

MICHIGAN'S STATEWIDE *E. COLI* TOTAL MAXIMUM DAILY LOAD

Guidance

A Statewide Approach to a Statewide Problem

Routine testing has shown *E. coli* levels in many areas are above the water quality standard. *E. coli* is used as an indicator for fecal contamination and the water quality standard is designed to protect human health during recreation. When the water quality standard is exceeded, the Federal Clean Water Act requires that Michigan develop a Total Maximum Daily Load (TMDL) to provide a framework for restoration of water quality. Sources of *E. coli* are ever present to human occupation, and include livestock, improper or incomplete sewage treatment (failing septic systems, leaking sewer systems, combined and sanitary sewer overflows, and illicit connections), pets and nuisance levels of wildlife. Given the extent of this problem and the multitude of potential sources, a statewide approach will be more effective and more efficient at addressing this issue.

The benefits of a statewide approach

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- Implement needed pollutant reductions through permits significantly faster
- Open up a statewide dialog and foster cooperation on this widespread problem
- Focus resources on priority areas where we can make an impact

How will this help you?

- A new online interactive mapping system will give you important, up-to-date information about potential *E. coli* sources in your area
- This statewide TMDL will be more interactive than previous versions, with links to online resources, so it won't become obsolete.

Some details on what to expect

- The TMDL will provide a general legal framework for reducing pollutant loads in areas where the water quality standard is exceeded
- Only impaired waters will be included
- As new impaired waters are found, they will be added to the TMDL
- New additions will be public noticed with each biennial update of the 303(d) list

Public Outreach

Are you interested in having Michigan Department of Environmental Quality (MDEQ) staff give a presentation to your group? Visit the Statewide *E. coli* TMDL Web site: www.michigan.gov/ecolitmdl, and submit a request.



Stay connected! Join our mailing list by going to www.michigan.gov/deq and clicking on any red envelope. (Topic: TMDLs and Integrated Reporting).

For more information, contact Molly Rippke, Senior Aquatic Biologist, at rippkem@michigan.gov or 517-284-5547.

What is *E. coli*?

Escherichia coli, or *E. coli*, is a bacteria found in the digestive systems of mammals and birds. Michigan uses the presence of *E. coli* in surface water as an indicator of pollution by feces. *E. coli* can be dangerous, but it also indicates the potential for other pathogens that can make people sick, such as giardia and cholera.

Why is *E. coli* Important?

The safety of Michigan's people and visitors is a DEQ priority. *E. coli*, and associated pathogens, can make you sick if ingested.

What is a TMDL?

The Federal Clean Water Act requires that Michigan monitor surface water to determine if the water quality standards are being met. If *E. coli* levels in a water body exceed the standard, then Michigan must develop a plan to limit pollution with a goal of meeting the standard. This plan is a document known as a Total Maximum Daily Load (TMDL). TMDLs are the necessary first step in solving *E. coli* pollution problems.

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