

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Mattese Creek

Water Body ID: 3596

Water Body Segment at a Glance:

County: St. Louis
Nearby City: Oakville
Length: 1.1 miles
Pollutants: Chloride and
Escherichia coli (E. coli)
Source: Urban runoff/storm sewers



State Map Showing Location of Watershed

Schedule for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Mattese Creek is impaired due to exceedances of state water quality criteria that protect aquatic life and whole body contact recreation designated uses.

Designated uses of Mattese Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated uses that are impaired

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

- Numeric bacteria criteria for the protection of recreational uses is found in 10 CSR 20-7.031(5)(C) and Table A. For category B waters, *E. coli* counts, measured as a geometric mean, shall not exceed 206 counts/100 mL of water “during the recreational season.” The state’s recreational season is defined in this section of the rule as being from April 1 to October 31.
- Numeric criteria for chloride are found in 10 CSR 20-7.031 Table A and are dependent upon water hardness and sulfate concentrations. However, this criteria was disapproved by the U.S. Environmental Protection Agency. For this reason, the assessment of Mattese Creek as impaired is based on the state’s former EPA-approved chronic chloride criterion of 230 milligrams per liter (mg/L).

Assessment and water quality data

A stream is judged to be impaired for bacteria if the recreational season geometric mean is exceeded in any of the last three years for which adequate data (5 samples) is available. For Mattese Creek there was adequate bacteria data in 2007, 2008 and 2009. The whole body contact recreation category B criterion was exceeded in 2008 and 2009 (Figure 1).

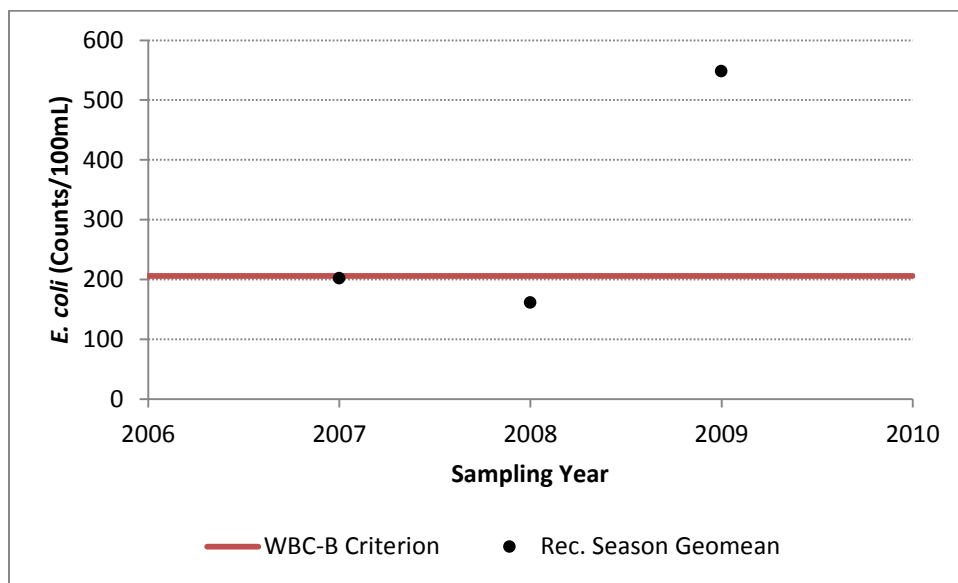


Figure 1. Recreational season *E. coli* data for Mattese Creek

A stream is judged to be impaired by toxics, such as chloride, if the criterion is exceeded more than once in any of the last three years of available data collected during stable flow conditions. There were four exceedances of the 230 mg/L chronic criterion during stable flow conditions between June 2009 and June 2012 (Figure 2).

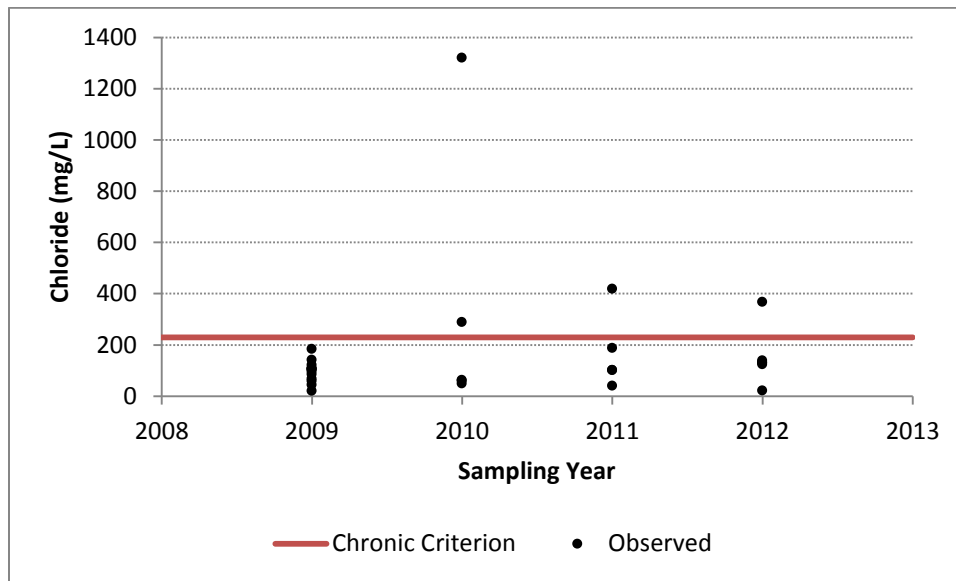


Figure 2. Chloride measurements from Mattese Creek

TMDL for Mattese Creek

The Mattese Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Mattese Creek TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

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Map of the Mattese Creek Watershed

