

**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

## Total Maximum Daily Load Information Sheet

### Turnback Creek

Water Body ID: 1414

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#### Water Body Segment at a Glance:

**Counties:** Dade and Lawrence  
**Nearby City:** Chesapeake  
**Impaired Length:** 19.9 miles  
**Pollutant:** *E. coli* bacteria  
**Source:** Rural nonpoint sources



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](http://dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm).

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### 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. Turnback Creek is impaired due to exceedances of water quality criteria that protect recreational uses.

#### Designated uses of Turnback Creek\*

- Warm Water Habitat (WWH)
- Cold Water Habitat (CDH)
- 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).

#### Use that is impaired

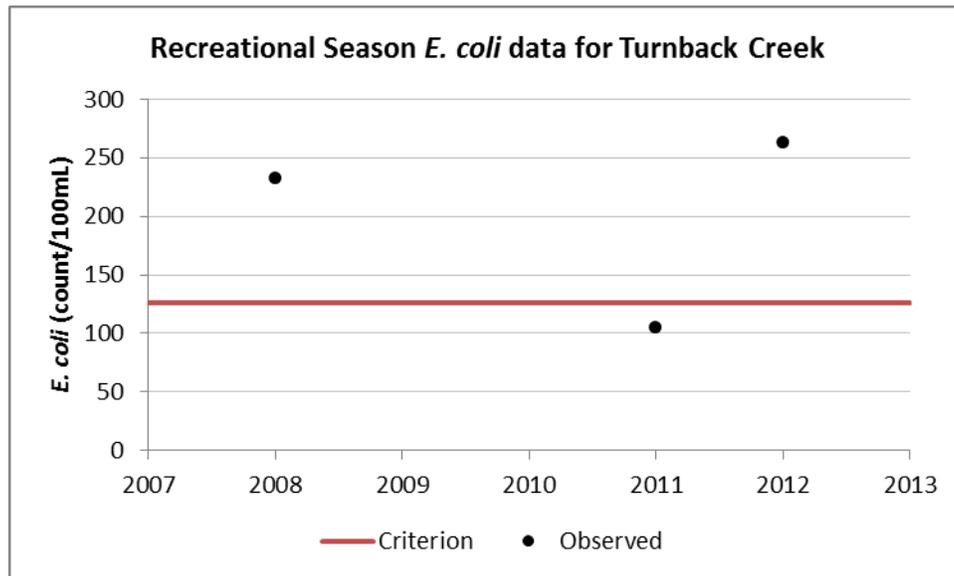
- Whole Body Contact Recreation Category A (WBC-A)

#### 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 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. *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 stream to be impaired by bacteria if the water quality criterion for *E. coli* is exceeded in any of the last three years for which there is a minimum of five samples collected during the recreational season. For Turnback Creek, sufficient recreational season data was collected in 2008, 2011 and 2012. The criterion was exceeded in both 2008 and 2012.



### TMDL for Turnback Creek

The Turnback 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 Turnback 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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Fax: 573-526-6802  
Email: [TMDL@dnr.mo.gov](mailto:TMDL@dnr.mo.gov)  
Program Home Page: [dnr.mo.gov/env/wpp/index.html](http://dnr.mo.gov/env/wpp/index.html)

# Map of the Turnback Creek watershed

