

North Canadian River near Watonga

Station AT239300 (520530000010-002AT) is a permanent ambient trend monitoring station located on the North Canadian River. Situated in the central portion of Blaine County, the site was established south of the town of Watonga on US Highway 270. The station is positioned between the upper end and the midpoint of stream segment 520530000010 and is classified within the Middle North Canadian River 8 digit HUC watershed (11100301). Water enters the stream system from several tributaries including Canton Lake, Minnehaha Creek, Ninemile Creek, and Weavers Creek, among others.

This station on the North Canadian River has been active for all water quality variables since January of 2003. The following assessment of beneficial uses is based on data collected from January of 2003 through April of 2007. For purposes of reporting, this station is representative of the North Canadian River from the Canton Lake dam near Canton, Oklahoma (98.6019, 36.0813) downstream to where it intersects the Canadian/Blaine County Line (98.3134, 35.7180). 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 III Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR).

The PPWS beneficial use is supported. The WWAC beneficial use is supported. Dissolved oxygen, pH, turbidity, and toxicant samples 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 sixteen (16) fecal coliform concentrations, eleven (11) samples (or 69%) exceeded the prescribed screening level of 400 cfu/100mL and the geometric mean (993.2 cfu/100mL) exceeded the prescribed mean standard of 400 cfu/100mL. Of the seventeen (17) enterococci concentrations, six (6) samples exceeded the prescribed screening level of 406cfu/100mL, and the geometric mean (211.2 cfu/100mL) exceeded the prescribed mean standard of 33 cfu/100mL. Of the 17 *E. coli* concentrations, 11 samples exceeded the prescribed screening level of 406cfu/100mL, and the geometric mean (441.4 cfu/100mL) exceeded the prescribed mean standard of 126 cfu/100mL. This segment of the North Canadian 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.