



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Thompson River Water Body ID: 0549

Water Body Segment at a Glance:

County: Harrison/Livingston
Nearby City: Chillicothe
Length: 70.6 miles
Pollutant: *E. coli* bacteria
Source: Rural nonpoint sources



State Map Showing Location of Watershed

Scheduled 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. The Thompson River is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of the Thompson River*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Drinking Water Supply (DWS)
- 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).

Use that is impaired

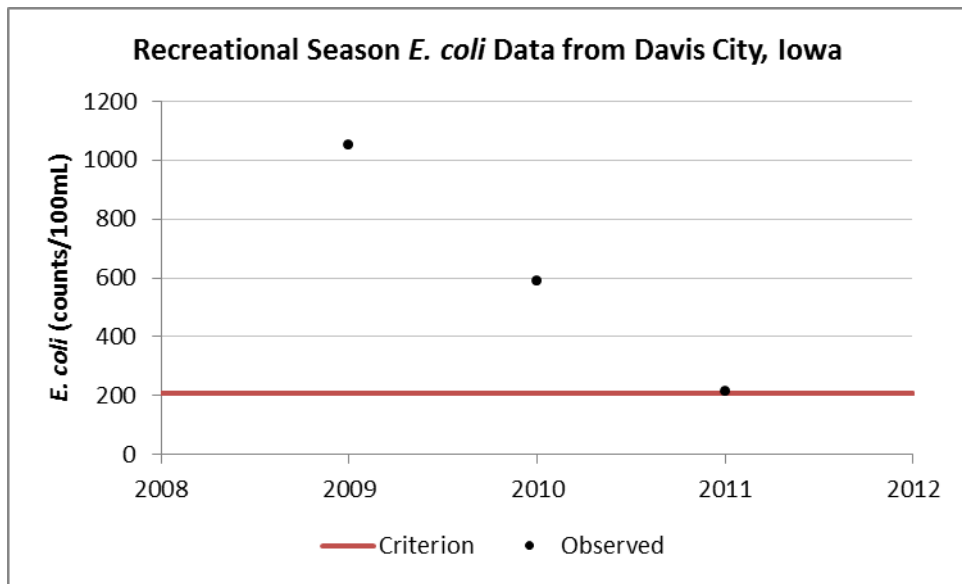
- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

- Missouri’s Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that for category B waters, the *E.coli* bacteria count shall not exceed 206 per 100 milliliters of water. This count is the geometric mean during the recreational season (April 1- October 31).

Background information and water quality data

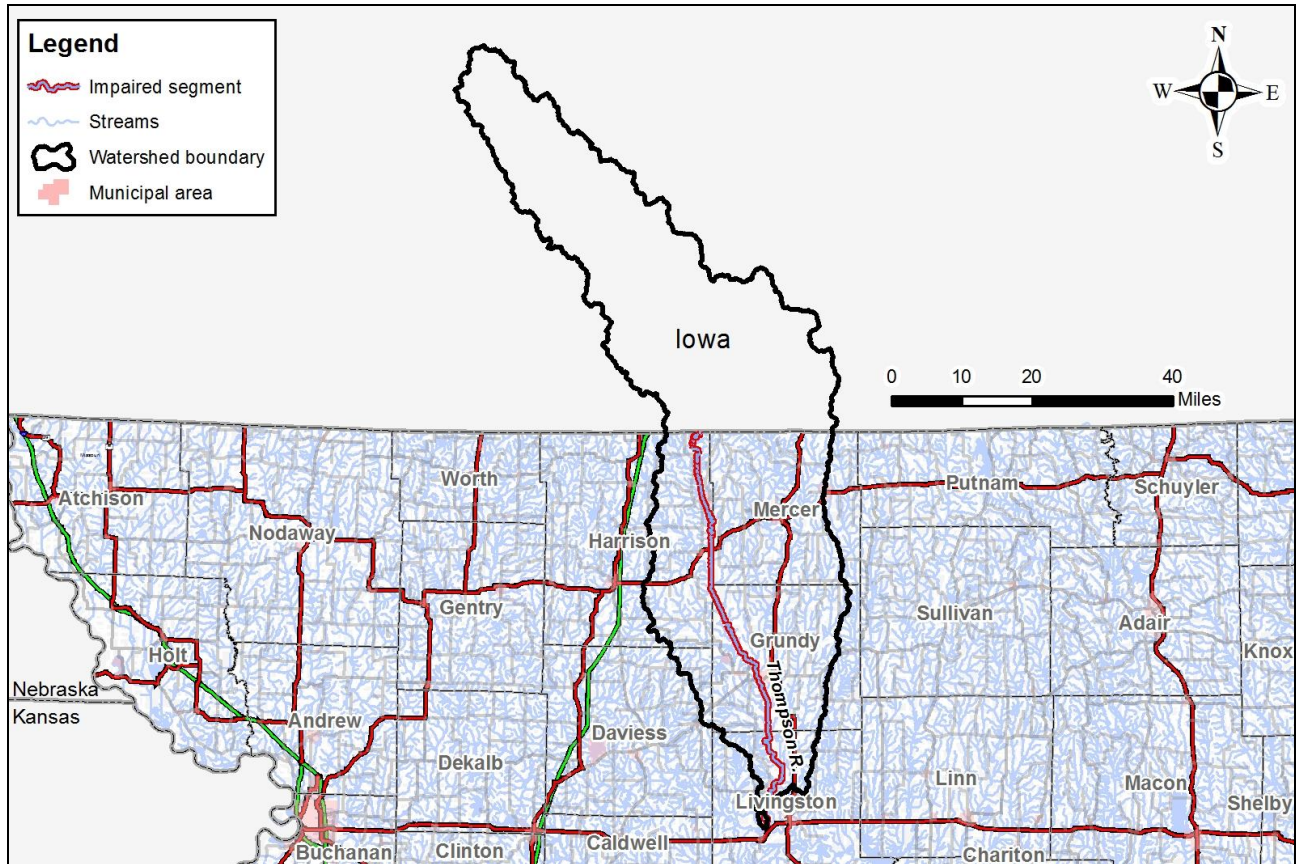
High counts of *E. coli* bacteria in surface water are an indication of fecal contamination. *E. coli*, are bacteria found in the intestines of warm blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses. The department judges a stream to be impaired by *E. coli* if the criterion is exceeded in any of the last three years for which there is a minimum of five samples collected during the recreational season. Available bacteria data collected in Davis City, Iowa, shows the criterion was exceeded in 2011, 2010, and 2009.



TMDL for the Thompson River

The Thompson River 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 Thompson River 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.

Map of the Thompson River watershed



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