West Mud Creek (0611D) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use attainability analysis (RUAA) was conducted on West Mud Creek (0611D) in the summer of 2014 to determine the appropriate recreational use and numeric criteria. West Mud Creek is an unclassified perennial water body that is approximately 23 miles in length. The creek is located in Smith and Cherokee counties. 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 2010.

The RUAA identified that the presumed use of primary contact recreation (PCR) for West Mud Creek is appropriate. PCR 1 is defined in §307.3 (a) of the Texas Surface Water Quality Standards as activities that are presumed to involve a significant risk of ingestion of water (e.g. wading by children, swimming, water skiing, diving, tubing, surfing, and the following whitewater activities: kayaking, canoeing, and rafting).

During the field surveys, field staff did not observe any recreational activities. Interviewees reported personal (4), observed (3), and heard of (2) PCR on West Mud Creek. Another person stated that they had gone tubing in the concrete stream channel after a rainfall event. One landowner stated that swimming and wading by children occurred on his property during the summer months. West Mud Creek had an average thalweg of 0.8 meters (31.49 in) and lacked pools deeper than 1 meter. Stream flow was normal during both surveys. The Palmer Drought Severity Index (PDSI) indicated slightly wet conditions during both field surveys.
Faulkner Park in Tyler is located directly on West Mud Creek, but the creek is not readily accessible due to dense trees and brush. Three sites were in close proximity to residential areas. Eight of the twelve sites were at road crossings, but private property boundaries often limited access to directly around and underneath road crossings. The remaining sites required access onto private property. Access down the stream bank was moderately easy in most locations.

Based on evidence collected during the RUAA study, the TCEQ recommends that West Mud Creek retain its primary contact recreation use and corresponding *E. coli* geometric mean criteria of 126 colonies/100mL for the entire segment, from the confluence with Mud Creek in Cherokee County to the confluence of an unnamed tributary 300 meters upstream of the northern crossing of US 69 (approximately 2.25 km south of the intersection of Loop 323) in the City of Tyler, in accordance with §307.4 (j) (1) of the Texas Surface Water Quality Standards.