



Figure 10. Ecologically significant South Llano River segment (within TNRCC classified stream segment 1415) in Edwards County (Scale: 1 inch = 9 miles; Base map source: TxDOT county files).

South Llano River

The South Llano River rises in the northwestern part of Edwards County. The river flows northeast 55 miles to its confluence with the North Llano River at Junction near the center of Kimble County, forming the Llano River (tributary to the Colorado River). The South Llano River contributes a large part of the flow of the Llano River. The ecologically significant stream segment on the South Llano River is within the Edwards Plateau ecoregion of Texas. The segment begins at SH 55 in Edwards County and runs downstream to the Edwards/Kimble County line (Fig. 10). The ecological significance of this segment is based upon the following criteria:

1. Biological function – The aquatic and riparian habitats (Fig. 11) associated with the stream support an exceptionally diverse assemblage of invertebrates, fish, birds, and plants characteristic of the Edwards Plateau ecoregion. Bald cypress, sycamore, pecan, and willows dominate the riparian gallery forests. Canyon slopes are dominated by Plateau live oak and Ashe juniper. These woodlands provide important nesting, migration, and wintering habitat for a variety of birds.
2. Hydrologic function – The South Llano and North Llano rivers join at Junction in Kimble County to form the Llano River which is a tributary of the Colorado River. Therefore the South Llano contributes freshwater inflow to Matagorda Bay, one of the state’s major estuaries. The riparian habitats of the river 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 – None identified.

4. High water quality/exceptional aquatic life/high aesthetic value – Designated as an Ecoregion Stream on the basis of dissolved oxygen¹, benthic macroinvertebrates^{1,3}, and fish populations^{1,12}.
5. Threatened or endangered species/unique communities – The only major watershed containing a genetically pure population of Guadalupe bass (state fish of Texas)⁵. The following rare species associated with aquatic or riparian habitats occur in or along this segment: the Golden-cheeked warbler (Fed.E, St.E), Black-capped vireo (Fed.E, St.E) and Zone-tailed hawk (St.T) nest in riparian and canyon-side woodlands, although they are not restricted to these habitats; the Interior least tern (Fed.E, St.E) occurs in the county although it is not known to nest along the South Llano; the Indigo snake (St.T); the Tobusch fishhook cactus (Fed.E, St.E) occurs in the county, and is occasionally found in gravel along creek bottoms.



Figure 11. South Llano River at US 377 crossing in Edwards County (11/21/00)