

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Buffalo Creek

Water Body ID: 3273

Water Body Segment at a Glance:

Counties: McDonald and Newton
Nearby City: Neosho
Length: 8 miles
Pollutant: Fishes bioassessments
Source: Unknown



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

Other TMDLs:

The U.S. Environmental Protection Agency approved a TMDL for this stream as part of the Elk River TMDL for nutrients in 2004. This TMDL is available on the department's website at dnr.mo.gov/env/wpp/tmdl/3246-elk-r-record.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. Buffalo Creek is impaired due to exceedances of the water quality criteria for the protection of aquatic life.

Designated uses of Buffalo Creek*

- Warm Water Habitat (WWH)
- Cool Water Habitat (CLH)
- 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).

Designated use that are impaired

- Warm Water Habitat (WWH)

Criteria that apply

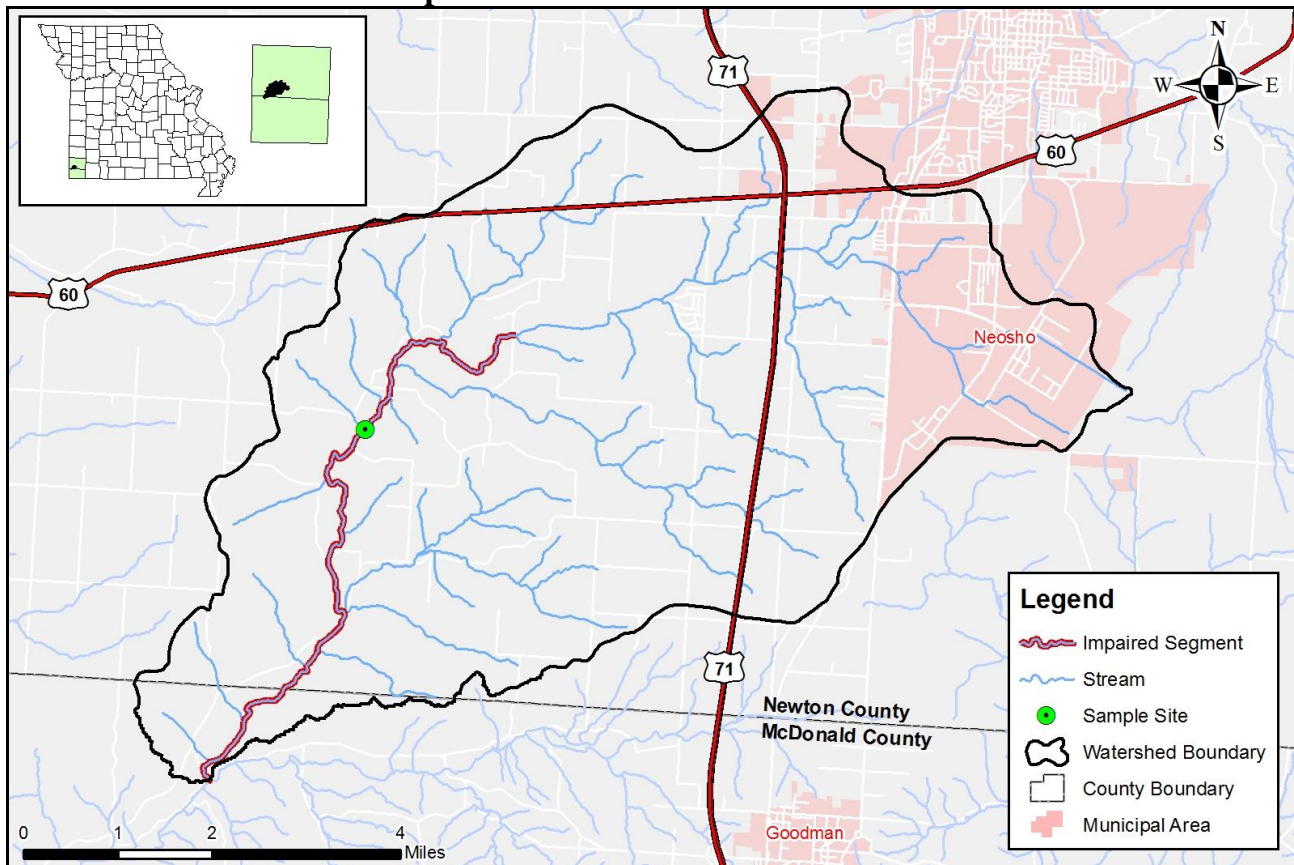
The state’s general water quality criteria at 10 CSR 20-7.031(4) are applicable to all waters of the state at all times. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

- Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life [10 CSR 20-7.031(4)(D)].
- Waters shall be free from physical, chemical, or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(G)].

Background information and water quality data

Water body segment 3273 is an 8 mile segment of Buffalo Creek that flows from about 2 miles upstream of Harrison Branch in Newton County to the confluence of Sugar Creek in McDonald County. Buffalo Creek is a tributary to the Elk River. Fisheries data for Buffalo Creek was collected by the Missouri Department of Conservation. The diversity of fishes in a stream as well as the kind of fish in a stream can be used as an indicator of stream health. Data is inadequate to develop a fisheries scoring system to determine impairment for prairie streams, however the Department of Natural Resources in consultation with the Missouri Department of Conservation determined that the available fisheries data for Buffalo Creek shows an impaired condition.

Map of the Buffalo Creek Watershed



TMDL for Buffalo Creek

The Buffalo 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 Buffalo 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:

Department of Natural Resources
Water Protection Program – Watershed Protection Section
P.O. Box 176
Jefferson City, MO 65102-0176
Ph: 1-800-361-4827 or 573-751-1300
Fax: 573-526-6802
Email: TMDL@dnr.mo.gov
Program Home Page: dnr.mo.gov/env/wpp/index.html