

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Bonhomme Creek

Water Body Segment at a Glance:

County:	St. Louis
Nearby City:	Chesterfield
Water Body ID:	1701
Segment Length:	2.5 miles
Watershed Size:	38 square 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: 2014 for bacteria and 2017 dissolved oxygen

Description of the Problem

Designated beneficial uses of Bonhomme Creek:

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation – Category B

Uses that are impaired:

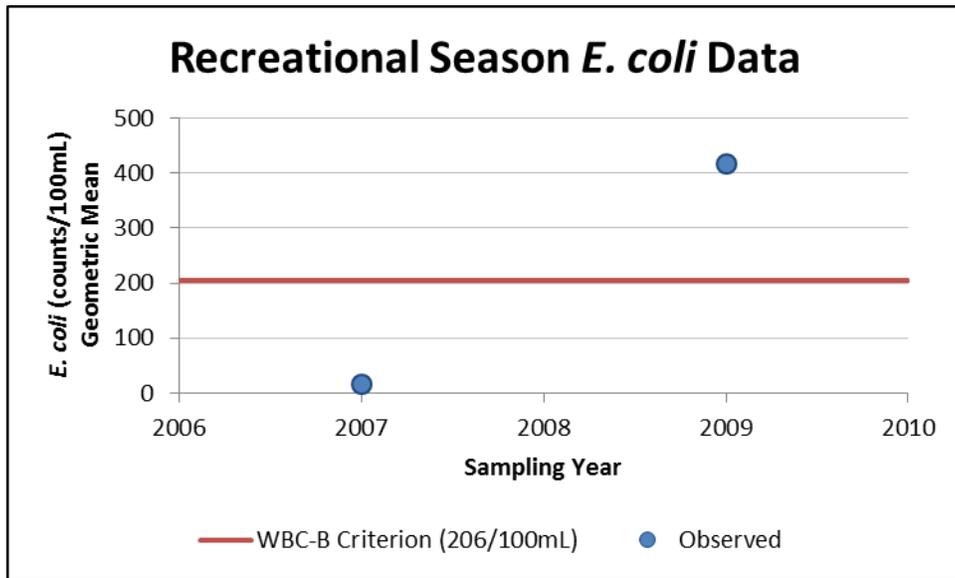
- Whole Body Contact Recreation – Category B (bacteria impairment)
- Protection of Warm Water Aquatic Life (pH impairment)

Standards that apply

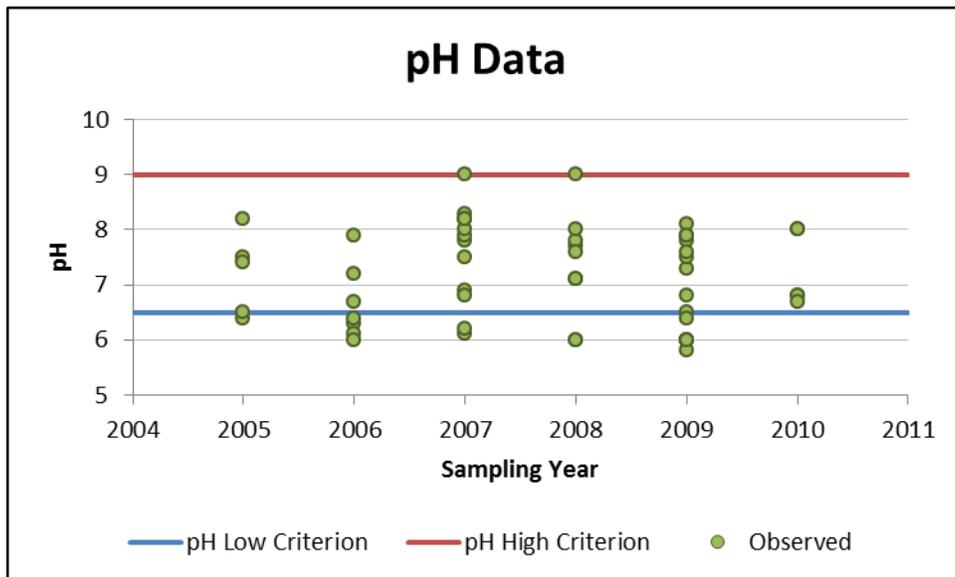
- Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(C) states that the *E. coli* bacteria count for category B waters, measured as a geometric mean, shall not exceed 206 colonies per 100 milliliters of water (206 col/100 mL) during the recreational season. The recreational season is defined as being from April 1 through October 31.
- Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(E) state that water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units.

Background information and water quality data

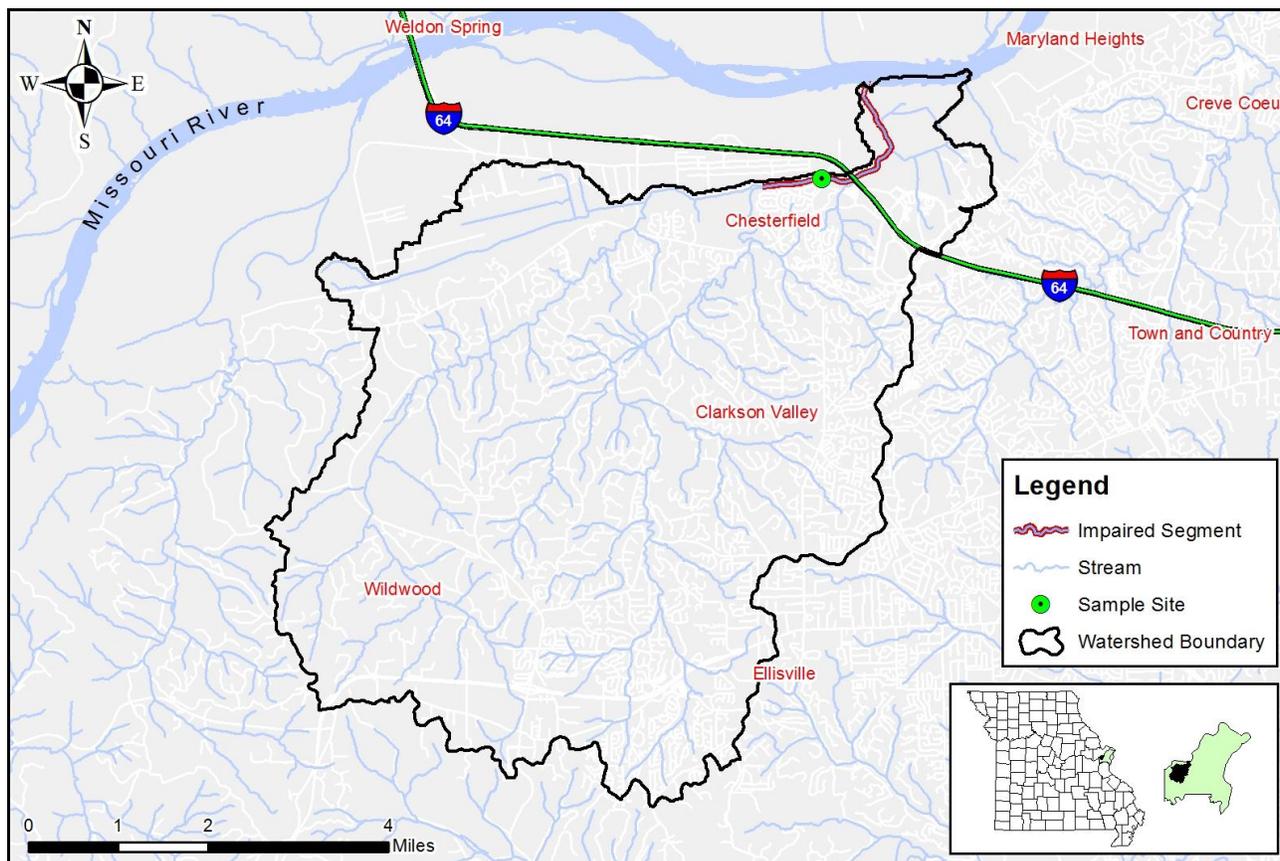
Bonhomme Creek is an urban stream located in the City of Chesterfield and is a tributary of the Missouri River. The department judges a stream to be impaired by bacteria if the applicable water quality criterion for *E. coli* is exceeded in any of the last three years for which there is a minimum of 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 ten percent or more of available pH measurements fall outside the range allowed in Missouri’s water quality standards. For Bonhomme Creek, 54 pH measurements were made from 2005 to 2010. Of these 54 measurements, 15 were found to be outside the allowable range of 6.5 to 9.0. This equates to a 27.8 percent exceedance rate. For this reason, Bonhomme Creek was judged to be impaired by pH.



Map Showing the Bonhomme Creek Watershed



Note: Final TMDLs developed for Bonhomme Creek will be based on the most current and available data and information.

For more information call or write:

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