



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Deer Creek

Water Body ID: 3826

Water Body Segment at a Glance:

Counties: St. Louis and St. Louis City
Nearby City: St. Louis
Length of segment: 1.6 miles
Pollutants: Chloride and *E. coli* bacteria
Source: Urban runoff/Storm sewers



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. Deer Creek is impaired due to exceedances of water quality criteria that protect aquatic life and recreational uses.

Designated uses of Deer Creek*

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

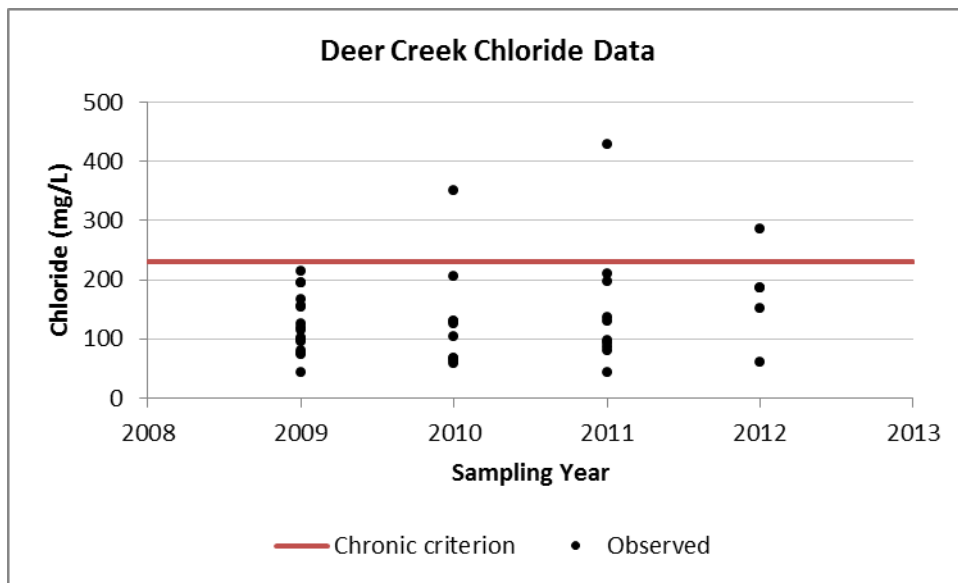
- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category A (WBC-A)

Criteria that apply

- Numeric criteria for chloride for the protection of aquatic life are found in 10 CSR 20-7.031 Table A and are dependent upon water hardness and sulfate concentrations. However, this criteria was disapproved by the U.S. Environmental protection agency. For this reason, the state’s former chronic chloride criterion of 230 milligrams per liter (mg/L) is continuing to be used.
- Bacteria criteria for the protection of recreational uses are found at 10 CSR 20-7.031(5)(C) and Table A. For category A waters, the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 126 colonies per 100 milliliters of water (mL) during the recreational season. The recreational season is defined as being from April 1 – October 31. For secondary contact recreation, *E. coli* counts measured as a geometric mean during the recreational season shall not exceed 1,134 colonies per 100mL.

Assessment and water quality data

The department judges a stream as impaired by chloride if either the acute or chronic criterion is exceeded more than once in the last three years of data when the stream is at stable flow conditions. Exceedances of the chronic chloride criterion have been observed.

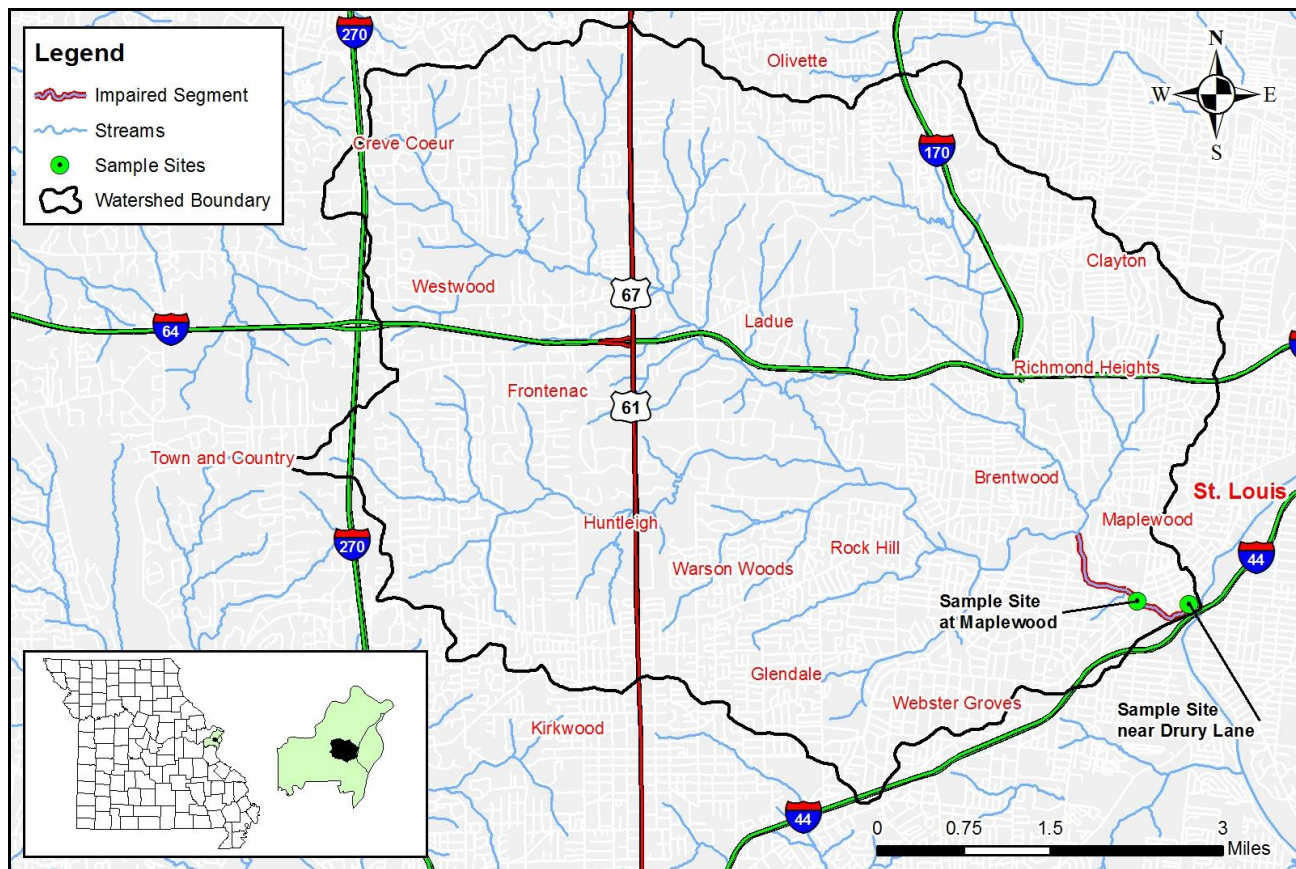


A stream is judged to be impaired by bacteria if the water quality criterion is exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season. Adequate bacteria data for Deer Creek is available for 2009, 2010, and 2011. The whole body contact criterion was exceeded in all three years and the secondary contact criterion was exceeded in 2009.

***E. coli* Data for Deer Creek (counts/100mL)**

<i>Sampling Year:</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<i>Rec. Season Geomean:</i>	1,420	518	309

Map of the Deer Creek Watershed



TMDL for Deer Creek

The Deer 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 Deer 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.

For more information call or write:

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