

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Fishpot Creek

Water Body Segment at a Glance:

County: St. Louis
Nearby Cities: Valley Park
Water Body ID: 2186
Impaired Length: 3.5 miles
Pollutants: Bacteria¹ and Chloride
Source: Urban Runoff/Storm Sewers



State Map Showing Location of Watershed

Scheduled for TMDL development: Bacteria in 2013; Chloride in 2017

Description of the Problem

Designated beneficial uses of Fishpot 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 (Chloride impairment)

Standards that apply

- The criteria for bacteria are found at 10 CSR 20-7.031(4)(C), where it states that the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 126 colonies per 100 milliliters of water (126 col/100 mL) for category A and 206 col/100 mL for category B waters during the recreational season. The recreational season is defined as being from April 1 through October 31.
- Numeric criteria for chloride are found in 10 CSR 20-7.031 Table A and are dependent upon water hardness and sulfate concentrations. However, the assessment of Fishpot Creek as impaired by chloride predates this current criteria and is based on the state's former chronic

¹ This stream was previously listed as also being impaired by low dissolved oxygen. However, the stream is now meeting water quality standards for this pollutant. The U.S. Environmental Protection Agency approved the delisting of dissolved oxygen from the state's 2012 303(d) List of impaired waters on July 11, 2012.

chloride criterion of 230 milligrams per liter (mg/L). An assessment based on the new hardness dependent criteria has not yet been completed.

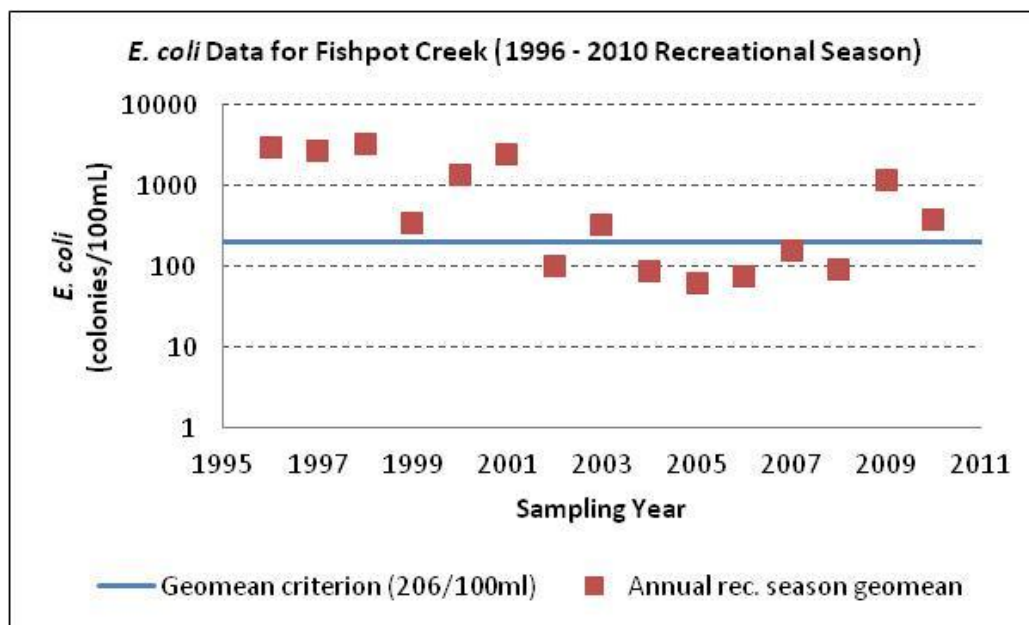
Background information and water quality data

Bacteria Impairment

Fishpot Creek is a small stream that flows east and southeast into the Meramec River near St. Louis. It is designated as category B for the whole body contact recreation use, which means it has places deep enough for total immersion (i.e., swimming), but these areas may be on private lands or inaccessible to the public. The impairments are based on data gathered by the U.S. Geological Survey and the Metropolitan St. Louis Sewer District.

A stream is judged as impaired by bacteria if the water quality criterion is exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season). Adequate data was collected in 2007, 2008, and 2009. The 2009 data shows an exceedance of the 206 col/100 mL criterion. Therefore, Fishpot Creek is judged to be impaired by bacteria. The geometric mean of *E. coli* data collected in 2010 also exceeds the whole body contact recreation category B criterion. However, because only four samples were collected, this data was not used for assessment.

High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. Infections due to pathogen-contaminated waters include gastrointestinal, respiratory, eye, ear, nose, throat and skin diseases. *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 (disease causing) bacteria or viruses. Missouri's whole body contact bacteria criteria are based on specific levels of risk of acute gastrointestinal illness. The level of risk correlating to the category B criterion is no more than 10 illnesses per 1,000 swimmers in fresh water (1 percent).

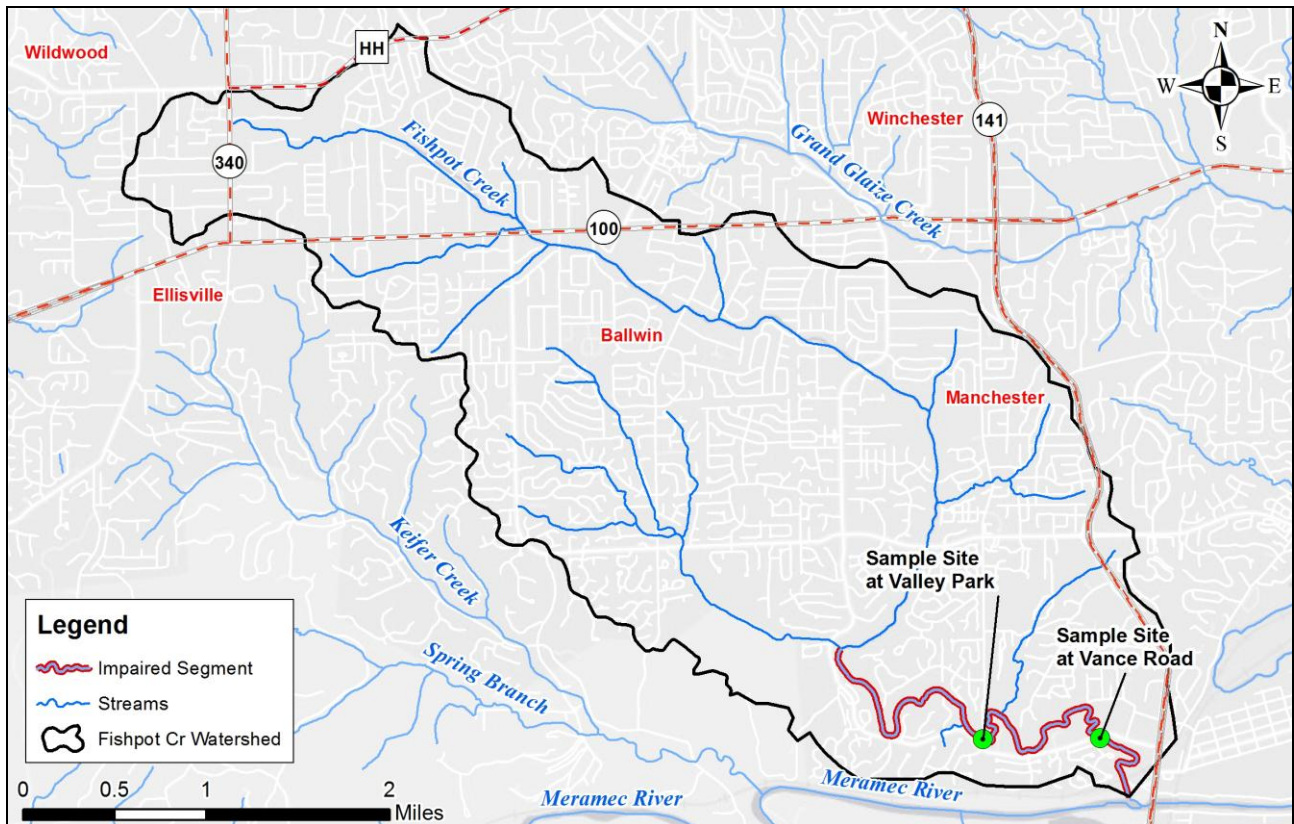


Chloride Impairment

The Listing Methodology used to assess Fishpot Creek for chloride allows a water body to be judged as impaired if the criterion is exceeded more than once in the last three years of data when the stream is at stable flow conditions. Data collected between July 2007 and July 2010 show three occurrences in which the chronic chloride criterion of 230 mg/L was exceeded. For this reason, Fishpot Creek was assessed as impaired by chlroride.

Sample Site	Date	Flow (cfs)	Cl (mg/L)
Fishpot Creek at Vance Rd	Dec. 12, 2007	0.29	385
Fishpot Creek at Vance Rd	Jan. 12, 2010	0	250
Fishpot Creek at Vance Rd	Feb. 18, 2010	0.17	1,140

Map Showing the Fishpot Creek Watershed in St. Louis County



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

For more information call or write:

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