

## **Segments**

Segment 1812 - Guadalupe River Below Canyon Dam

## **Segment Summary**

Segment 1812 is the stretch of the Guadalupe River that runs from Canyon Dam to the confluence with the Comal River. This segment is 23-miles-long and has a watershed of almost 88-square-miles. This segment lies within the Edwards Plateau ecoregion, and the substrate is predominantly limestone with areas of dark and loamy soil. Water released from the bottom of Canyon Dam is cool and clear, and



Guadalupe River at Second Bridge Crossing

the segment is known for meandering, slow river runs dotted with areas of whitewater rapids. It is no surprise that this segment is used extensively for contact recreation including tubing, swimming, and fishing. TPWD in conjunction with Trout Unlimited releases rainbow and brown trout in this segment throughout the winter each year for sport fishing. Recreational businesses like river outfitters, campgrounds, and short-term rentals are most common. Due to the rocky soils and limestone escarpments, agricultural practices are not common in this watershed.

GBRA monitors this segment at two stations:

Station ID	Dissolved Oxygen	Biologicals	Bacteria	Temperature	Nutrients	Chlorophyll a
12656	М	М	М	M	М	М
12658	М	М	М	М	М	М

M - Meets water quality criteria

Table 9: Summary of the 2022 Texas Integrated Report / Segment 1812

At Station 12656, chloride levels show an increasing trend. Increased chlorides can be a result of diminished flow.

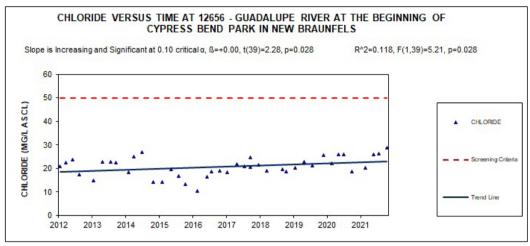


Figure 15: Chloride trend at Station 12656

Data analysis at Station 12658 show a significantly decreasing trend in turbidity over the reported period. Segment 1812, and Canyon Reservoir which is immediately upstream, are known for having generally low turbidity. In 2017, it was confirmed that the invasive species zebra mussels had been accidentally introduced to Canyon Reservoir. Zebra mussels are highly efficient filter feeders and have further reduced the turbidity and levels of total suspended solids (TSS) in the reservoir. This likely contributes to the reduced turbidity levels at Station 12658.

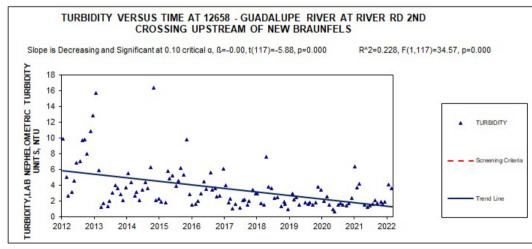


Figure 16: Turbidity trend at Station 12658