

Bullhead Bayou (1245C) and Unnamed Tributary of Bullhead Bayou (1245D) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use attainability analysis (RUAA) was conducted on Bullhead Bayou (1245C) and Unnamed Tributary of Bullhead Bayou (1245D) in the summer of 2010 to determine the appropriate recreational use and numeric criteria. Bullhead Bayou and Unnamed Tributary of Bullhead Bayou are unclassified intermittent water bodies with perennial pools, located immediately southwest of Houston in northern Fort Bend County. Bullhead Bayou and Unnamed Tributary of Bullhead Bayou are approximately 9.6 and 1.6 miles in length respectively. Both water bodies are currently listed on the 2010 Texas Clean Water Act Section 303(d) List of Impaired Water Bodies due to elevated bacteria levels, and were initially listed in 2006.

The RUAA identified that the presumed use of primary contact recreation (PCR) for Bullhead Bayou and Unnamed Tributary of Bullhead Bayou should be revised to secondary contact 1 (SCR1). SCR 1 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 contractors did not observe any type of recreation occurring on either bayou. Interviews of individuals familiar with the water bodies had not observed or had any knowledge of primary contact recreation in the bayous. An abandoned bike found in Unnamed Tributary of Bullhead Bayou and a cooler on the bank were the only evidence of recreation found in or near the bayous. Non contact recreation in the form of cycling was seen near Unnamed Tributary of Bullhead Bayou at several locations on sidewalks in this suburban area. An engineer with the Fort Bend County Levee Improvement district stated that Bullhead Bayou south of Highway 59 and Unnamed Tributary of Bullhead Bayou, the areas they own and operate, are strictly for flood control purposes and have no recreational uses. Public comments made by the City of Sugar Land recommended removing the area of Bullhead Bayou east of Highway 90A and south of Highway 59 from the study due to hydrologic modifications made in the developing area. The upper portion of Bullhead Bayou is rural and while the lower portion is accessible, the bayou is essentially used as a conveyance for flood waters. Physical characteristics for Bullhead Bayou include an average thalweg of 0.4 meters (15.75 in) and an average flow of 4.0 cubic feet per second. Unnamed Tributary of Bullhead Bayou's thalweg depth was 0.2 meters (7.87 in) with an average flow of 0.2 cubic feet per second. Access to the water bodies does not limit the use of either water body, since the bayous flow through a rapidly developing suburban area, stream banks are not steep and riparian vegetation is frequently mowed.

Natural water levels decrease the likelihood of primary contact recreation use. The shallow average depths and lack of evidence of primary contact recreation supports reclassification to SCR1. Secondary Contact Recreation 2 is not justified, given the accessibility of the bayous. In accordance with §307.4 (j) (3)(C) of the Texas Surface Water Quality Standards, the TCEQ

recommends reclassification of the contact recreation use to secondary contact recreation 1 and corresponding geometric mean of 630 colonies/100mL for all of Bullhead Bayou from its confluence with Steep Bank Creek in Fort Colony, upstream to its headwaters in Pecan Grove in Fort Bend County. The TCEQ also recommends a reclassification of the contact recreation use to secondary contact recreation 1 and a corresponding geometric mean of 630 colonies/100mL for all of Unnamed Tributary of Bullhead Bayou, tributary to Bullhead Bayou in Fort Bend County. These recommendations are 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 Bullhead Bayou or Unnamed Tributary of Bullhead Bayou in the Texas Surface Water Quality Standards, TCEQ would provide additional public notice and opportunity for public comment; and the U.S. Environmental Protection Agency would review this proposed change under the provisions of the federal Clean Water Act.