor and Nutrient/ Eutrophication.



Blue Earth River and transparency tube

Clean Water Act

Originally passed in 1972, the Federal Clean Water Act established the basic structure for regulating discharge of pollutants into the waters of the United States. It requires all states to adopt water standards that protect the nation's waters. One of its most important functions is to spell out requirements on setting water quality standards for all contaminants in surface waters. These standards define how much of a pollutant can be in a surface and/or ground water while still allowing it to meet its designed uses – drinking water, fishing, swimming, irrigation or industrial purposes.

The Clean Water Act requires each state to do the following:

- 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.

The Impaired Waters graph (right) shows the number of impaired waters that have been placed on the Impaired Waters (303(d) List. The increase is largely a reflection of more waters being assessed.