

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Bonhomme Creek

Water Body ID: 1701

Water Body Segment at a Glance:

County:	St. Louis
Nearby City:	Chesterfield
Segment Length:	2.5 miles
Pollutant 1:	Bacteria
Source 1:	Urban runoff/Storm sewers
Pollutant 2:	pH
Source 2:	Unknown



Statewide 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. Bonhomme Creek is impaired due to exceedances of the water quality criteria for the protection of aquatic life and recreation.

Designated uses of Bonhomme 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 use that are impaired

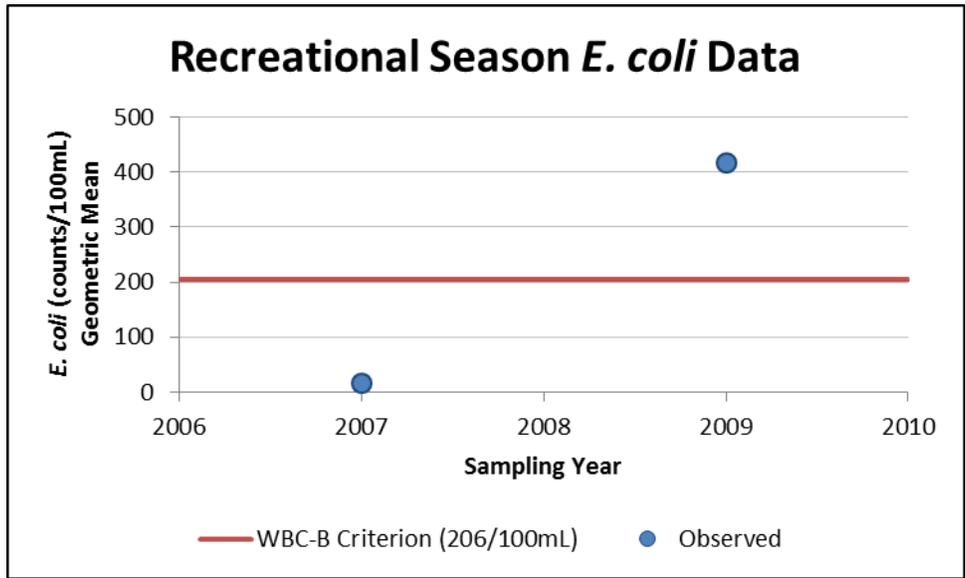
- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)

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 for category B waters, measured as a geometric mean, shall not exceed 206 colonies per 100 milliliters of water (206 col/100 mL) during the recreational season. The recreational season is defined as being from April 1 through October 31.
- Missouri’s Water Quality Standards at 10 CSR 20-7.031(5)(E) state that water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units.

Assessment and water quality data

The department judges a stream to be impaired by bacteria if the applicable water quality criterion for *E. coli* is exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season. Sufficient *E. coli* data for Bonhomme Creek is available for the 2007 and 2009 recreational seasons. The geometric mean criterion was exceeded in 2009.



A water is judged to be impaired due to pH if 10 percent or more of available pH measurements fall outside the range allowed in Missouri’s water quality standards. For Bonhomme Creek, 66 pH measurements were made from 2005 to 2012. Of these 66 measurements, 15 were found to be outside the allowable range of 6.5 to 9.0. This equates to a 22.7 percent exceedance rate. For this reason, Bonhomme Creek was judged to be impaired by pH.

Map of the Bonhomme Creek Watershed

