

Implications of the New TMDL Rules for Iowa Agriculture

by

Bill Ehm, Iowa Department of Natural Resources TMDL Coordinator
John Creswell, ISU Extension Nutrient Management Education Coordinator
Gerald Miller, Associate Dean, College of Agriculture, ISU
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Iowa's water quality standards are defined by Iowa Administrative Rules on the basis of *general* use and *designated* use for surface waters within the state. *General* uses include livestock and wildlife watering, aquatic life, recreation without surface water contact, crop irrigation, and industrial, domestic, agricultural, and other incidental water uses.

Designated uses are grouped into three classes.

- ✓ Class A includes surface water where body contact for recreation occurs such as swimming and water skiing.
- ✓ Class B identifies uses that ensure that expected growth and reproduction of aquatic life will occur. Class B also supports non-contact recreational uses such as fishing.
- ✓ Class C identifies water that will serve as a source of public drinking water supplies.

All Iowa surface waters are classified for *general* use. In addition, surface water can be classified for any one, or a combination of *designated* uses.

A Total Maximum Daily Load (TMDL) is described as “the amount of a pollutant that a waterbody, such as a stream, river, lake, reservoir, or wetland, can receive and still meet designated water quality standards.” A TMDL is a planning tool used by the U.S. Environmental Protection Agency (EPA) and Iowa Department of Natural Resources (DNR) to bring waterbodies into compliance with water quality standards.

The original thrust of the Clean Water Act of 1972 was to clean up obvious point source pollution such as pipes from factories, sewage treatment plants, and related identifiable locations. The results of these efforts have been dramatic. Water quality in our rivers and streams has improved immensely in the past 28 years. As a result of recent litigation, current interpretation of the Clean Water Act has extended the use of TMDLs to include nonpoint source pollution. A TMDL allocates among point and nonpoint sources in a watershed, the amount of each kind of pollutant that each source can contribute to the surface water leaving the watershed. TMDLs are being used throughout the country to identify pollutant budgets for sediment, nutrients (nitrogen and phosphorus), and bacteria entering the water from the landscape as well as from pipes. Because 91.3% of Iowa's landscape is used for agriculture, and because over half of Iowa's 157 impaired waters are impacted all or in part by nonpoint source pollution, agriculture and agribusiness have the potential to be significantly affected by the TMDL process.

On July 11, 2000 EPA issued new final rules expanding and strengthening TMDLs as a tool to control nonpoint source pollutants. These rules are available at: www.epa.gov/owow/tmdl/finalrule/. In response to Congressional actions, EPA has delayed implementation of the new rules until October 1, 2001. These new rules:

- Require that a TMDL include an implementation plan defining the steps to be taken to restore polluted waters on a specific schedule. Currently, TMDLs do not require implementation plans.
- Require that implementation plans provide “reasonable assurance” that measures to reduce pollution from nonpoint sources will be implemented. Current rules do not require specific commitments to reduce nonpoint pollution or “reasonable assurance” of implementation.
- Implementation plans must identify the date by which the State expects water quality standards will be attained. This date must reflect a goal of meeting water quality standards as soon as practicable; if such date is more than 10 years after establishing the TMDL, the State must demonstrate that compliance within the 10 year period is not reasonable. Current rules do not address schedules for achieving water quality standards.
- States must develop TMDLs as expeditiously as practicable but not later than 10 years after a polluted waterbody is first listed. EPA may grant up to a 5-year extension of schedules where justified. Current rules only require that States set priorities and identify TMDLs they expect to develop over the next 2 years.
- Where both point and nonpoint sources are involved, the schedule must provide that nonpoint controls be installed within the same time period that point sources are given. Where only nonpoint sources are controlled, the schedule must provide for implementing controls within 5 years when practicable. Current rules do not address schedules for implementing nonpoint source controls.
- EPA must develop TMDLs where state developed TMDLs are disapproved or a State fails to make substantial progress in TMDL development (i.e., misses its schedule by more than 1 year). Currently, EPA must develop TMDLs where a TMDL submitted to EPA is disapproved.
- Require a comprehensive listing of a State’s polluted waters, including waters needing TMDLs, waters impaired by pollution, polluted waters with completed TMDLs that do not yet meet water quality standards, and polluted waters where existing controls will meet water quality standards before the next list is submitted. Currently, lists include only waters impaired by pollutants and still needing a TMDL.
- Require States to give high priority for TMDL development to waterbodies where the problem pollutant is causing a public drinking water system to violate a drinking water standard or where the waterbody supports threatened or endangered species. Currently, rules do not address drinking water problems or threatened/endangered species.
- EPA must establish lists of polluted waters and schedules for TMDL development where state developed lists/schedules are not submitted by April 1, 2002 and

every 4 years thereafter. Currently, EPA is only required to establish a list of polluted waters where a State list submitted to EPA is disapproved.

- Require that States provide public notice and provide an opportunity to review and comment on lists of polluted waters, the methods used to list them and, on TMDLs. Currently, States are required to provide notice on the establishment of TMDLs.
- Require States to develop a methodology for assessing the health of waters and listing of polluted waters with the involvement of the public and EPA. Current rules do not require a methodology for listing polluted waters.
- Give EPA a new mechanism to object to and to reissue expired point source permits for waters not meeting water quality standards. Current rules don't provide a mechanism to assure that expired permits be reissued in accordance with TMDL allocations.

Though a great deal of controversy surrounds the TMDL process, it is clear that water quality improvement programs will continue to be expanded. Currently EPA, in cooperation with the states, is in the process of developing numeric standards for nutrients (nitrogen and phosphorus) and turbidity. These standards will eventually set limits on the amount of each that can be found in Iowa's streams, rivers, lakes, reservoirs, and wetlands. It will be up to agencies, trade organizations, and individuals to work in a spirit of cooperation to bring water quality improvement to the next level.