



Total Maximum Daily Load Information Sheet

Mussel Fork Creek

Water Body ID: 0674

Water Body Segment at a Glance:

Counties: Sullivan to Macon
Nearby City: Ethel
Length: 29 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

Other TMDLs:

In 2006, the U.S. Environmental Protection Agency approved a TMDL to address a sediment impairment in Mussel Fork. This TMDL and associated documents are available online at dnr.mo.gov/env/wpp/tmdl/0674-mussel-fk-ck-record.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. Mussel Fork Creek is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of Mussel Fork Creek*

- 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

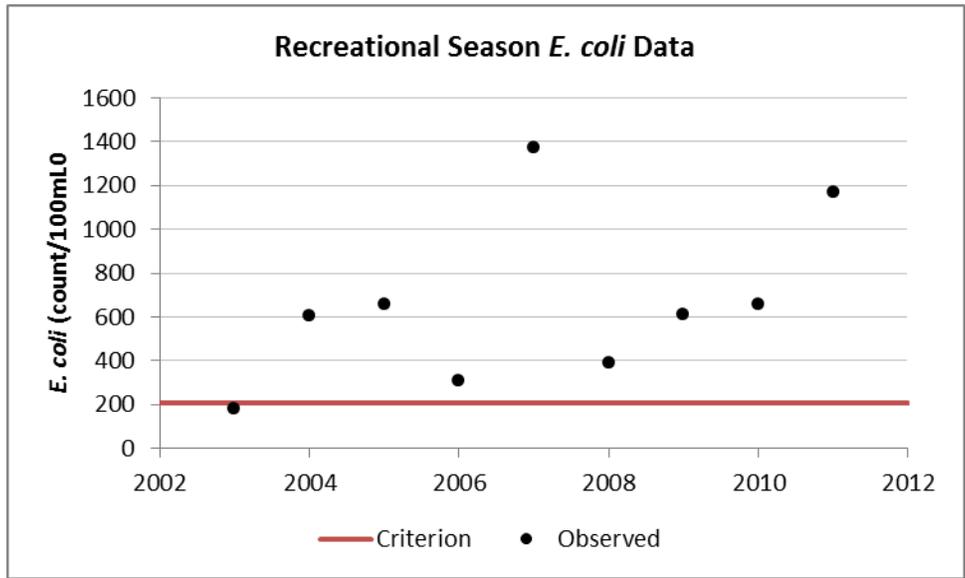
- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

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

Background information and water quality data

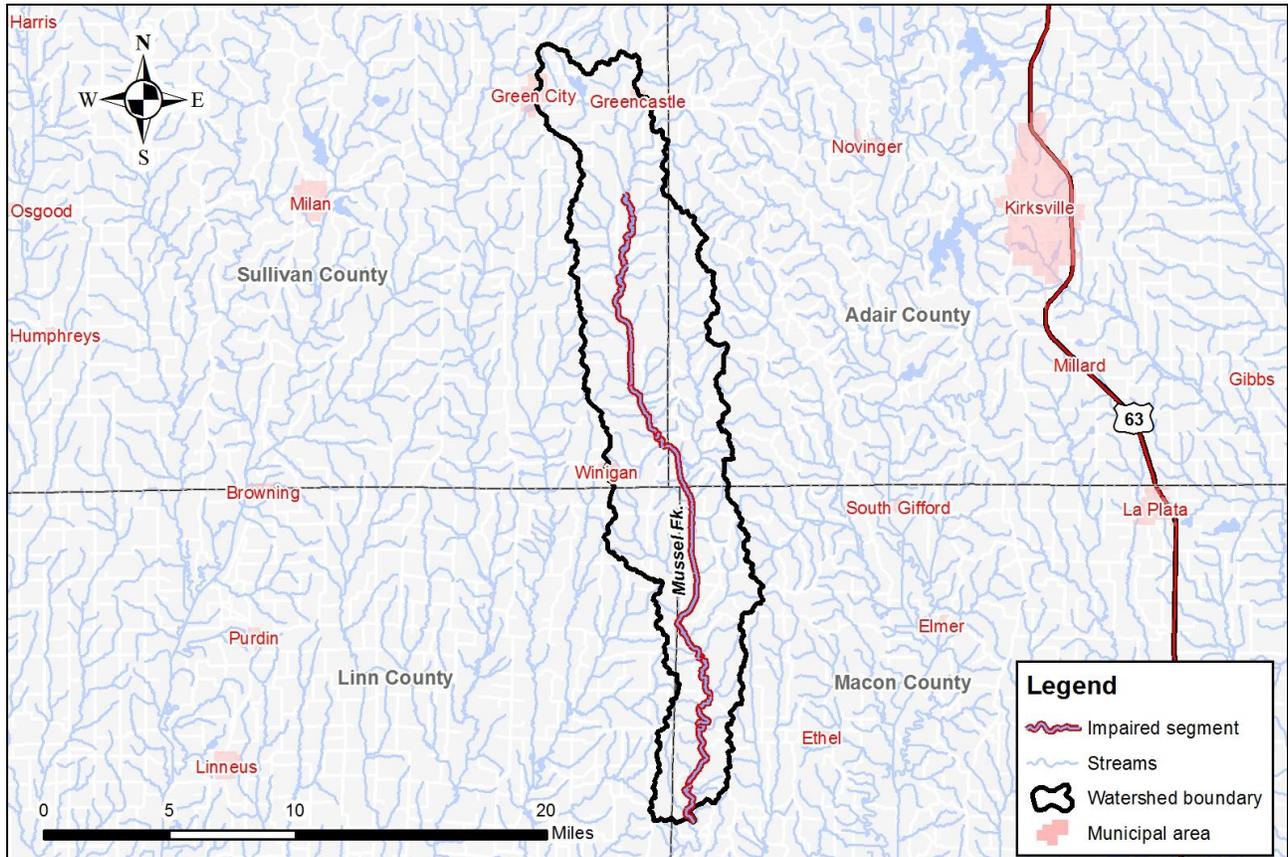
High counts of *E. coli* bacteria in surface water are an indication of fecal contamination. *E. coli* are bacteria found in the intestines of warm blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses. The department judges a stream to be impaired by *E. coli* if the criterion is exceeded in any of the last three years of available data for which there are a minimum of five samples collected during the recreational season. Sufficient *E. coli* data for Mussel Fork Creek, is available from 2003 to 2011. The *E. coli* criterion has been exceeded in every year from 2004 to 2011.



TMDL for Mussel Fork Creek

The Mussel Fork 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 Mussel Fork 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.

Map of the Mussel Fork Creek watershed



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