

Cimarron River near Oilton

Station AT161500 (620900010170-001AT) is a permanent ambient trend monitoring station near the terminal end of the Cimarron River in Oklahoma. Situated in the northwestern portion of Creek County, the site was established north of the town of Oilton on State Highway 99. The station is positioned near the midpoint of stream segment 620900010170 and is classified within the Lower Cimarron River 8-digit HUC watershed (11050003). Water enters the stream system from several tributaries including Salt Creek, Skull Creek, Euchee Creek, and Tiger Creek, among others.

This station on the Cimarron River has been active for all water quality variables since November of 1998. The following assessment of beneficial uses is based on data collected from May of 2002 through April of 2007. For purposes of reporting, this station is representative of the Cimarron River from the confluence of Salt Creek (96.7212, 36.0928) downstream to confluence of the Cimarron River with Keystone Reservoir (96.4829, 36.1160). As per Appendix A, Table 6 of OAC 785:45, this water quality management segment is assigned the following designated beneficial uses: 1) Emergency Water Supply (EWS), 2) Warm Water Aquatic Community—Fish and Wildlife Propagation (WWAC), 3) Agriculture—Class III Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR).

The WWAC beneficial use is not supported. Of the thirty-nine (39) turbidity samples, eight (8) samples (or 21%) exceeded the numerical criteria of 50. Dissolved oxygen, pH, and toxicant samples met the criteria prescribed in the WWAC beneficial use. The AG beneficial use is not supported. Of the fifty-eight (58) total dissolved solids concentrations, thirteen (13) samples (or 22%) exceeded the prescribed sample standard of 5326 mg/L. Sulfate and chloride concentrations met the prescribed segment-specific criteria. The PBCR beneficial use is not supported. Of the twenty-eight (28) fecal coliform concentrations, 8 samples (or 29%) exceeded the prescribed screening level of 400 cfu/100mL. Of the 28 enterococci concentrations, seven (7) samples exceeded the prescribed screening level of 400 cfu/100mL, and the geometric mean (119.4 cfu/100mL) exceeded the prescribed mean standard of 33 cfu/100mL. This segment of the Cimarron River is not nutrient-threatened. The total phosphorus and nitrate/nitrite median values were below the threshold medians of 1.0 mg/L and 4.65 mg/L, respectively.

HUC 1105