

## Big Creek (1242P) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use attainability analysis (RUAA) was conducted on Big Creek (1242P) in the summer of 2009 to determine the appropriate recreational use and numeric criteria. Big Creek is an unclassified intermittent water body in Brazos County, TX, approximately 47 miles in length. It is currently listed on the 2012 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 Big 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 type of recreation occurring on the stream. Interviews were conducted with local residents and water resource professionals familiar with the watershed. Of the 15 individuals interviewed, only one stated that PCR, wading by children, occurs on the stream. Most stated that there was not enough water or access for PCR to occur and that hunting was the most predominant activity on the stream. Physical characteristics of the stream include an average thalweg of 0.32 meters (12.60 in), pools greater than one meter deep and measureable flow only recorded at two of 25 stations. Public access is described as very limited with the stream flowing through private land in a rural area.

Naturally low water levels decrease the likelihood of PCR use. Big Creek has a shallow average depth and limited public access, 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 Big Creek, from the confluence with Little Brazos River in Falls County upstream to the confluence with unnamed creeks near Mart in the northeast corner of Falls 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 Big 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.