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Agriculture

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May 21, 2001

**WATER QUALITY TECHNICAL NOTE NO. NM 1**

**SUBJECT: WQP – “WHAT FARMERS NEED TO KNOW ABOUT CLEAN WATER AND TMDLS” BROCHURE**

**Purpose:** To distribute information to the field.

The attached Brochure, “What Farmers Need to Know About Clean Water and TMDLs” was developed by the National Corn Growers Association and the American Soybean Association to inform their growers about the current TMDL process. This brochure provides a “short course” on what TMDLs are under the current rule, and how and why growers could become involved if regulators institute a TMDL involving their watershed.

While the brochure includes statements from only corn and soybean growers, the information and concepts contained in the brochure are applicable to all agricultural producers. State TMDL information is available from the New Mexico Environment Department web site: [www.nmenv.state.nm.us](http://www.nmenv.state.nm.us) or from Linda Scheffe, Water Quality Specialist. A TMDL Q&A fact sheet from this web site is attached.

File the attached “What Farmers Need to Know About Clean Water and TMDL” brochure and NMED fact sheet in the Water Quality Tech Note (new with enclosed notebook) section of your field office reference library.

ROSENDO TREVINO III  
State Conservationist

Dist:

Team Leaders – (1 ea)

DC – (1 ea)

TSO (1 ea)

Los Lunas PMC – (1 ea)

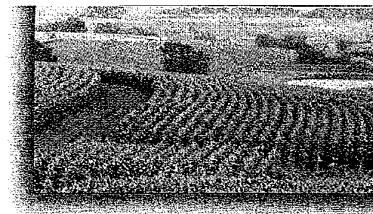
NMSO, Official TN– 1 ea

Director, ECS, NHQ, Washington, DC – (1 ea)

The Natural Resources Conservation Service,  
formerly the Soil Conservation Service, works  
hand-in-hand with the American people to  
conserve natural resources on private lands.

AN EQUAL OPPORTUNITY EMPLOYER

# What Farmers Need to Know About Clean Water and TMDLs



## To Our Members

The National Corn Growers Association and American Soybean Association are firmly committed to the principles of sound environmental stewardship and voluntary, incentive-based approaches to putting those principles into practice. In the years ahead, the Environmental Protection Agency and state water quality agencies will be working with local, state, federal and private sector partners to strengthen efforts to improve water quality. The TMDL Program will provide a framework for many of those activities. Corn and soybean producers therefore need to understand how this program may affect their production practices and how they can participate in the TMDL implementation process.

We hope you'll take the time to read the information in this brochure and learn more about water quality and TMDLs. Everyone belongs to a watershed community, and you can help your community decide what needs to be done, and what is possible given available resources, to protect water quality. Growers are stakeholders in the clean water process!

**Lynn Jensen**  
President  
National Corn Growers Association

**Tony Anderson**  
President  
American Soybean Association

## TMDLs Will Be Used to Achieve Water Quality Standards

Since its enactment over 25 years ago, programs under the federal Clean Water Act, combined with many voluntary, locally led efforts, have resulted in the extensive restoration of polluted waters across the nation. The number of waterways that are considered safe for fishing and swimming have doubled in that period of time. But the Environmental Protection Agency is requiring states to do more to meet water quality standards in the rivers, lakes and streams that have still not achieved the standards set for them. "Nonpoint sources" like agriculture will be included in efforts to reduce pollutants such as nutrients, sediments and bacteria.


State water quality agencies have identified polluted waters that will require the establishment of Total Maximum Daily Loads (TMDLs) over the next 5-15 years. TMDLs set pollutant reduction goals that are necessary to meet water quality standards. Landowners, community groups, local industry and other watershed residents will be asked to work together to decide what actions must be taken to reduce pollution in runoff that may be contributing to water quality problems.


### TMDL

#### Total Maximum Daily Loads


A Total Maximum Daily Load, or TMDL, is the amount of a given pollutant that can be allowed to enter a waterbody without causing the water quality standards to be exceeded.


#### Legend:

 Targeted for Establishment Within 2 Years

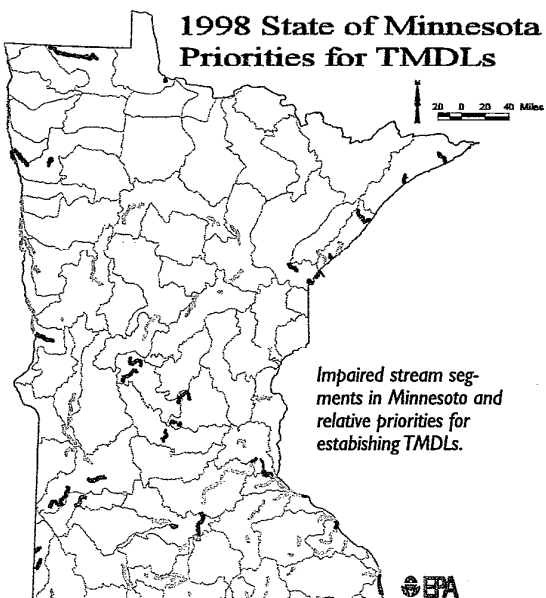
 Highest Priority for Establishing TMDLs

 Moderate Priority for Establishing TMDLs

 Lowest Priority for Establishing TMDLs

 No Priority Information for Establishing TMDLs

 8-digit USGS Cataloging Units



## Many TMDLs Will Impact Agriculture

Across the country, 40,000 TMDLs for 21,000 impaired waterbodies will be developed and implemented to reduce pollutants. The three leading pollutants identified by states in their 1998 water quality assessments were sediments, nutrients and harmful microorganisms.

Depending on the levels of pollutants found in impaired waters and the designated uses of the waters, some TMDLs will indicate that certain pollutants should be significantly reduced. This was the case for the watershed draining into Lake Mitchell which supplies drinking water for the city of Mitchell, South Dakota. The TMDL calls for a 50 percent reduction in phosphorus runoff from the watershed. This goal is being cooperatively achieved by both urban and rural watershed residents. Several best management practices (BMPs), including animal waste management systems, buffer strips adjacent to riparian areas, grassed waterways, and other BMPs to improve riparian areas on farmland are being put into place. But urban runoff is also of concern. Storm sewers in the city of Mitchell have been rerouted to help reduce nutrient loadings.



## Growers Should Get Involved in Locally Led TMDL Projects

TMDL projects will be managed by various local authorities and watershed partnerships. Growers can and should participate in project planning and implementation.



The South Dakota Department of Environment and Natural Resources has identified the Central Big Sioux River (CBSR) Watershed as a priority for restoration through the TMDL process. Land use in the watershed is largely in corn, soybean and livestock production, and

TMDL projects will focus on reducing sedimentation and bacteria. Monitoring sites have been established to collect data to determine pollution "loads" and their sources. Load reduction

*Local growers observe water samples being collected from Medary Creek, a tributary of the Big Sioux River, during a field day sponsored by the commodity associations.*



Howard Markus is the TMDL Coordinator for the Minnesota Pollution Control Agency, which administers the TMDL Program in the state.

*"Many TMDLs in Minnesota will involve agriculture, but we believe that currently recommended best management practices will, in most cases, be adequate to attain standards. Local communities must decide how to achieve widespread adoption of better production practices where they are most needed. Growers should join in this process to make sure that good decisions are made, and that resources are used effectively to provide technical assistance, demonstration and education projects, and other means of helping farmers adopt alternative practices where this is necessary."*



Gary Joachim grows soybeans in the Mississippi River Basin in southeastern Minnesota, and is a past president of the Minnesota Soybean Growers Association. He is also active in his local watershed partnership.

*"Growers need to become informed about their local watershed issues, including TMDLs, because many TMDLs are aimed at agricultural runoff. We are the best qualified to offer workable approaches to solving water quality problems involving agriculture. And we need to work together with our urban neighbors to get as much accomplished as possible without regulation."*

Bill Whipple is a corn grower and rancher in the Big Stone Lake watershed in northeastern South Dakota. He is vice president of the South Dakota Corn Growers Association, and a leader for his commodity association in tracking the CBSR watershed project.



*“Commodity associations can play an important role in communicating with state and local government agencies and watershed partnerships about water quality and TMDLs. Growers need to stay active on these issues within their commodity associations, and also at the local watershed level. I missed a good opportunity to work with my local watershed group when it was developing a TMDL implementation plan and deciding where cost share assistance was needed for installing BMPs to reduce sedimentation.”*

Gary Edwards grows corn in the Mississippi River Basin in eastern Iowa, and has taken the lead in developing the commodity associations' water quality partnership program.



*“Good management practices must be in place to control runoff and keep soil and production inputs from entering surface waters. What we need is a structure for communicating with growers to help them do a better job with their natural resource planning. Growers are the best advocates for environmental protection, and our commodity association partnership will equip grower leaders to reach out to their watershed neighbors to help them get technical information and access to cost share and other incentives for upgrading production practices.”*

goals will be established by specific TMDLs, and locally developed implementation plans will specify what actions need to be taken within the watershed to achieve the pollutant reduction goals.

The South Dakota Corn Growers Association and South Dakota Soybean Association are working closely with the lead project sponsor, the East Dakota Water Development District, to ensure that TMDL implementation plans call for widely accepted, affordable and effective agricultural practices. The associations wanted to get involved early in the process so that voluntary efforts to achieve water quality goals could be effectively promoted. They also wanted to make sure that adequate cost share and technical assistance will be available for practices that may be expensive or difficult to adopt.

Watershed teams are organizing for TMDL implementation in Center and Elm Creeks, located in the Blue Earth River Basin in south central Minnesota. The teams will be comprised of a broad cross section of watershed stakeholders, including agriculture, industry, townships, county commissions, conservation districts and other conservation groups.

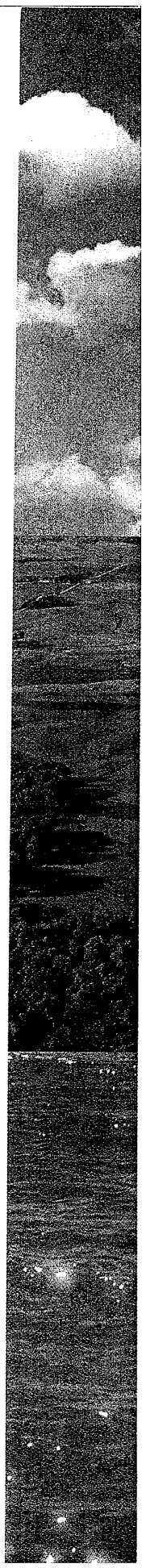


Linda Meschke is the Coordinator of the Blue Earth River Basin Initiative (BERBI). Her family farm, which produces corn, soybeans and hogs, is located in the watershed.

*“Watershed stakeholders will guide the TMDL projects at Center and Elm Creeks from start to finish, including data collection, identifying sources of pollution, and deciding who does what to meet load reduction goals within the watershed. The watershed belongs to the community, so the community must share responsibility for its cleanup.”*

## Growers Can Take the Lead in Promoting Water Quality BMP's

Good farmers are good environmental stewards, and are uniquely positioned to lead efforts to protect water quality. The Iowa Corn Growers Association and Iowa Soybean Growers Association are creating a partnership to organize networks of farmers in watersheds across the state to promote BMP's that will improve water quality in those watersheds.



## TMDL Short Course

A **Total Maximum Daily Load**, or TMDL, is the amount of a given pollutant that can be allowed to enter a waterbody without causing the water quality standards to be exceeded.

A TMDL is also a **blueprint** for identifying and cleaning up an impaired stream, river or lake.

The **pollutants** most frequently identified as causing water quality impairment, and that will be addressed by TMDLs, are **sediments, excess nutrients, and harmful microorganisms**.

Waterbodies are assessed and TMDLs are established where needed by **state water quality agencies** under U.S. Environmental Protection Agency oversight. TMDLs will be developed within the next 15 years.

TMDLs quantify pollutant levels that can be tolerated without causing impairment. How to **control pollutants** that exceed these levels will be decided by **communities** within the watershed.

TMDLs are set so that the **water quality standards** for the impaired waterbody can be achieved and beneficial uses, like swimming and fishing, restored within a certain timeframe.

In watersheds where agriculture contributes to water quality impairment, TMDL implementation plans could call for landowners to change certain management practices in order to **reduce runoff**.

Where needed, **voluntary adoption of alternative practices** will be encouraged and credit will be given for voluntary efforts that have already been made. More intensive education and accelerated assistance for landowners will be undertaken where necessary for states to show measurable progress in attaining water quality standards.

**TMDL implementation plans** -- or cleanup plans -- will be developed by local government and natural resource authorities, with community-based watershed partnerships.

## For More Information

For more information on the TMDL Program and your state water quality agency, visit **EPAs Office of Water** home page with links to state agencies at [www.epa.gov/owow/tmdl/index.html](http://www.epa.gov/owow/tmdl/index.html).

To find out more about **USDA's Natural Resources Conservation Service** go to [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

You can also visit **NCGA** on the web at [www.ncga.com](http://www.ncga.com), and **ASA** at [www.amsoy.org](http://www.amsoy.org).

Margie Williams  
Editor  
Envisory



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## What Growers Can Do

- **Become informed:** find out from your local conservation district or NRCS office if your watershed has been assessed and listed as impaired, and whether TMDLs will be needed.
- **Find out** what the critical water quality issues are in your watershed, and whether they are associated with agricultural practices.
- **Assess** your own production practices, and whether you are following recommended practices such as those in the American Soybean Association's "Soybean Management and the Land: A Best Management Handbook for Growers". NRCS can assist you with your assessment.
- **Promote** voluntary adoption of good management practices that protect water quality.
- **Participate** in your locally led watershed planning and TMDL implementation process by joining your local watershed partnership. Your input on which production practices should be recommended and included in the implementation plan is important to you and your neighbors.
- **Help** your commodity association educate its members on water quality and the TMDL process.



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