

## North Canadian River near El Reno

Station AT239500 (520530000010-001AT) is a permanent ambient trend monitoring station located on the North Canadian River. Situated in the central portion of Canadian County, the site was established within the city of El Reno on US Highway 81. The station is positioned between the midpoint and the lower end 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 Sixmile Creek, Purcell Creek, and Shell Creek, among others.

This station on the Canadian 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 1999 through September of 2004. For purposes of reporting, this station is representative of the North Canadian River from where it intersects the Canadian/Blaine County Line (98.3134, 35.7180) downstream to confluence of the North Canadian River with Lake Overholser (97.6776, 35.5370). As per Oklahoma Water Quality Standards, Appendix A, Table 5 of Oklahoma Administrative Code (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 I Irrigation (AG), and 4) Primary Body Contact—Recreation (PBCR).

The PPWS beneficial use is supported. The WWAC beneficial use is supported. Dissolved oxygen (Figure 49a), pH (Figure 49b), turbidity (Figure 49c) 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 (Figure 49d and Figure 49e). The PBCR beneficial use is not supported (Table 23). Of the twenty-three (23) enterococci concentrations, seven (7) samples exceeded the prescribed screening level of 406 cfu/mL, and the geometric mean (147.6 cfu/mL) exceeded the prescribed mean standard of 33 cfu/mL. 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 0.36 mg/L and 5.0 mg/L, respectively (Figure 49f).

**Figure 49a-f.** Dissolved Oxygen (a), pH (b), Turbidity (c), Total Dissolved Solids (d), Minerals (e), and Nutrients (f) on the North Canadian River at El Reno (AT239500), 1999-2004.



