

## 1.9 MAJOR RIVERS

### 1.9.1 Upper Angelina River

The Angelina River begins in the southwestern part of Rusk County at the confluence of Barnhardt, Scober, and Shawnee Creeks and joins the Neches River about 12 miles west of Jasper. The Angelina River is the principal tributary of the Neches River and is impounded in northern Jasper County to form the 114,500-acre Sam Rayburn Reservoir (Belisle and Josselet 1974). Both rivers rise in a region consisting of flat to rolling terrain surfaced by sandy and clay loams that support water-tolerant hardwoods, conifers, and grasses and flow through an area of moderately hilly relief to the vicinity of Jasper and Woodville where the rolling terrain abruptly changes to the flat coastal prairie. The 30-year (1961-1990) mean precipitation in the Angelina basin ranges from about 45 inches (in) near the headwaters to about 53 in near the confluence with the Neches River (Dallas Morning News, Inc. 2001). Annual mean discharge of the Angelina River as measured upstream of Sam Rayburn Reservoir at USGS streamflow gaging station 08036500 near Alto is 901 cubic feet per second (651,152 acre-feet per year) based on water years 1960–2000. This upper section of the river meanders through heavily forested bottomlands, mostly owned by lumber companies, upstream of Sam Rayburn Reservoir. Numerous tributaries and braided streams that provide additional flow and a diversity of habitats join this section of the Angelina River. Fish species native to the Angelina and Neches rivers are listed in Appendix C. The ecologically significant segment is from the aquaduct crossing 0.6 mile upstream of the confluence with Paper Mill Creek in Angelina/Nacogdoches Counties upstream to the FM 1911 crossing in Cherokee/Nacogdoches County (within TCEQ stream segment 0611).

- **Biological function-** approximately 18,000 acres of priority bottomland hardwood habitat associated with the river displays significant overall habitat value considering the diverse assemblage of flora and fauna (USFWS 1984).
- **Riparian conservation area-** fringed by the 153,179-acre Angelina National Forest and the 2,075-acre Alazan Bayou Wildlife Management Area.
- **Threatened or endangered species/unique communities-** significant due to the presence of the paddlefish (*Polyodon spathula*) (St.T) (Wilde 2000), the alligator snapping turtle (*Macrolemys temminckii*) (SOC/St.T) (Rudolph et al. 2002), and the American bald eagle (*Haliaeetus leucocephalus*) (Fed.T/St.T) (TPWD 2005).



Figure 3. Angelina River north of SH 7 (8/14/01)

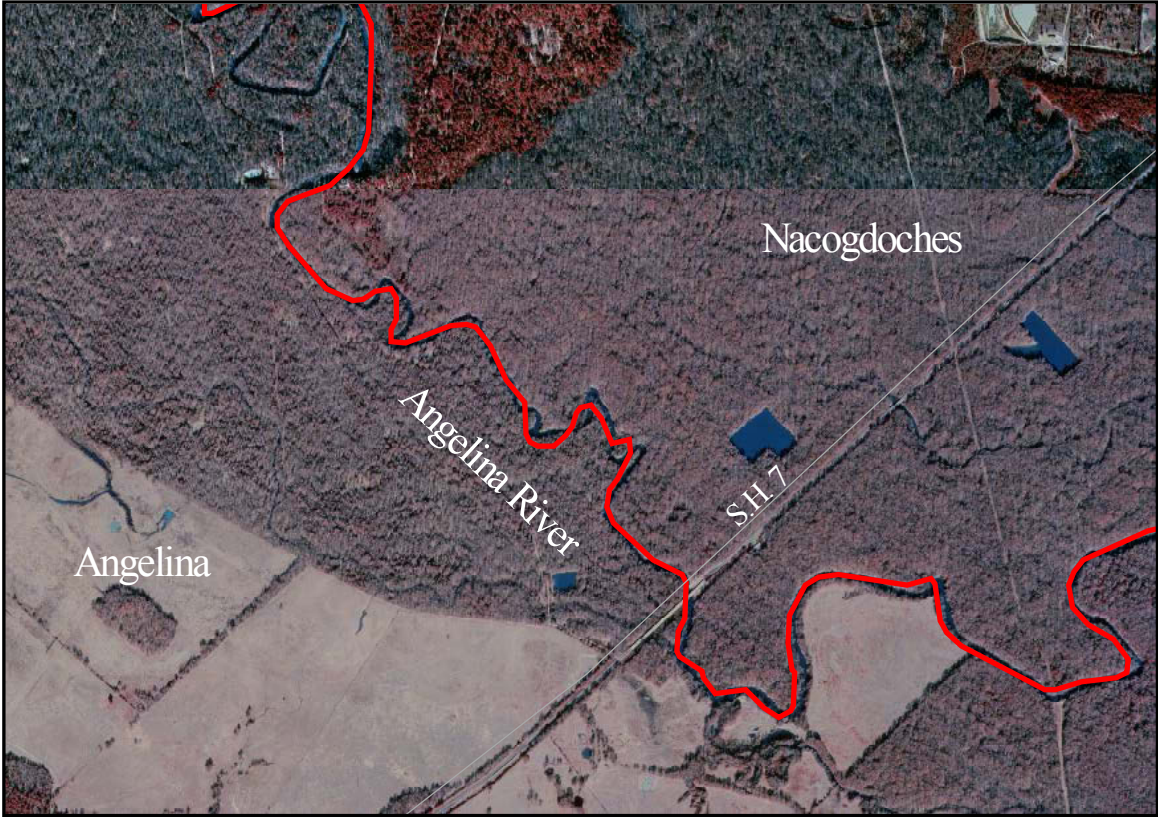


Figure 4. Angelina River at SH 7, Angelina/Nacogdoches County line. Source: Lake Nacogdoches DOQ, 1996, 1m CIR (TNRIS, 1995-1997).