

Illinois River near Watts

Station AT195500 (121700030350-001AT) is a permanent ambient trend monitoring station located on the Illinois River in Oklahoma. Situated in the northeastern portion of Adair County, the site was established north of the city of Watts on US Highway 59. The station is positioned near the upper end of stream segment 121700030350 and is classified within the Illinois River 8 digit HUC watershed (11110103). Water enters the stream system from Arkansas and several tributaries including Ballard Creek and Flint Creek, among others.

This station on the Illinois 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 October of 2001 through September of 2006. Analysis also includes water quality data collected by the United States Geological Survey's Oklahoma Water Science Center. For purposes of reporting, this station is representative of the Illinois River from its entrance into Oklahoma near Watts, Oklahoma (94.5551, 36.1189) downstream to confluence of Flint Creek with the Illinois River (94.7210, 36.1744). As per Appendix A, Table 1 of OAC 785:45, this water quality management segment is assigned the following designated beneficial uses: 1) Public and Private Water Supply (PPWS), 2) Cool Water Aquatic Community—Fish and Wildlife Propagation (CWAC), 3) Agriculture—Class I Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR), and 5) Aesthetics. The Illinois River is also designated as a scenic river.

The PPWS beneficial use is supported. The CWAC beneficial use is not supported. Of the forty-five (45) turbidity samples, ten (10) samples (or 22%) exceeded the numerical criterion of 10. Dissolved oxygen, pH, and toxicant samples met the criteria prescribed in the CWAC beneficial use. The AG beneficial use is supported for total dissolved solids (TDS), chlorides, and sulfates. Although several TDS concentrations exceeded the sample standard and the mean exceeded the yearly mean standard, all values are below the prescribed minimum value of 700 mg/L. The PBCR beneficial use is not supported. Of the forty-four (44) enterococci concentrations, fifteen (15) samples exceeded the prescribed screening level of 61 cfu/100mL, and the geometric mean (49.4 cfu/100mL) exceeded the prescribed mean standard of 33 cfu/100mL. The aesthetics beneficial use is impaired for total phosphorus. Of the fifty-three (53) 3-month rolling geometric means calculated from total phosphorus samples, 53 geometric means (or 100%) exceed the prescribed scenic river total phosphorus criterion of 0.037mg/L.