

## Devil's River

The Devil's River rises in northwestern Sutton County. The river flows south through Val Verde County to International Amistad Reservoir, an impoundment on the Rio Grande. The Devil's River is one of two major tributaries to the Rio Grande in Texas, along with the Pecos River. Perennial flows start about 50 miles upstream from the mouth at Pecan Springs seven miles southwest of Juno. Downstream, a series of springs (including Dolan Springs) provide up to 80 percent of the river's baseflow. These springs issue from the Georgetown limestone of the Edwards-Trinity (Plateau) Aquifer<sup>2</sup>. There are no impoundments on the river and little local use for irrigation because the river flows through a deeply eroded canyon. The Devil's River is within the Edwards Plateau ecoregion. The selected segment runs from a point 0.4 mile downstream of the confluence with Little Satan Creek in Val Verde County upstream to the Val Verde/Sutton County line (Fig. 33). The ecological significance of this segment is based upon the following criteria:

1. Biological function – The river flows through a region that represents the overlap of three ecological zones – the Chihuahuan Desert to the west, the Edwards Plateau to the east, and the Tamaulipan Brushlands of northern Mexico to the south. The limestone canyon riparian habitat (Figs. 37&38) is dominated by Plateau live oak, sycamore, and pecan. The riparian and aquatic habitats associated with the river support a diverse assemblage of invertebrates, reptiles, fish, birds, and plants.
2. Hydrologic function – Flow of the river is impounded by International Amistad Reservoir. 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 baseflows.
3. Riparian conservation area - Devil's River State Natural Area (SNA) and Dolan Falls Preserve of the Texas Nature Conservancy are contiguous tracts with river frontage and exceptional biodiversity. Both tracts have great potential to attract nature tourists to the area. Amistad National Recreation Area (NPS) fringes the reservoir and extends up the former lower reach of the river (Fig. 39). Devil's River SNA and Amistad NRA have both been nominated for the Heart of Texas Wildlife Trail.
4. High water quality/exceptional aquatic life/high aesthetic value – The river is considered by many to be the cleanest and clearest naturally flowing river in Texas. It has been designated an Ecoregion Stream<sup>1</sup> and supports exceptional aquatic life uses<sup>19</sup>. It also has exceptional aesthetic value and is rich in prehistoric archeological sites with pictographs and burned rock middens<sup>14</sup>. It has been proposed for inclusion in the National Wild and Scenic Rivers System<sup>14</sup>.
5. Threatened or endangered species/unique communities – The following species associated with aquatic or riparian habitats occur in or along this segment: Devil's River minnow (St.T), Conchos pupfish (St.T), Rio Grande darter (St.T), Proserpine shiner (St.T). The Black-capped vireo (Fed.E, St.E), Interior least tern (Fed.E, St.E), and Zone-tailed hawk (St.T) use, but are not restricted to, riparian habitats for nesting. The Indigo snake (St.T) and Big Bend blackhead snake (St.T) are found in riparian habitats in this region. The endangered plant Texas snowbells (Fed.E, St.E) is a riparian species whose largest known population (of about 20) is found on this segment<sup>15</sup>. The Tobusch fishhook cactus (Fed.E, St.E) is found occasionally in gravels along creek bottoms.



Figure 37. Dolan Creek at Devil's River State Natural Area. The Devil's River was inaccessible due to recent rainfall (11/20/00).

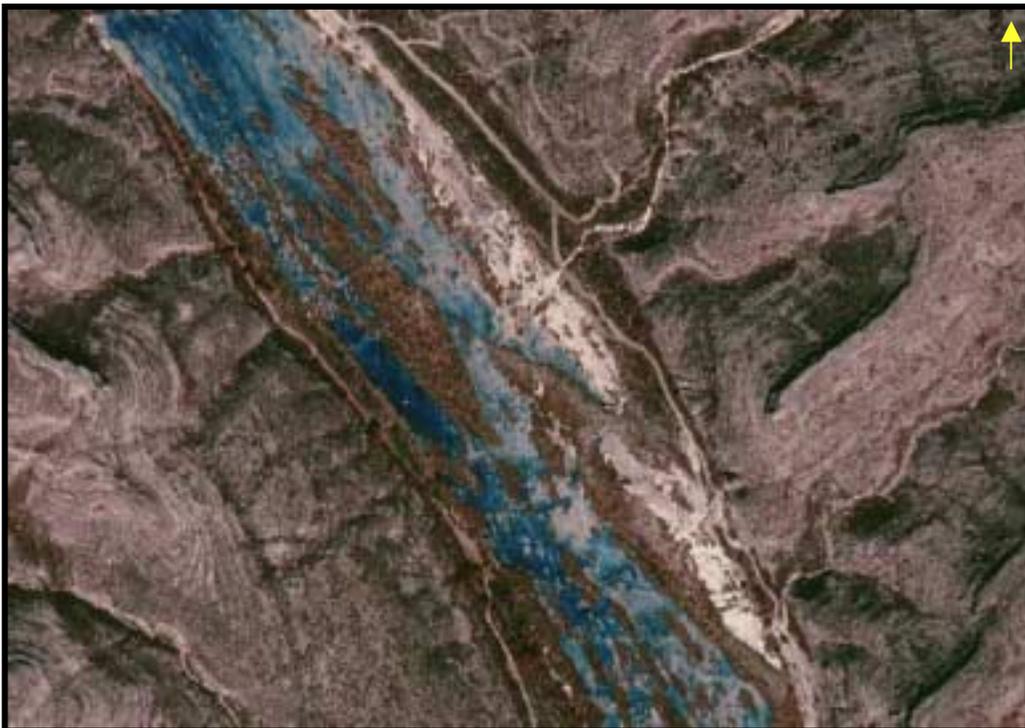


Figure 38. The Devil's River at Devil's River State Natural Area in Val Verde County. Note the riparian trees and brush in the channel and fringing the channel.  
Source:Dolan Springs DOQ, 1995, 1 m CIR.



Figure 39. Amistad International Reservoir, fringing riparian habitat. The reservoir is about 40 feet below normal pool elevation in this photo.