



Missouri Department of Natural Resources
Total Maximum Daily Load Information Sheet

Center Creek
Water Body ID: 3203, 3210, and 3214

Water Body Segment at a Glance:

Counties: Jasper, Newton and Lawrence
Nearby Cities: Joplin
Length: 3203 – 26.8 miles
3210 – 21.0 miles
3214 – 4.9 miles
Pollutant: *E. coli* bacteria
Source: Rural nonpoint sources



State 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. Center Creek is impaired due to exceedances of the water quality criteria for the protection of recreational uses.

Designated uses of Center Creek*

- Warm Water Habitat (WWH)
- Cool Water Habitat (CLH) ← water body 3203 only
- Cold Water Habitat (CDH) ← water body 3214 only
- Whole Body Contact Recreation Category A (WBC-A)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Industrial Water Supply (IND) ← water bodies 3203 and 3210 only
- 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

- Whole Body Contact Recreation Category A (WBC-A)

Criteria that apply

- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that for waters designated for whole body contact recreation category A, the *E. coli* bacteria count, measured as a

geometric mean, shall not exceed 126 colonies per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1 to October 31.

Assessment and water quality data

High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. The department judges a stream to be impaired by bacteria if the water quality criteria for *E. coli* are exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season.

Table 1. Recreational season geometric mean *E. coli* data for Center Creek*

<i>Water Body ID</i>	<i>Year</i>	<i>Geometric Mean</i>	<i>Geometric Mean Criterion</i>	<i>Exceedance</i>
3203	2011	47	126	No
	2012	72	126	No
	2013	230	126	Yes
3210	2010	228	126	Yes
	2012	193	126	Yes
	2013	338	126	Yes
3214	2007	234	126	Yes
	2011	102	126	No
	2012	456	126	Yes

* The units for all *E. coli* values are counts/100mL of water.

TMDL for Center Creek

The Center 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 Center 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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Map of the Center Creek Watershed

