

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Indian Creek

Waterbody Segment at a Glance:

County: Jackson
Nearby Cities: Kansas City
Length of impairment: 3 miles
Pollutant: Fecal Coliform bacteria
Source: Wastewater discharges in Kansas



State map showing location of watershed

TMDL Priority Ranking: High

Description of the Problem

Beneficial uses of Spring Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health associated with Fish Consumption
- Whole Body Contact Recreation (Swimming)
- Industrial Water Supply

Use that is impaired

- Whole Body Contact Recreation (Swimming)

Standards that apply

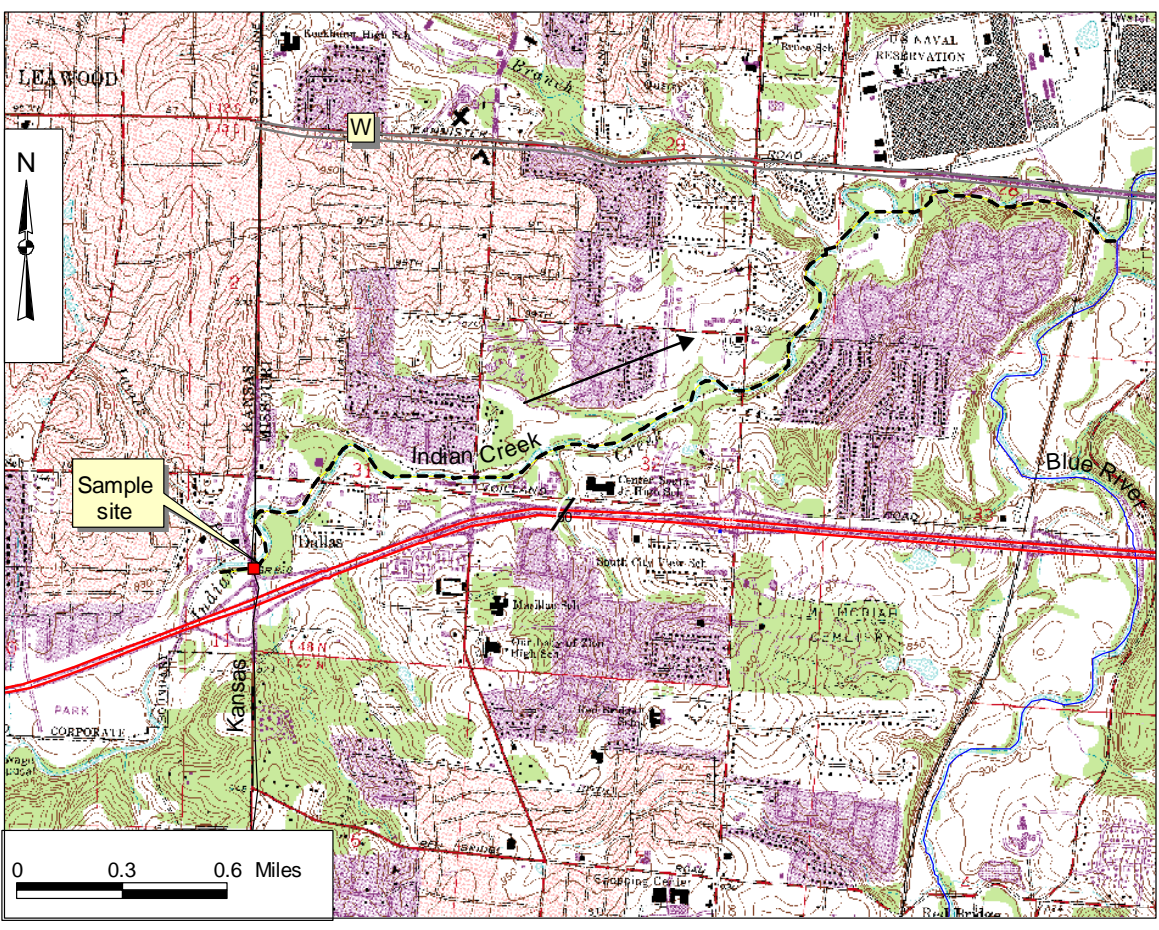
- Missouri's Water Quality Standards (WQS) at 10 CSR 20-7.031(4)(C) state:
For periods when the stream or lake is not affected by stormwater runoff, the fecal coliform count shall not exceed 200 bacterial colonies per 100 milliliters of water (200 col/100 mL) during the recreational season (April 1-October 31) in waters designated for whole-body contact recreation or at any time in losing streams.

Note: Because fecal coliform data can be highly variable and there are uncertainties inherent in sample collection and analysis, the WQS are undergoing revision to use a geometric mean of 200 col/100 mL for the standard. This provides a better indication of what is actually occurring in the water by lessening the impact of infrequent, high bacteria counts on the final result.

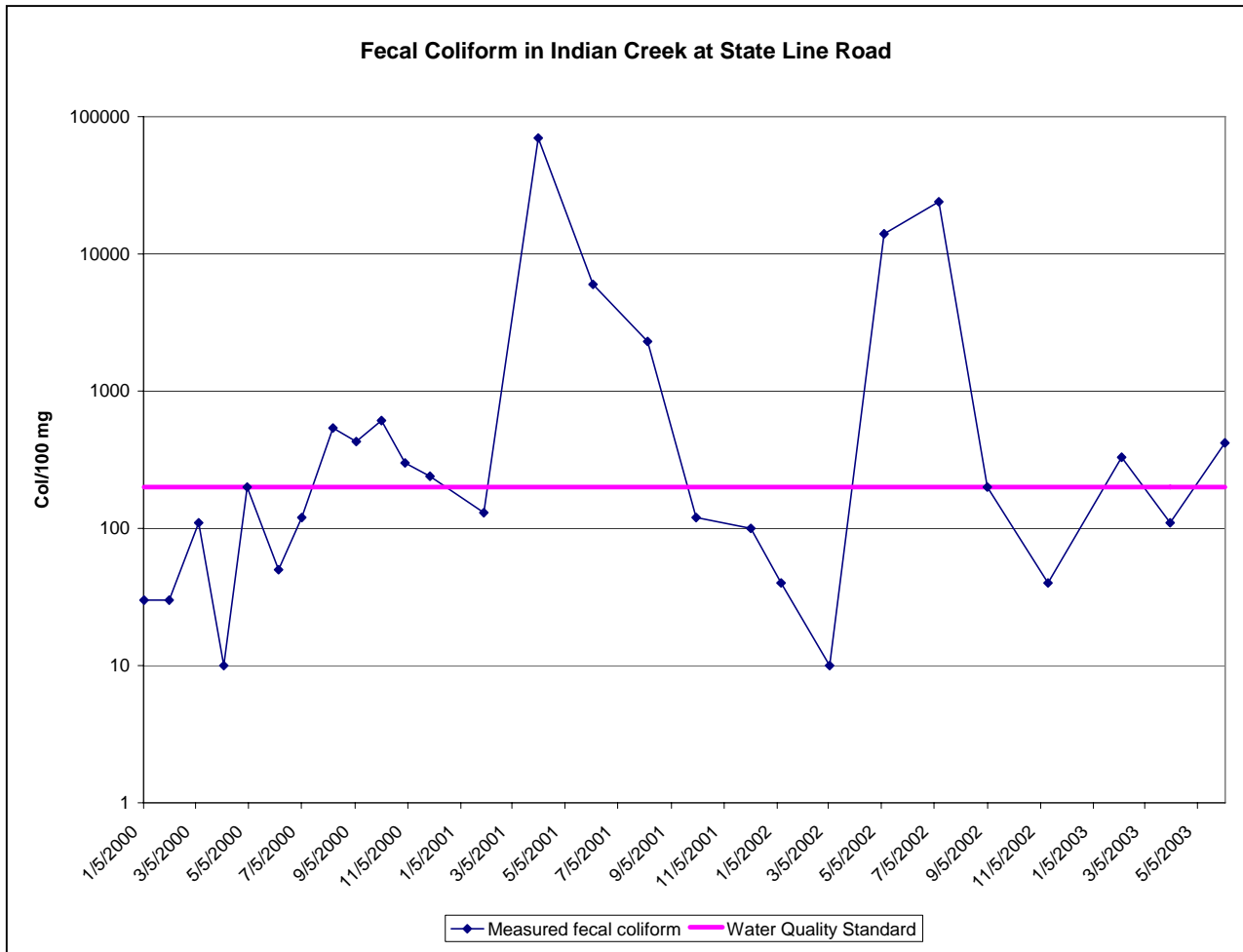
A three mile stretch of Indian Creek was added to the 2002 303(d) list of impaired waters for excess fecal coliform bacteria. Fecal coliform are non-pathogenic (do not cause human illness) bacteria

that act as indicators of the risk of waterborne disease. They are found in the intestines of warm-blooded animals and are used to detect fecal contamination of the water by humans or other animals. Indian Creek flows from Kansas into Missouri, where it continues for three miles before joining the Blue River. The Kansas Department of Health and Environment gathers fecal coliform samples on Indian Creek at State Line Bridge. Kansas used this data to complete a TMDL for fecal coliform (approved by EPA August 28, 2001) for that the portion of Indian Creek that runs through Kansas. Missouri reviewed a total of twenty-seven samples collected between January 2000 and May 2003. The data (see table below) show 10 exceedences of Missouri's numeric criteria during the recreation season. The geometric mean for all samples was 266 col/100 mL and the geometric mean for recreational season samples, uninfluenced by storm water flow, was 273 col/100 mL. After crossing the state line into Missouri, it is noted that any reductions in coliform bacteria in Indian Creek would be insignificant. Therefore, based on the Kansas data, the portion of Indian Creek in Missouri does not meet our bacterial standard.

Impaired Segment of Indian Creek, Jackson County, Missouri, with Sampling Site



----- Impaired segment —————> Direction of Flow



Source: Kansas Department of Health and Environment

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