

## EACH CREEK

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Segments

Segment 1803C - Peach Creek

## Segment Summary

Peach Creek is a tributary of the Guadalupe River that flows east and then south through Bastrop and Fayette counties before reaching its confluence with the Guadalupe River in eastern Gonzales County. Peach Creek is a 64-mile-long segment that is fed by numerous named and unnamed tributaries throughout the reach, and has a 480-square-mile drainage area. This watershed is rural and consists mainly of undeveloped agricultural and ranch land. Hay pastures are a common sight in this watershed. The watershed falls entirely within the Post Oak Savannah ecoregion and lies over the Carrizo-Wilcox Aquifer. Soils in the watershed mainly consist of sandy loam, and forests of Post Oak, Blackjack Oak, and other hardwoods are common.

Electrofishing in Peach Creek

Peach Creek was first included on the 303(d) List of Impaired Water Bodies in 2002 for bacteria. In 2006 an additional impairment was added for depressed

levels of dissolved oxygen. A TMDL was adopted for Peach Creek in 2008, recommending a 47 to 100 percent reduction in loading of bacterial sources. To date, no implementation of BMPs have been initiated. The TMDL determined that bacteria loading was most likely due to non-point source pollution sources including failing septic systems, livestock, and wildlife. BMPs to reduce agricultural runoff and programs to encourage and facilitate proper maintenance of septic systems could help to reduce bacteria loads in the creek. GBRA collects monthly monitoring data at one station (14937) within this segment, located at the CR 353 bridge crossing in the lower reach of the segment.

Station ID	Dissolved Oxygen	Biologicals	Bacteria	Temperature	Nutrients	Chlorophyll a
14937	I	С	I	М	С	С

M - Meets water quality criteria

C - Concern for water quality criteria

I - Impaired for water quality criteria

## Table 24: Summary of the 2022 Texas Integrated Report / Segment 1803C

Recently GBRA conducted an aquatic life monitoring event on segment 1803c near the CR 353 bridge crossing. Fish and macroinvertebrates were sampled, and habitat assessments were performed twice in 2020. Segment 1803c has a high Aquatic Life Use designation; however, this monitoring confirmed the concern for macroinvertebrates.

Segment	Mean Macroinvertebrate Score	Mean Fish Score	Mean Habitat Score
1803C	Intermediate	High	High

 Table 25: Summary of the 2020 Biological Monitoring / Segment 1803C

Data from station 14937 show an increasing trend in chlorides (Figure 48) and TDS (Figure 49). This could be due to decreased flows over time, or possibly a result of upstream discharges from wastewater or industrial effluent.



Figure 48: Chloride trend at Station 14937



Figure 49: Total dissolved solids trend at Station 14937