Jack Creek (0604C) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use attainability analysis (RUAA) was conducted on Jack Creek (0604C) in the summer of 2014 to determine the appropriate recreational use and numeric criteria. Jack Creek is an unclassified perennial water body in Angelina County, TX, approximately 16 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 2000.

The RUAA identified that the presumed use of primary contact recreation (PCR) for Jack 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 observed children wading in the creek. Twelve instances of personal use PCR were documented in interviews (i.e. swimming, wading by children). PCR activities witnessed included five reports of each for both swimming and wading children. Evidence of PCR activity included an inner tube. Physical characteristics of the stream include an average thalweg of 0.49 meters (19.29 in), 5 pools greater than one meter deep and normal flow. At the time of the surveys, Jack Creek had a mid-range Palmer drought index. Public access to Jack Creek is moderate. Footpaths, ATV tracks, beaches/sand bars, and shoes on the stream bank were observed by field technicians.

Based on evidence collected during the RUAA study, the TCEQ recommends that Jack 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 of Cedar Creek southwest of Lufkin in Angelina County to the upstream perennial portion of the stream in northeast Lufkin in Angelina County, in accordance with §307.4 (j) (1) of the Texas Surface Water Quality Standards.