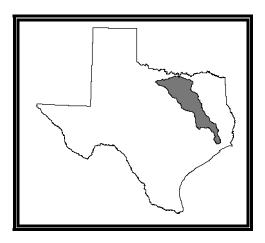
## Basin 08

## **Trinity River**



## **Trinity River Basin Narrative Summary**

Four forks of the Trinity River drain a large portion of north central Texas before merging into a single stream that flows south-southeastward and discharges into Trinity Bay on the Texas coast. The longest fork, the West Fork, originates in southeastern Archer County and flows across Jack, Wise, and Tarrant counties before joining the main stem in Dallas County. The Clear Fork originates in Parker County and flows southeastward, merging with the West Fork in Tarrant County. The Elm Fork originates near the Montague County line and flows across Cooke and Denton counties, converging with the West Fork in Dallas County. The river is called the Trinity downstream of the West Fork/Elm Fork confluence. The East Fork originates in Cooke County and flows southward through Collin and Kaufman counties, joining the main stem at the Kaufman/Ellis county line. The total drainage area of the system is 17,969 square miles and includes parts of 34 counties. The Trinity River Basin has the largest population of any river basin in Texas, the Dallas/Fort Worth metropolitan area alone containing more than three million people.

Major reservoirs in the basin include Lake Bridgeport, Eagle Mountain Lake, and Lake Worth on the West Fork; Lake Weatherford and Benbrook Lake on the Clear Fork; Ray Roberts Lake and Lewisville Lake on the Elm Fork; Lavon Lake and Lake Ray Hubbard on the East Fork; and Lake Livingston on the main stem. In addition, 11 major reservoirs exist on smaller tributaries, mostly in the Dallas/Fort Worth area.

The Trinity River Basin has been divided into 41 classified segments, including 20 stream segments encompassing 869 stream miles and 21 reservoirs encompassing 319,013 acres. In addition, 16 unclassified water bodies were evaluated for the year 2002 assessment, including 12 stream segments encompassing 355.5 stream miles and four reservoirs encompassing 2,748 acres. There are 180 active monitoring stations in the Trinity River Basin.

Water quality in the Trinity River is affected by effluents from a number of large municipal wastewater treatment plants in the Dallas/Fort Worth area, as well as stormwater runoff from urbanized areas. In the past, water quality in portions of the upper Trinity River system, especially the East Fork, was among the poorest in the state. More efficient wastewater treatment and heightened public awareness have resulted in improved water quality and aquatic life enhancement. However, certain problems still exist, mainly during dry weather, when streamflow is effluent-dominated.

Low dissolved oxygen concentrations occur in one classified segment. pH values that do not conform to criteria ranges occur in three classified segments. Elevated fecal coliform levels occur in three classified segments and two unclassified water bodies. General uses are not supported in one classified segment due to elevated temperature. Elevated nutrient concentra-

tions occur in 15 classified segments and seven unclassified water bodies, and elevated algal growth occurs in nine classified segments and one unclassified water body. The Texas Department of Health has issued fish consumption advisories for four classified segments due to elevated levels of PCBs and chlordane in fish tissue, and for one classified segment and four unclassified water bodies due to elevated levels of pesticides and/or PCBs in fish tissue.