



Total Maximum Daily Load Information Sheet

Little Beaver Creek Water Body ID: 1529

Water Body Segment at a Glance:

County: Phelps
Nearby City: Rolla
Length: 3.5 miles
Pollutant: Sedimentation/Siltation
Source: Smith Sand and Gravel



State 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

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. Little Beaver Creek is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of the Little Beaver Creek*

- Warm Water Habitat (WWH)
- 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).

Uses that are impaired

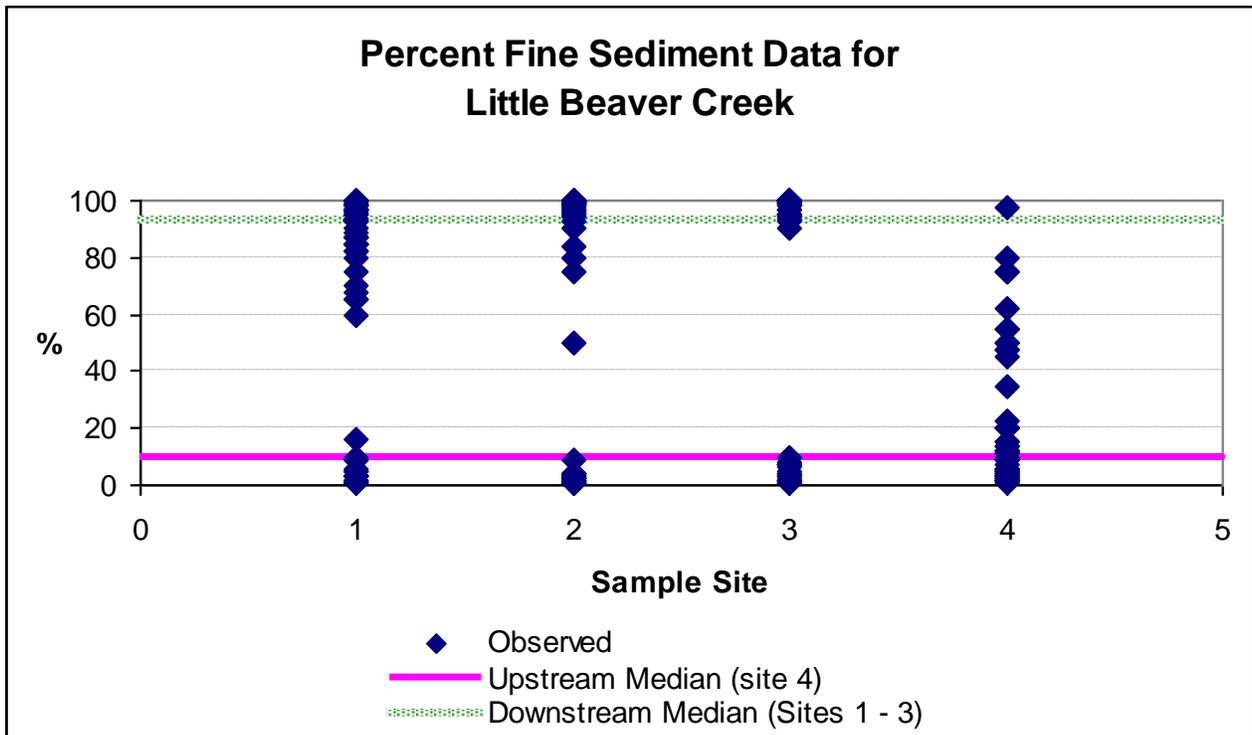
- Warm Water Habitat (WWH)
- General Criteria

Criteria that apply

- Missouri does not have specific criteria for sediment, but the following general criteria apply.
 - Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses [10 CSR 20-7.031(4)(A)].
 - Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses [10 CSR 20-7.031(4)(C)].
 - Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community [10 CSR 20-7.031(4)(G)].

Assessment and water quality data

Little Beaver Creek lies west of Rolla and flows southwest to join Little Piney Creek. The sediment impairment is based on data collected by the department in 2003 and 2006. To determine impairment, the department used a statistical test to compare the median percent fine sediments from the upstream portion of the water body to the median percent fine sediments of the downstream portion. For Little Beaver Creek, the test indicates that the median percent fine sediment deposition in the downstream sites is greater than the upstream.

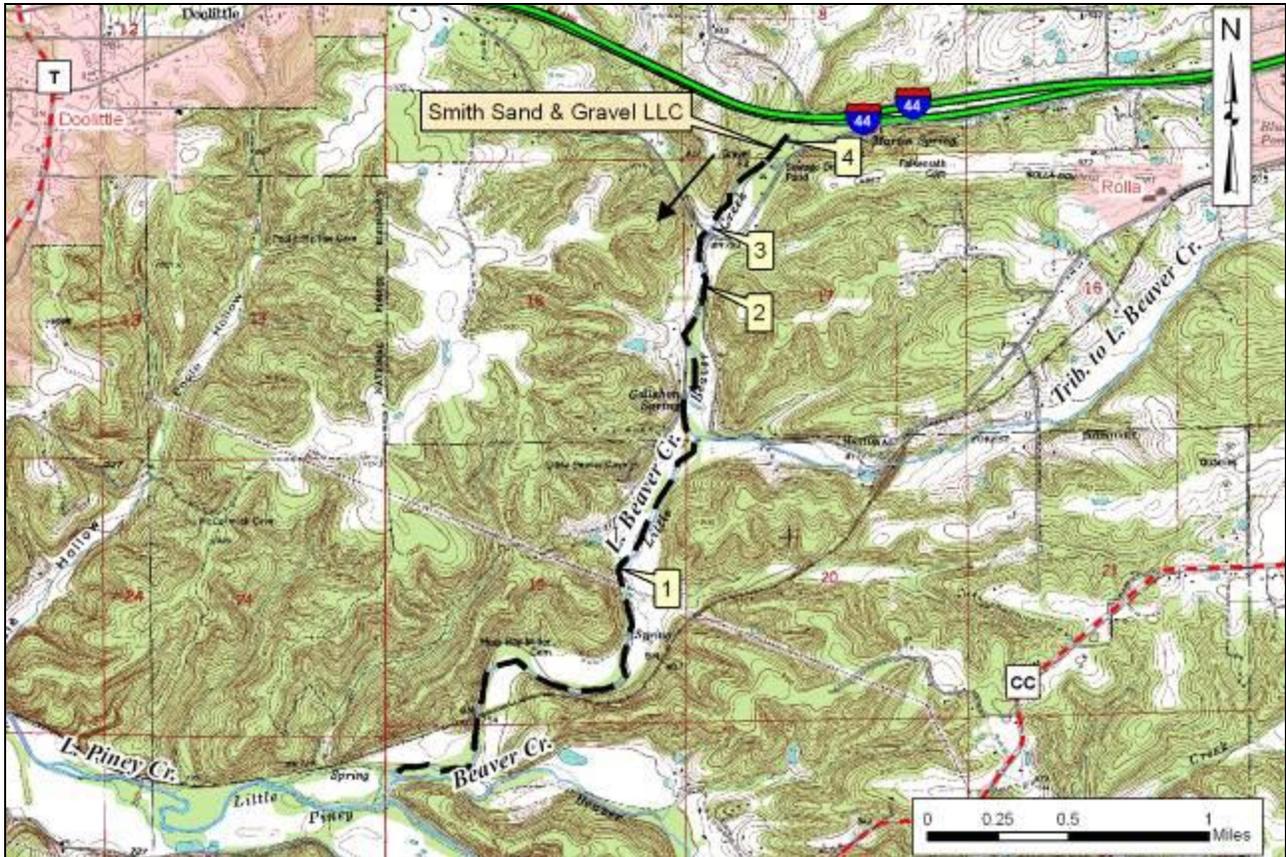


TMDL for Little Beaver Creek

The Little Beaver 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 Little Beaver 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.

Map of Little Beaver Creek in Phelps County



--- Impaired segment ← Direction of flow

Sample Sites

- 1 – 1.7 miles downstream of Smith S&G
- 2 – 0.6 miles downstream of Smith S&G
- 3 – 0.4 miles downstream of Smith S&G
- 4 – Upstream of Smith S&G retention basin discharge

For more information call or write:

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