MISSOURI DEPARTMENT OF NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Spring River

Water Body ID: 3160, 3164, and 3165

Water Body Segment at a Glance:


State Map Showing Location of Watershed

Counties: Lawrence and Jasper
City: Carthage
Length: 3160 (61.7 miles)
3164 (8.8 miles)
3165 (11.9 miles)
Pollutant: *E. coli* bacteria
Source: Rural nonpoint sources

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 http://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. The Spring River is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of the Spring River*

- Warm Water Habitat (WWH)
- Cool Water Habitat (CLH) ←*water body 3160 only*
- Cold Water Habitat (CDH) ←*water body 3164 only*
- Whole Body Contact Recreation Category A (WBC-A)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Industrial Water Supply (IND) ← *water body 3160 only*
- 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).

Use that is impaired

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

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Criteria that apply
Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that the *E. coli* bacteria count for category A waters shall not exceed 126 per 100 milliliters of water. This count is the geometric mean during the recreational season (April 1- October 31) in waters designated for whole body contact recreation.

Assessment and Water Quality Data
High counts of *E. coli* are an indication of fecal contamination. *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 bacteria or viruses. The department judges a water to be impaired by *E. coli* when the criterion is exceeded in any of the last three years for which there are a minimum of five samples collected during the recreational season.

Summary of Geometric Mean *E. coli* Levels in the Spring River*

Location	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
WBID 3160 below Carthage	173	231	125	--	88	378
WBID 3160 Above Carthage	205	238	164	69	105	294
WBID 3164	--	--	833	217	--	--
WBID 3165	32	--	298	175	--	--

* Shaded cells indicate an exceedance of the WBC-A criterion

TMDL for the Spring River
The Spring River 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 Spring River 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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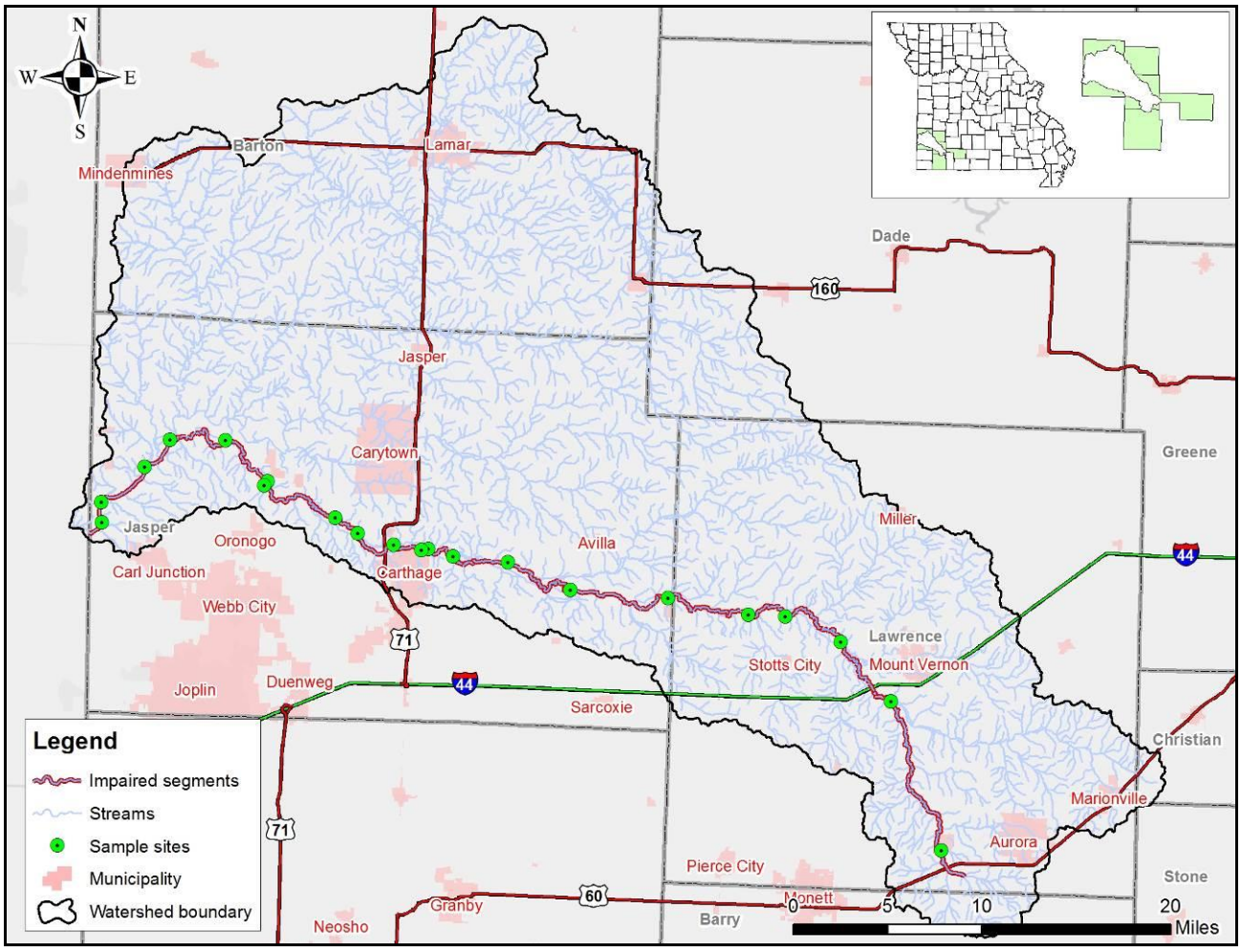
Map of the Spring River Watershed



Revised: March 2015