

IZAAK WALTON LEAGUE CEDAR RIVER WATERSHED PROJECT

February 2018

Goal: Fishable, swimmable waters throughout the watershed, as called for by the Clean Water Act, passed 45 years ago.

2017 STREAM MONITORING FOR E-COLI

The Cedar River is designated and promoted as a Water Recreation Route, encouraging boating, swimming and other water-based activities.

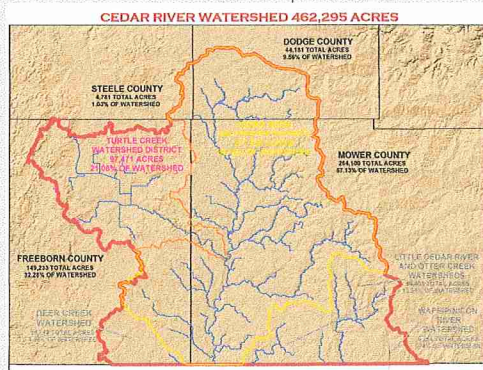
40 volunteers sampled over a 19-week period from late June to early October.

83 sites, 498 samples from across the watershed.

70% (345/498) of samples indicated e-coli exceeding health standards.

21 DNA tests from 7 sites indicated human, swine and cattle contamination. This situation is complex!

Data indicate that the city of Austin is not the source.



Izaak Walton League
Upper Mississippi River Initiative
Cedar River Monitoring and Clean-up

Our Findings

- In 2017, forty volunteer stream monitors drew almost 500 samples from 83 sites across the Cedar River watershed and tested for e-coli, an indicator of fecal contamination.
- Seventy percent of the samples had e-coli contamination which exceeded human health standards for body contact (swimming, wading, boating, etc.)
- After major rainstorms, we consistently found extremely high e-coli readings on most streams and tributaries at 5X, 10X, 20X or more of the standard. This indicates to us that the rain is flushing e-coli on the land, and in tile lines and ditches into the streams.
- Limited DNA testing indicated at least three sources for the fecal contamination: swine, cattle and humans.
- We have no reason to believe that our results are not reflective of the conditions of the other streams and rivers of our county and region.
- We are concerned about the health of children and adults who enjoy our streams, rivers and lakes, and request an urgent effort by all members of our community to address this and other related sources of pollution.

Our requests

- Hormel corporation and partners in the Cedar River Partnership have already been requested to take a lead in addressing contamination coming from hog rearing and related manure spreading.
- The Mower County Soil and Water Conservation District should be provided the resources to work with smaller (unregulated) cattle feeding operations to encourage best practices to move cattle and manure piles away from waterways to reduce fecal contamination from these sources
- Mower County should immediately notify the estimated 1700 home owners across the county with questionable sewage disposal that they will be required to verify that their systems are up to standards, and if not, to bring them up to today's standards for the good of the community.
 - We support public assistance for lower income individuals to comply with this necessary upgrade which protects us all.
 - We urgently request that all such homes along both north and south Dobbins Creek be required to be in compliance by December 31st, 2018, because both the Hormel Nature Center and Eastside Lake are water recreation areas of high use by our children.
 - We request that all homes throughout the county be required to be in compliance by December 31st, 2020.



Minnesota
Pollution
Control
Agency

Revised Regional TMDL Evaluation of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin

Regional
Division

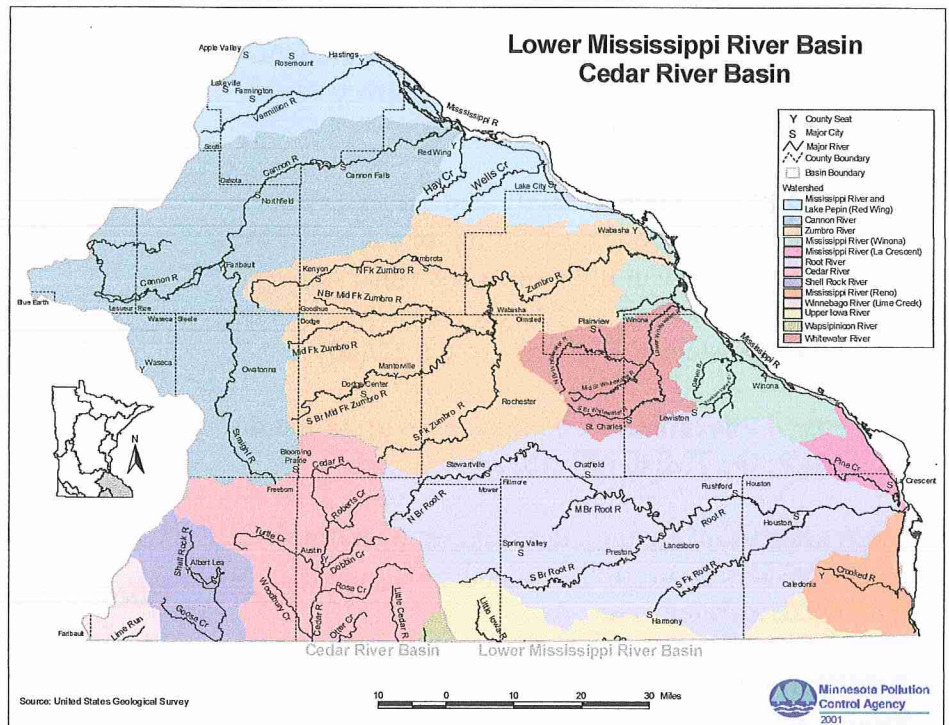
Water Quality/Impaired Waters #9.02a, August 2005

Impaired
Waters
Program

The federal Clean Water Act and the United States Environmental Protection Agency's Water Quality Planning and Management Regulations require states to develop Total Maximum Daily Loads (TMDLs) for water bodies that do not meet water quality standards.

The TMDL process establishes the allowable level of pollutants for a water body based on the relationship between pollutant sources and water conditions. Development of a TMDL Report provides a basis for determining the pollutant reductions necessary from point and nonpoint sources to restore and maintain the quality of water resources.

Thirty-nine stream reaches in the Lower Mississippi and Cedar River Basins are impaired for swimming use. Fecal coliform levels in these reaches violate Minnesota water quality standards. The purpose of this 2005 TMDL Report is to revise a 2002 TMDL developed for fecal coliform impairments in the same geographic area.



MPCA Area Offices:

- Rochester area:**
507/285-7343
- Mankato area:**
507/389-5977
- Marshall area:**
507/537-7146
- Willmar area:**
320/214-3786
- Detroit Lakes area:**
218/847-1519
- Brainerd area:**
218/828-2492
- Duluth area:**
218/723-4660
- Metro area:**
651/296-6300
- Toll-Free Number:**
800/657-3864

2002 Report

In 2002, the MPCA submitted a report titled, *Regional Total Maximum Daily Load Evaluation of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin in Minnesota* to the U.S. Environmental Protection Agency (EPA). The report satisfied the requirements of the federal Clean Water Act for 20 stream reaches in the Lower Mississippi and Cedar River basins. The original report is available for review on the MPCA web site at <http://www.pca.state.mn.us/water/tmdl/index.html#finaltmdl>. The report was approved by the EPA in November 2002, a decision that was later challenged by the Minnesota Center for Environmental Advocacy (MCEA).



Results of Legal Challenge

In a June 2005 ruling, the United States District Court for Minnesota remanded the TMDL report back to the EPA for revisions. The complete court ruling is available on the MPCA Web site at

<http://www.pca.state.mn.us/water/tmdl/index.html#finaltmdl>. In short, the court ruling states that the revised TMDL must

- Be established at a level necessary to implement the applicable water quality standards for each reach impaired with fecal coliform contamination
- Contain a margin of safety that accounts for lack of knowledge concerning the relationship between effluent limitations and water quality
- Properly account for straight pipe septic systems in the wasteload allocation of the TMDL

Wasteload allocation: all point sources or permitted facilities in the TMDL affected area

Load allocation: all nonpoint sources, including those considered part of the natural background, in the TMDL affected area

Additional Revisions

Prior to the court ruling, the MPCA had begun revisions in two other areas of the TMDL. First, a number of reaches have been added to the impaired waters list since the original TMDL was submitted for approval. As such, the revised TMDL includes 39 reaches as opposed to the 20 contained in the original report. In addition, based on new EPA guidelines, municipal separate storm sewer systems and confined animal feedlot operations are now included in the wasteload allocation, rather than the load allocation.

A Different Approach

Based on the requirements of the court order, the approach to the revised TMDL is quite different from that of the original. The original TMDL report set source-specific fecal coliform reduction goals for the entire basin. The revised report establishes monthly fecal coliform loading capacities and allocations for each individual impaired reach. Based on these loading capacities and allocations, reduction goals will be reviewed as part of an implementation plan update process.

Implementation

Despite the legal challenge, the MPCA proceeded to develop and put in place an implementation plan for the TMDL. Implementation plans detail the source reductions and needed activities for meeting the pollutant load allocations set in the TMDL. A wide range of efforts to reduce fecal coliform bacteria in the rivers and streams of the basin are underway. A few of the specific efforts include:

- Reduction of runoff from smaller, open lot livestock feedlots through increased technical, educational, and financial support
- Assistance to beef and dairy producers to accelerate the use of rotational grazing
- A doubling in the rate at which inadequate septic systems and small unsewered communities are being upgraded

Upon approval of the revised TMDL report, a public process for reviewing and updating the existing implementation plan will begin.

For More Information

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TTY users may call the MPCA teletypewriter at

(651) 282-5332 or 1-800-657-3864.

On the Web, visit <http://www.pca.state.mn.us/water/tmdl>

The draft TMDL report is located on the Web at

<http://www.pca.state.mn.us/water/tmdl/index.html#drafttmdl>