

Mud Creek (1242K) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use attainability analysis (RUAA) was conducted on Mud Creek (1242K) in the summer of 2010 to determine the appropriate recreational use and numeric criteria. Mud Creek is an unclassified intermittent with pools water body that is approximately 15 miles in length. The creek is located in Robertson County. It was identified in the 2014 Texas Clean Water Act Section 303(d) List of Impaired Water Bodies due to elevated bacteria levels. It was initially listed in 2002.

The RUAA identified that the presumed use of primary contact recreation (PCR) for Mud Creek should be revised to secondary contact recreation 1 (SCR 1). SCR applies to water bodies where water recreation can occur, but the nature of the recreation does not involve a significant risk of ingestion. SCR 1 applies to intermittent and perennial freshwaters where site-specific information demonstrates that primary contact recreation has little to no likelihood of occurring due to physical characteristics of the water body such as shallow depths or lack of pools.

During the field surveys, field staff did not observe any form of recreation occurring on the stream. Interviewees reported that they had not personally used, witnessed, or heard of PCR occurring on the stream. The reason cited for the lack of recreation was that the stream was usually dry or had shallow pools. Mud Creek had an average thalweg of 0.3 meters (11.81 in) and four pools deeper than 1 meter. Stream flow was normal during both surveys. The Palmer Drought Severity Index (PDSI) indicated moderately moist conditions during both the June and August 2010 surveys. There are no public parks or boat ramps on the stream. Franklin High School and associated sports fields are located within 350 m of Site 99908; however, fences prohibit access upstream and downstream of this location. Overall access to Mud Creek is limited. There is some access at bridge crossings, but most of the access is through private property. At many sites there are private property fences upstream and/or downstream of a bridge crossing. Access to the stream down the bank was moderately difficult in most locations due to steep banks and dense vegetation.

Naturally low water levels decrease the likelihood of PCR use. Mud Creek has a shallow average depth and no accounts of PCR, supporting reclassification to SCR1. In accordance with §307.4 (j)(3)(C) of the Texas Surface Water Quality Standards, the TCEQ recommends a reclassification from PCR to SCR1 with the corresponding geometric mean of 630 colonies *E. coli*/100mL for all of Mud Creek, from the confluence with the Little Brazos River, upstream to the confluence with Touchstone Branch and Wolf Den Branch, in Robertson County. This reclassification is appropriate due to “natural, ephemeral, intermittent low flow conditions or water levels” in accordance with reasons specified in 40 CFR §131.10(g)(2).

Prior to changing the currently assigned recreational use of Mud Creek in the Texas Surface Water Quality Standards, the TCEQ would provide additional public notice and opportunity for public comment. In addition, the U.S. Environmental Protection Agency would review this proposed change under the provisions of the federal Clean Water Act.