

Guadalupe River

The Guadalupe River rises in the western part of Kerr County. It flows southeast for 225 miles traversing the counties of Kerr, Kendall, Comal, Guadalupe, Gonzales, DeWitt, Victoria, Calhoun, and Refugio. The river flows into San Antonio Bay. The principal tributaries to the Guadalupe River are the Comal, San Marcos, and San Antonio rivers. The significant stream segment on the Guadalupe River is within the Edwards Plateau ecoregion. The segment extends from the confluence of the North Fork Guadalupe River and the South Fork Guadalupe River in Kerr County downstream to the Kerr/Kendall County line (Fig. 12). The ecological significance of the segment is based upon the following criteria:

1. Biological function – The aquatic and riparian habitats associated with the stream (Figs. 19&20) support an exceptionally diverse assemblage of invertebrates, fish, reptiles, and birds characteristic of the Edwards Plateau ecoregion. The riparian and canyon forests are dominated by sycamore, willows, green ash, bald cypress, pecan, sugarberry/hackberry, plateau live oak, Texas oak, Ashe juniper, and many other deciduous trees and shrubs.
2. Hydrologic function – This segment provides inflow to Canyon Lake in Comal County and eventually provides freshwater inflow to San Antonio Bay, one of the state's major estuaries. The entire segment is within the Edwards Aquifer drainage area. The riparian habitats function to improve the quality of runoff and groundwater discharge into the river, attenuate peak flood flows, and to some extent, stabilize base flows.
3. Riparian conservation area – Kerrville-Schreiner State Park fronts the river and offers water-based recreational opportunities. The park has been nominated for inclusion in the Heart of Texas Wildlife Trail.
4. High water quality/exceptional aquatic life/high aesthetic value – Flow from springs along the Balcones Fault Zone provide a constant flow of high quality water and the segment is designated an exceptional aquatic life stream¹⁹. This river is rated the number one recreational river and the number two scenic river in Texas¹⁴. Canoeists, kayakers, and tubers heavily use it. The numerous rapids and limestone bluffs and formations add to the scenic value of the river.
5. Threatened or endangered species/unique communities – The following rare species associated with aquatic or riparian habitats may occur in or along this segment although most would not be restricted only to the segment habitats: Zone-tailed hawk (St.T), Golden-cheeked warbler (Fed.E, St.E), Black-capped vireo (Fed. E, St.E); Cagle's map turtle (Fed. Candidate, category 1); Tobusch fishhook cactus (Fed.E, St.E); One of only four known remaining populations of endemic Texas fatmucket mussels^{6,7,8,9}, one of only four known remaining populations of endemic golden orb mussels^{6,7,9}.

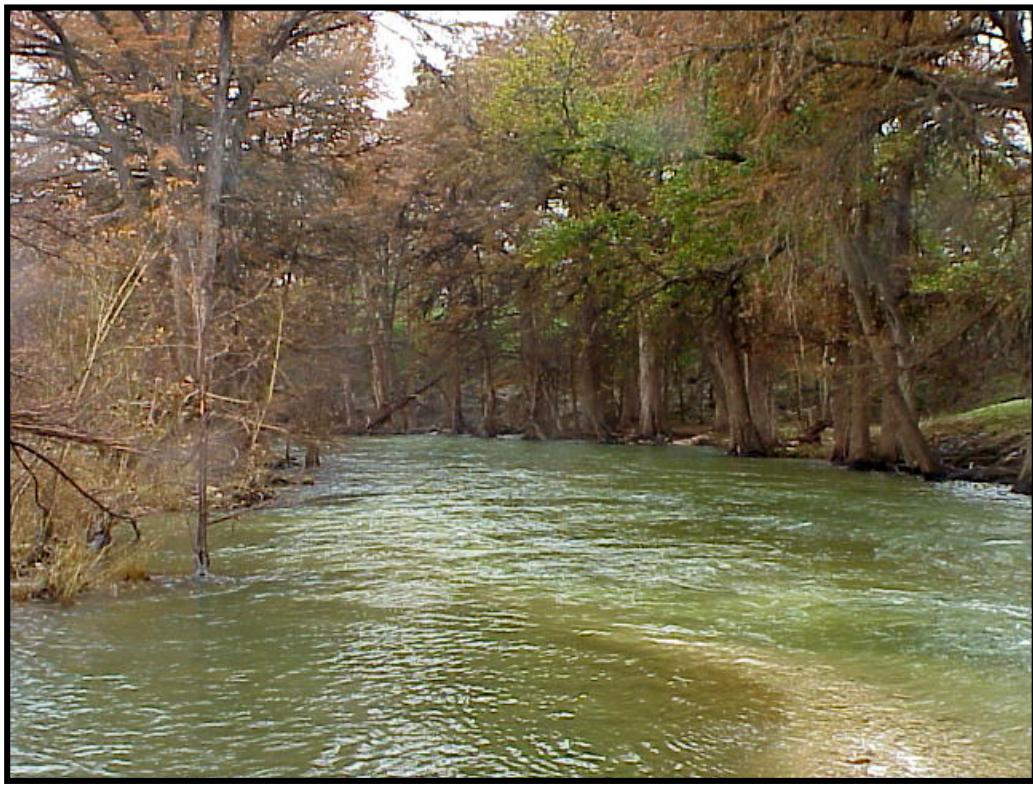


Figure 19. Guadalupe River at RR 1350 east of Center Point, Kerr County (11/22/00).



Figure 20. Guadalupe River at RR 1350 east of Center Point, Kerr County. The fringing riparian habitat is very narrow through this agricultural area. Source: Center Point DOQ, 1995, 1 m CIR.