

## Wolf Creek near Fort Supply

Station AT237050 (720500030010-001AT) is a permanent ambient trend monitoring station located on Wolf Creek in Oklahoma. Situated in the west central portion of Woodward County, the site was established south of the town of Fort Supply off US Highway 270. The station is positioned near the terminal end of stream segment 720500030010 and is classified within the Lower Wolf Creek 8-digit HUC watershed (11100203). Water enters the stream system from Texas and from several tributaries including Twenty-five Mile Creek, Little Wolf Creek, and Sixteen-mile Creek, among others.

This station on Wolf Creek has been active for all water quality variables since November of 1998. The following assessment of beneficial uses is based on data collected from October of 1999 through September of 2004. For purposes of reporting, this station is representative of Wolf Creek from the confluence of Twenty-five Mile Creek (99.7333, 36.3337) downstream to confluence of Wolf Creek with Fort Supply Reservoir (99.5762, 36.5094). As per Oklahoma Water Quality Standards, Appendix A, Table 7 of Oklahoma Administrative Code (OAC) 785:45, this water quality management segment is assigned the following designated beneficial uses: 1) Public and Private Water Supply (PPWS), 2) Warm Water Aquatic Community—Fish and Wildlife Propagation (WWAC), 3) Agriculture—Class I Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR).

The PPWS beneficial use is supported. The WWAC beneficial use is supported. Dissolved oxygen (Figure 56a), pH (Figure 56b), turbidity (Figure 56c), and toxicant data collected during the same period met the criteria prescribed in the WWAC beneficial use. The AG beneficial use is supported for total dissolved solids, chlorides, and sulfates (Figure 56d and Figure 56e). The PBCR beneficial use is not supported (Table 23). Of the twenty-two (22) enterococci concentrations, eight (8) samples exceeded the prescribed screening level of 406 cfu/mL, and the geometric mean (475.7 cfu/mL) exceeded the prescribed mean standard of 33 cfu/mL. This segment of Wolf Creek is not nutrient-threatened. The total phosphorus and nitrate/nitrite median values were below the threshold medians of 0.36 mg/L and 5.0 mg/L, respectively (Figure 56f).

**Figure 56 a-f.** Dissolved Oxygen (a), pH (b), Turbidity (c), Total Dissolved Solids (d), Minerals (e), and Nutrients (f) on Wolf Creek at Fort Supply (AT237050), 1999-2004.



