



Figure 21. Ecologically significant Las Moras Creek, Mud Creek, Pinto Creek, Sycamore Creek, and West Nueces River segments in Kinney County (Scale: 1 inch = 9 miles; Base map source: TxDOT County files).

Las Moras Creek

Las Moras Creek rises four miles north of Brackettville in Kinney County. It flows southwest 29 miles to the Rio Grande in Maverick County. Las Moras Springs, in Brackettville, provide most of the baseflow. The selected segment begins at the headwaters and runs downstream to the Kinney/Maverick County line (Fig. 21). The ecological significance of this segment is based upon the following criteria:

1. Biological function – The aquatic and riparian habitats associated with the creek (Fig. 22) support a diverse assemblage of invertebrates, reptiles, fish, and birds due to the overlap, in this region, of the Edwards Plateau and Tamaulipan Brushlands natural regions. Sycamore, willows, sugarberry/hackberry, cottonwood, pecan, and huisache dominate the riparian gallery forest.
2. Hydrologic function – Las Moras Springs (Fort Clark Springs) issue from the Edwards and associated limestones of the Edwards (Balcones Fault Zone) Aquifer (Figs. 23&24). They provide water for the city of Brackettville as well as contribute to baseflow of the Rio Grande downstream of Del Rio. The riparian habitats function to improve the quality of runoff and groundwater discharge into the creek, attenuate peak flood flows, and to some extent, stabilize base flows.

3. Riparian conservation area – The Fort Clark Springs Association, in Brackettville, has been nominated for inclusion in the Heart of Texas Wildlife Trail.
4. High water quality/exceptional aquatic life/high aesthetic value –Las Moras Springs provide high quality water to Las Moras Creek. Both the springs and the creek support recreation at the Fort Clark Springs Association resort and leisure community⁴. This segment is designated an Ecoregion Stream on the basis of dissolved oxygen¹ and benthic macroinvertebrates^{1,3}.
5. Threatened or endangered species/unique communities – The following rare species associated with aquatic or riparian habitats may occur in or along this segment: the Common black-hawk (St.T), Golden-cheeked warbler (Fed.E, St.E), Black-capped vireo (Fed.E, St.E), Proserpine shiner (St.T), Indigo snake (St.T), and Tobusch fishhook cactus (Fed.E, St.E).



Figure 22. Las Moras Creek at Fort Clark in Brackettville, Kinney County (11/20/00).



Figure 23. The swimming pool at Las Moras Springs, Fort Clark, Brackettville, Kinney County (11/20/00).



Figure 24. Las Moras Springs and Creek at Fort Clark in Brackettville.
Source: Brackettville DOQ, 1995, 1 m CIR.