

Arkansas River near Ralston

Station AT152500 (621200010200-001AT) is a permanent ambient trend monitoring station located on the Arkansas River in Oklahoma. Situated in the west central portion of Osage County, the site was established east of the town of Ralston on State Highway 18. The station is positioned near the upper end of stream segment 621200010200 and is classified within the Black Bear - Red Rock Creek 8 digit HUC watershed (11060006). Water enters the stream system from several tributaries including Salt Creek (Fairfax Lake), Black Bear Creek (Pawnee Lake), and Bug Creek, among others.

This station on the Arkansas 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 Arkansas River from the confluence of Salt Creek (97.3276, 36.9679) downstream to confluence of the Arkansas River with Keystone Reservoir (97.1739, 36.6243). As per Appendix A, Table 6 of 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 II Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR).

The PPWS beneficial use is supported. The WWAC beneficial use is not supported. Of the thirty-nine (39) turbidity samples, eleven (11) samples (or 28%) exceeded the numerical criteria of 50. Dissolved oxygen, pH, 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. The PBCR beneficial use is not supported. Of the twenty-four (24) enterococci concentrations, six (6) samples exceeded the prescribed screening level of 406 cfu/100mL, and the geometric mean (100.0 cfu/100mL) exceeded the prescribed mean standard of 33 cfu/100mL. This segment of the Arkansas 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.