

## Deep Fork River near Beggs

Station AT243500 (520700020010-001AT) is a permanent ambient trend monitoring station located on the Deep Fork River in Oklahoma. Situated in the west central portion of Okmulgee County, the site was established south of the town of Beggs off State Highway 16 on County Road N3900. The station is positioned near the terminal end of stream segment 520700020010 and is classified within the Deep Fork River 8 digit HUC watershed (11110303). Water enters the stream system from Todd Lake and from several tributaries including Buckeye Creek (Okemah Lake), Nuyaka Creek, Little Deep Fork Creek, and Salt Creek, among others.

This station on the Deep Fork 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 Deep Fork River from the confluence of Buckeye Creek (96.2682, 35.6225) downstream to confluence of Salt Creek with the Deep Fork River (96.0242, 35.5887). As per Appendix A, Table 5 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 twenty-five (25) turbidity samples, sixteen (16) samples (or 64%) exceeded the numerical criteria of 50. Of the forty-seven (47) visual site observations, five (5) samples (or 11%) exceeded the median observation value for oil and grease. Dissolved oxygen, pH, and toxicant data 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-seven (27) enterococci concentrations, six (6) samples exceeded the prescribed screening level of 406 cfu/100mL, and the geometric mean (133.3 cfu/100mL) exceeded the prescribed mean standard of 33 cfu/100mL. Of the twenty-eight (28) fecal coliform concentrations, nine (9) samples (or 32%) exceeded the prescribed screening level of 400 cfu/100mL. This segment of the Deep Fork River 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.

HUC 1110