

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Spring River

Water Body Segment at a Glance:

Counties: Lawrence and Jasper
Nearby City: Carthage
Water Body ID: 3160 (61.7 miles)
3164 (8.8 miles)
3165 (11.9 miles)
Pollutant: Bacteria
Source: Urban/Rural Point
and Nonpoint Sources



State Map Showing Location of Watershed

Scheduled for TMDL development: 2012

Description of the Problem

Beneficial uses of Spring River

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Cool Water Fishery (3160 only)
- Cold Water Fishery (3164 only)
- Protection of Human Health (Fish Consumption)
- Industrial (3160 and 3164 only)
- Irrigation (3160 and 3164 only)
- Secondary Contact Recreation
- Whole Body Contact Recreation – Category A

Use that is impaired

- Whole Body Contact Recreation – Category A

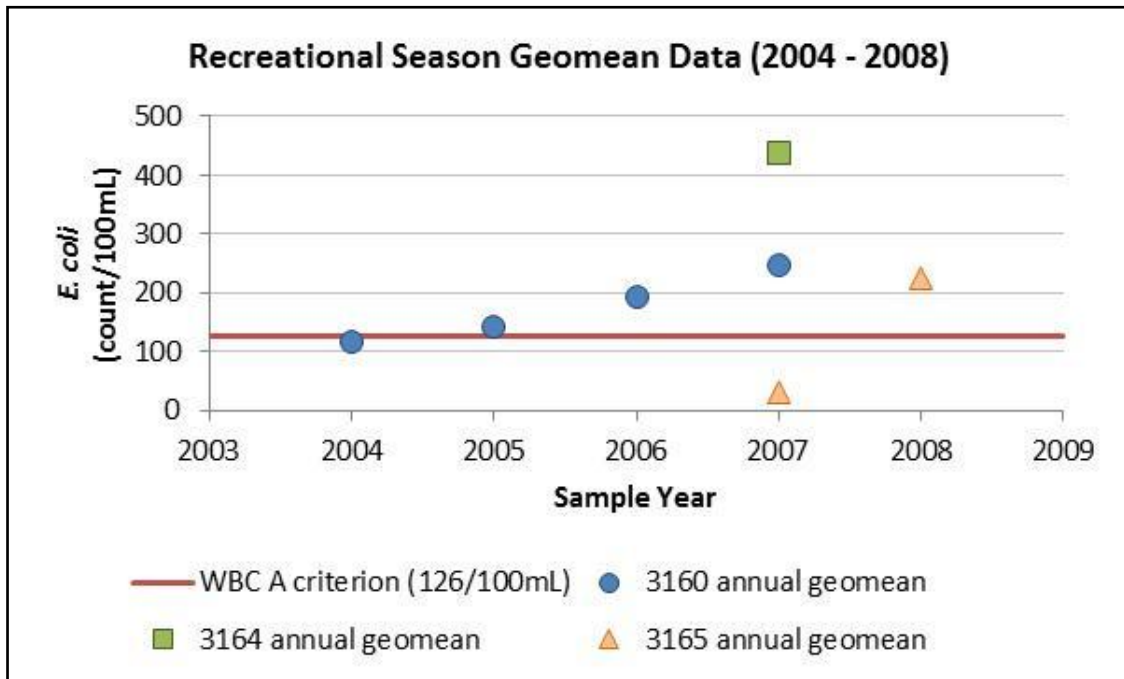
Standards that apply

Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(C) state that the *E. coli* bacteria count 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. This count is the geometric mean during the recreational season (April 1- October 31) in waters designated for whole body contact recreation.

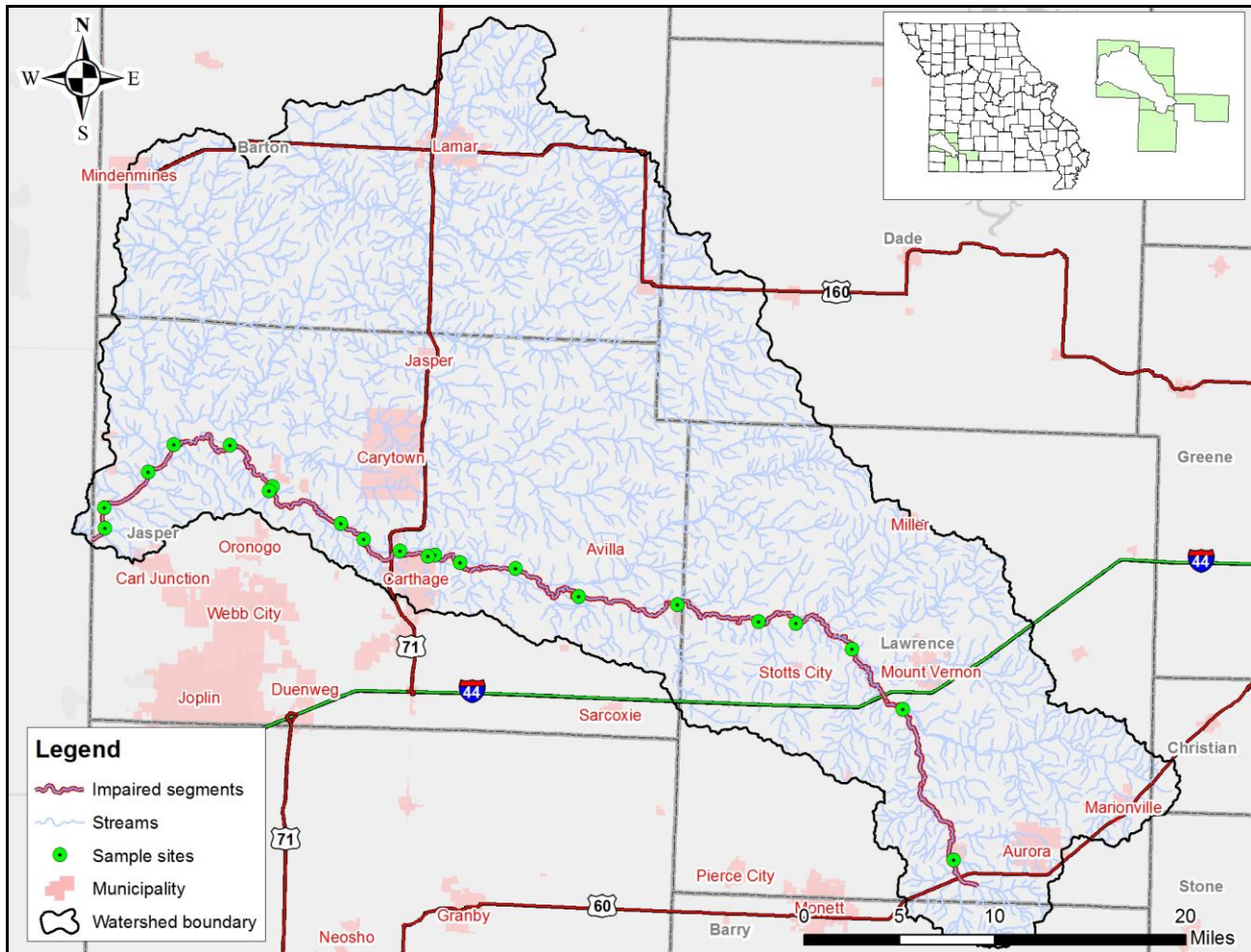
Background information and Water Quality Data

The Spring River touches six counties in western Missouri and crosses over into Kansas just north of Joplin. It is designated for category A whole body contact recreation use. Waters designated for the category A use are waters where there are established public swimming areas and existing whole body contact recreational uses. Three segments of the Spring River are listed as impaired by bacteria on the state's 2010 303(d) List of impaired waters, which was approved by the U.S. Environmental Protection Agency on Oct. 6, 2011. The impairments are based on measurements of *Escherichia coli*, or *E. coli*, bacteria collected by the department, the Carthage High School volunteers and the health departments for Jasper and Lawrence counties.

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. Most *E. coli* strains are harmless, but some can cause serious illness in humans and are occasionally responsible for product recalls. 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 A criterion is no more than 8 illnesses per 1,000 swimmers in fresh water (0.8 percent).



Map Showing the Spring River Watershed and Sampling Sites



NOTE: The final Spring River TMDL will be developed using the most current and available data.

For more information call or write:

Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or 573-751-1300 office
573-522-9920 fax
Program Home Page: www.dnr.mo.gov/env/wpp/index.html