

Total Maximum Daily Load Information Sheet

Black Creek

Water Body Segment at a Glance:

County:	Shelby
Nearby City:	Shelbyville
Water Body ID:	111
Segment Length:	19.4 miles
Watershed Size:	112.2 square miles
Pollutant 1:	Bacteria
Source 1:	Shelbyville WWTF and nonpoint sources
Pollutant 2:	Low dissolved oxygen
Source 2:	Unknown



Statewide Map Showing Location of Watershed

Scheduled for TMDL development: 2013 for bacteria and 2024 dissolved oxygen

Description of the Problem

Designated beneficial uses of Black 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:

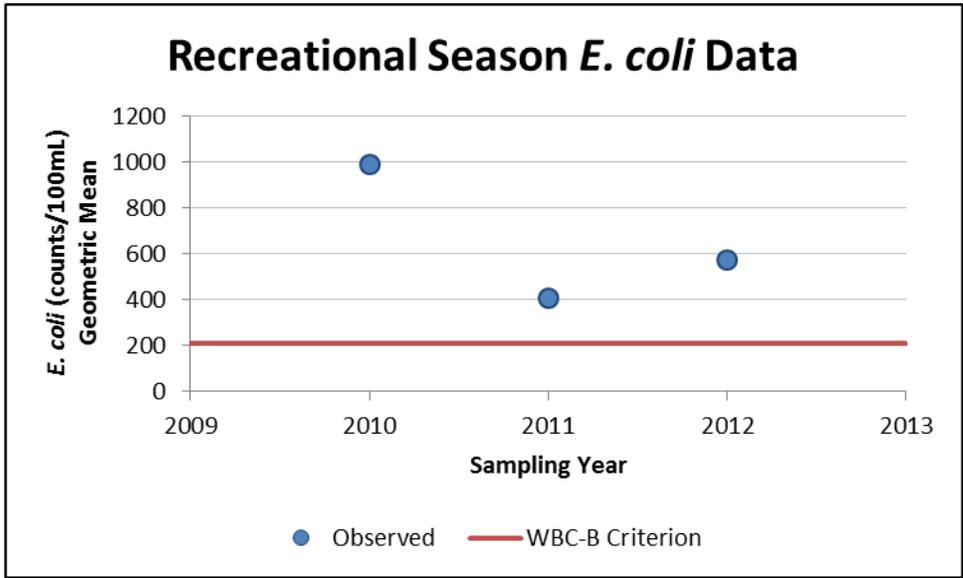
- Whole Body Contact Recreation – Category B (bacteria impairment)
- Protection of Warm Water Aquatic Life (dissolved oxygen impairment)

Standards that apply

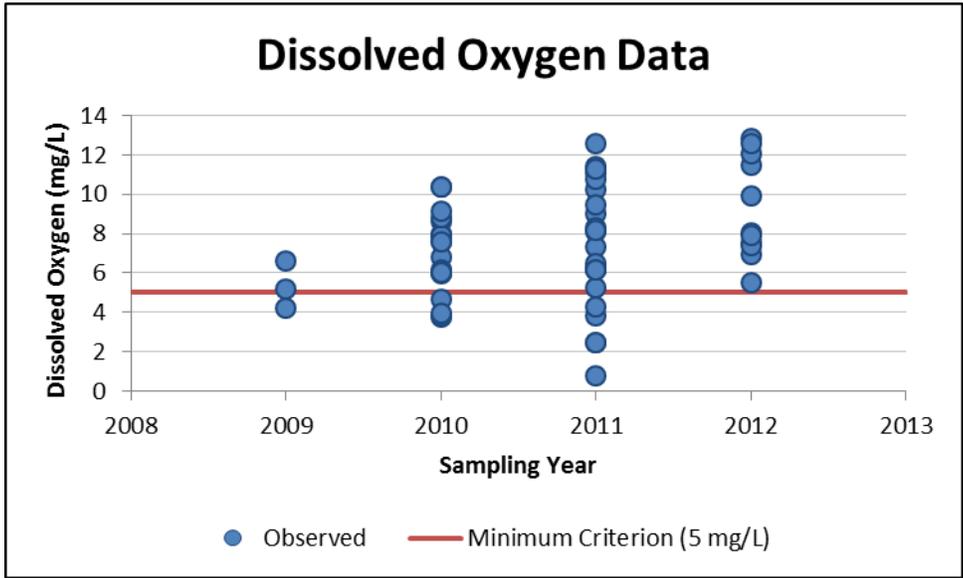
- Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(C) states that the *E. coli* bacteria count for category B waters, measured as a geometric mean, shall not exceed 206 colonies per 100 milliliters of water (206 col/100 mL) during the recreational season. The recreational season is defined as being from April 1 through October 31.
- The dissolved oxygen criterion applicable to Black Creek is found in Table A of Missouri's water quality standards at 10 CSR 20.7.031. Table A states that the minimum allowable dissolved oxygen concentration for warm-water and cool-water fisheries is 5 milligrams per liter (mg/L).

Background information and water quality data

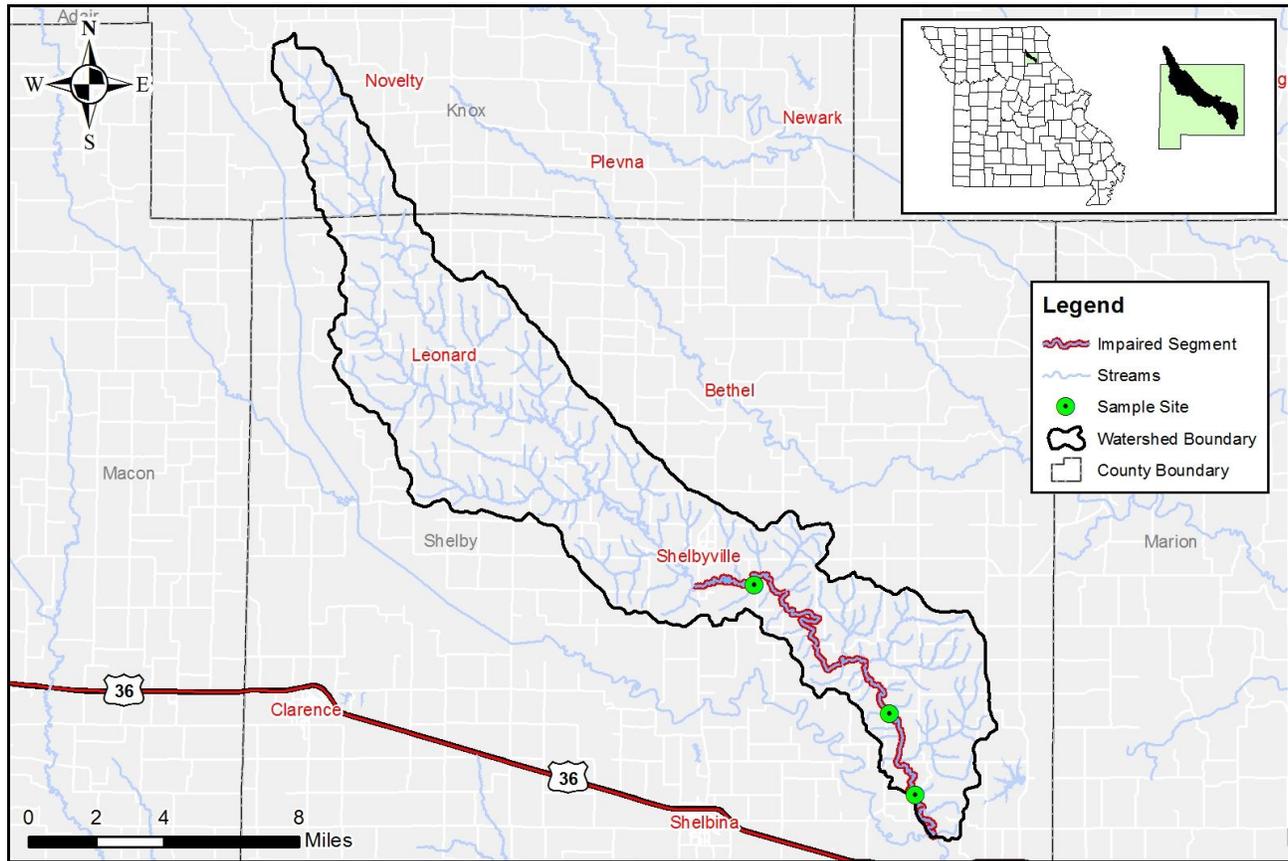
Black Creek is located near the municipality of Shelbyville and is a tributary of the North Fork Salt River. The department judges a stream to be impaired by bacteria if the applicable water quality criterion for *E. coli* is exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season. Sufficient *E. coli* data for Black Creek is available for the 2010, 2011, and 2012 recreational seasons. The geometric mean criterion was exceeded in all three years.



A water is judged to be impaired due to low dissolved oxygen if ten percent or more of available dissolved oxygen measurements fall below the water quality criterion of 5 mg/L. For Black Creek, 57 dissolved oxygen measurements were made from 2009 to 2012. Of these 57 measurements, 10 were found to be below 5 mg/L. This equates to a 17.5 percent exceedance rate. For this reason, Black Creek was judged to be impaired due to low dissolved oxygen.



Map Showing the Black Creek Watershed



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

For more information call or write:

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