

## North Canadian River near Woodward

Station AT237500 (720500010140-001AT) is a permanent ambient trend monitoring station located on the North Canadian River in Oklahoma. Situated in the center portion of Woodward County, the site was established east of the city of Woodward on US Highway 412. The station is positioned near the terminal end of stream segment 720500010140 and is classified within the Middle North Canadian River 8 digit HUC watershed (11100301). Water enters the stream system from Clear Creek and Otter Creek, among others.

This station on the North Canadian River has been active for all water quality variables since October of 2000. 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 Beaver River from the confluence of Wolf Creek (99.5019, 36.5886) downstream to the confluence of an unnamed tributary near Mutual, Oklahoma (99.0817, 36.2638). As per Appendix A, Table 7 of OAC 785:45, this water quality management segment is assigned the following designated beneficial uses: 1) Warm Water Aquatic Community—Fish and Wildlife Propagation (WWAC), 2) Agriculture—Class III Irrigation (AG), and 3) Primary Body Contact—Recreation (PBCR).

The WWAC beneficial use is supported. Dissolved oxygen, pH, turbidity, and toxicant data met the criteria prescribed in the WWAC beneficial use. Fish collected during the summer of 2006 indicate that whether the segment is supporting a healthy biological community is currently indeterminate. Based on the Index of Biological Integrity (IBI) outlined in Appendix C of Oklahoma's USAP, the station has a sample composition score of 8 (maximum 30) and fish condition score of 11 (maximum 15) for a total score of 19. This is between the assigned non-supporting and supporting thresholds of 19-21 for Central Great Plains warm water aquatic communities [OAC 46:15-5(l)]. The AG beneficial use is supported for total dissolved solids, chlorides, and sulfates. The PBCR beneficial use is not supported. Of the twenty-three (23) enterococci concentrations, nine (9) samples exceeded the prescribed screening level of 406 cfu/100mL, and the geometric mean (270.7 cfu/100mL) exceeded the prescribed mean standard of 33 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.