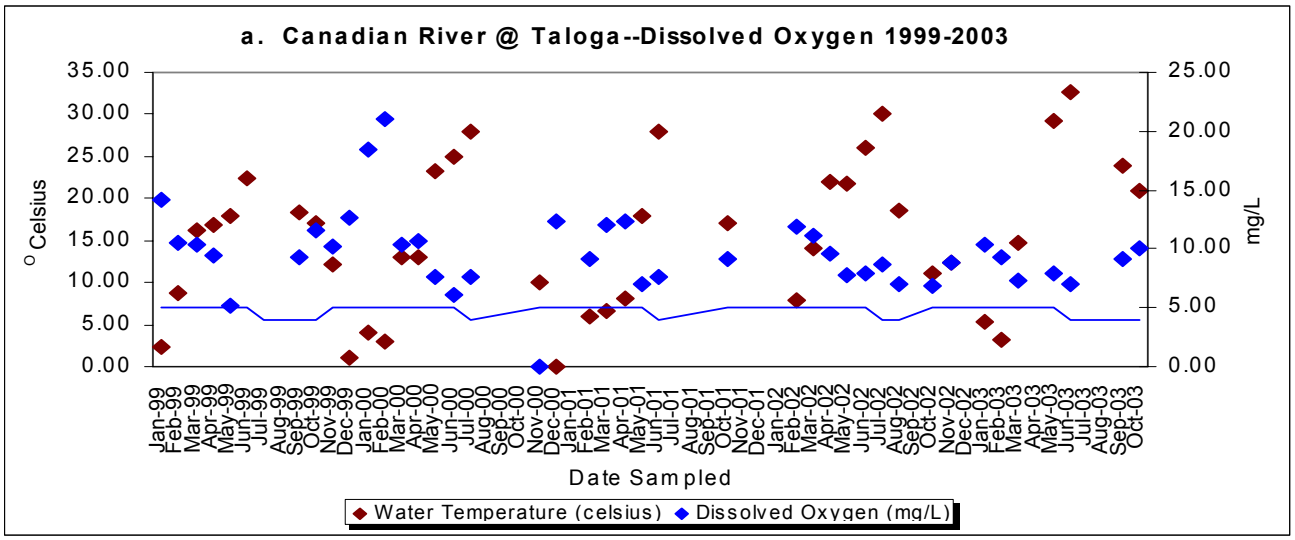
Canadian River near Taloga

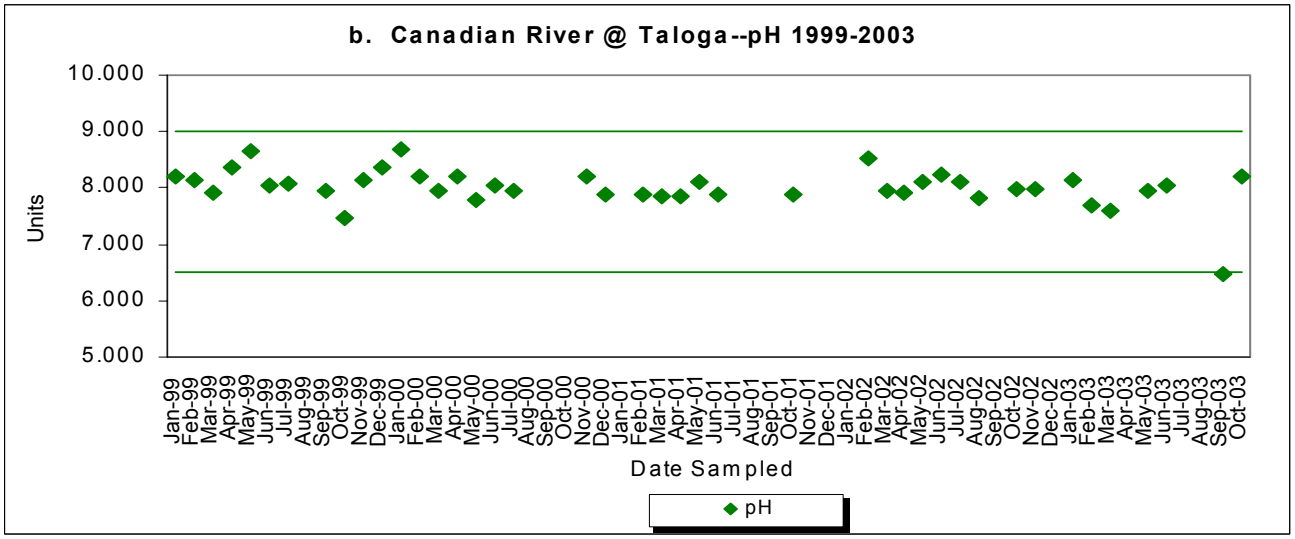
Station AT228250 (520620020010-001AT) is a permanent ambient trend monitoring station located on the Canadian River in Oklahoma. Situated in the north central portion of Dewey County, the site was established north of the town of Taloga on US Highway 183. The station is positioned near the upper end of stream segment 520620020020 and is classified within the Lower Canadian River - Deer Creek 8-digit HUC watershed (11090201). Water enters the stream system from several tributaries including Turkey Creek, Red Creek, Gyp Creek, Trail Creek, Lone Creek, Squirrel Creek, and Deer Creek, among others.

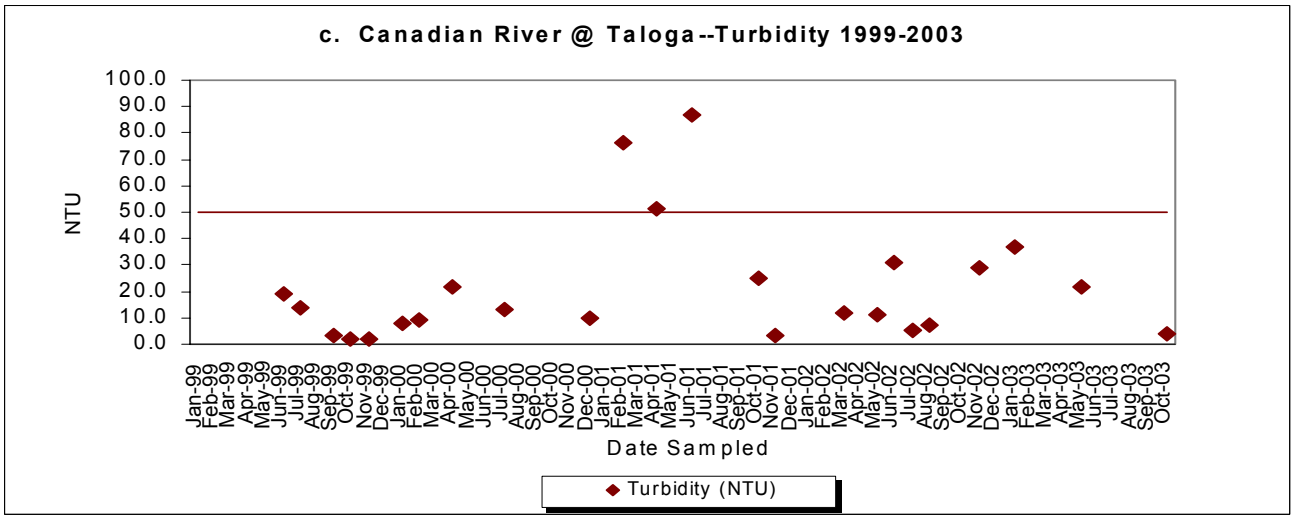
This station on the Canadian River has been active for all water quality variables since November of 1998. The following assessment of beneficial uses is based on data collected January of 1999 through October of 2003. For purposes of reporting, this station is representative of the Canadian River from the confluence of Turkey Creek (99.3783, 36.0127) downstream to confluence of Deer Creek with the Canadian River (98.4737, 35.5580). As per Appendix A, Table 5 of OAC 785:45, this water quality management segment is assigned the following designated beneficial uses: 1) Emergency Water Supply (EWS), 2) Warm Water Aquatic Community—Fish and Wildlife Propagation (WWAC), 3) Agriculture—Class II Irrigation (AG), 4) Primary Body Contact—Recreation (PBCR), and 5) Aesthetics.

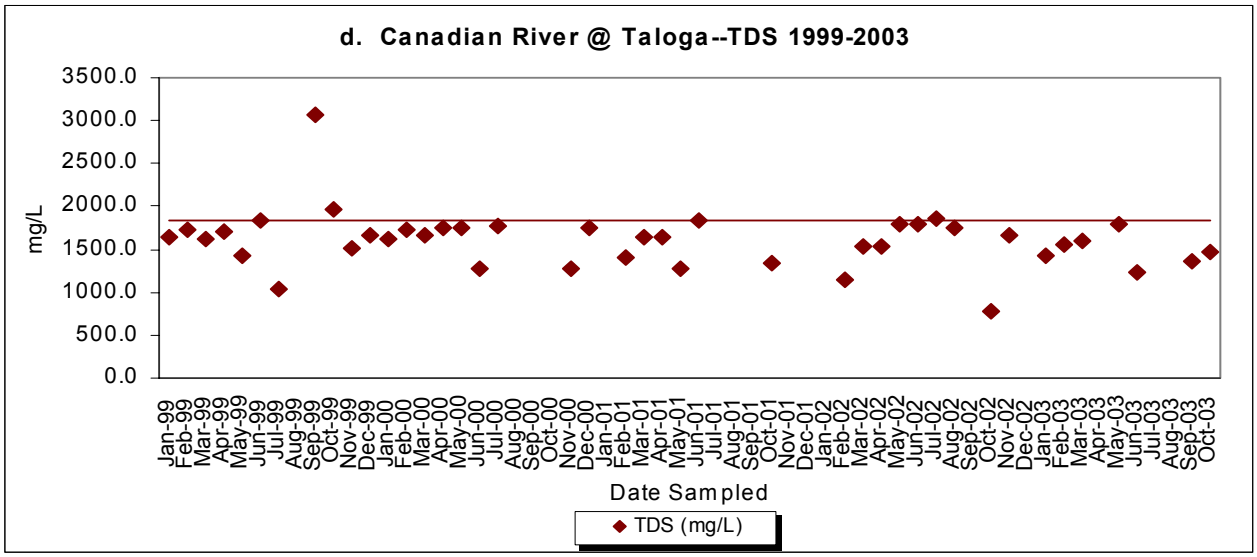
The WWAC beneficial use is partially supported. Of the 24 turbidity samples (Figure 42c), 3 samples (or 13%) exceeded the numerical criteria of 50. Dissolved oxygen (Figure 42a), pH (Figure 42b), and toxicant samples met the criteria prescribed in the WWAC beneficial use. The AG beneficial use is not supported (Figure 42d and Figure 42e). The geometric mean of the total dissolved solids concentrations (1478.2 mg/L) exceeded the prescribed yearly mean standard of 1463 mg/L. The PBCR beneficial use is not supported (Table 20). Of the 18 enterococci concentrations, 6 samples exceeded the prescribed screening level of 406 cfu/mL, and the geometric mean (218.2 cfu/mL) exceeded the prescribed mean standard of 33 cfu/mL. This segment of the 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 42f).

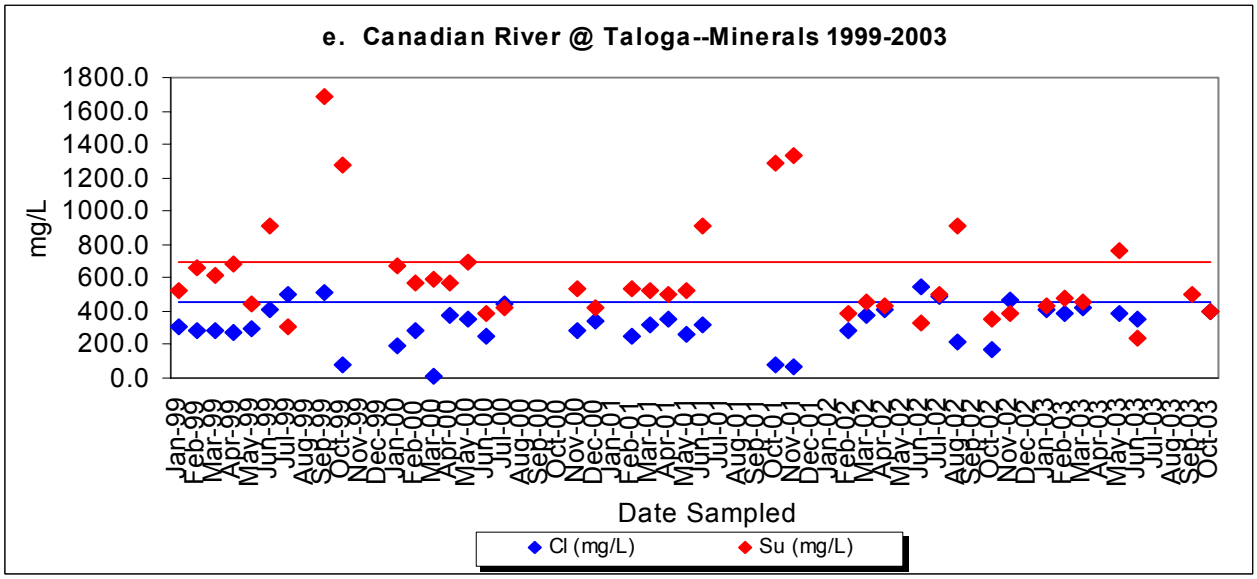
Figure 42a-f. Dissolved Oxygen (a), pH (b), Turbidity (c), Total Dissolved Solids (d), Minerals (e), and Nutrients (f) on the Canadian River at Taloga (AT228250), 1999-2003.

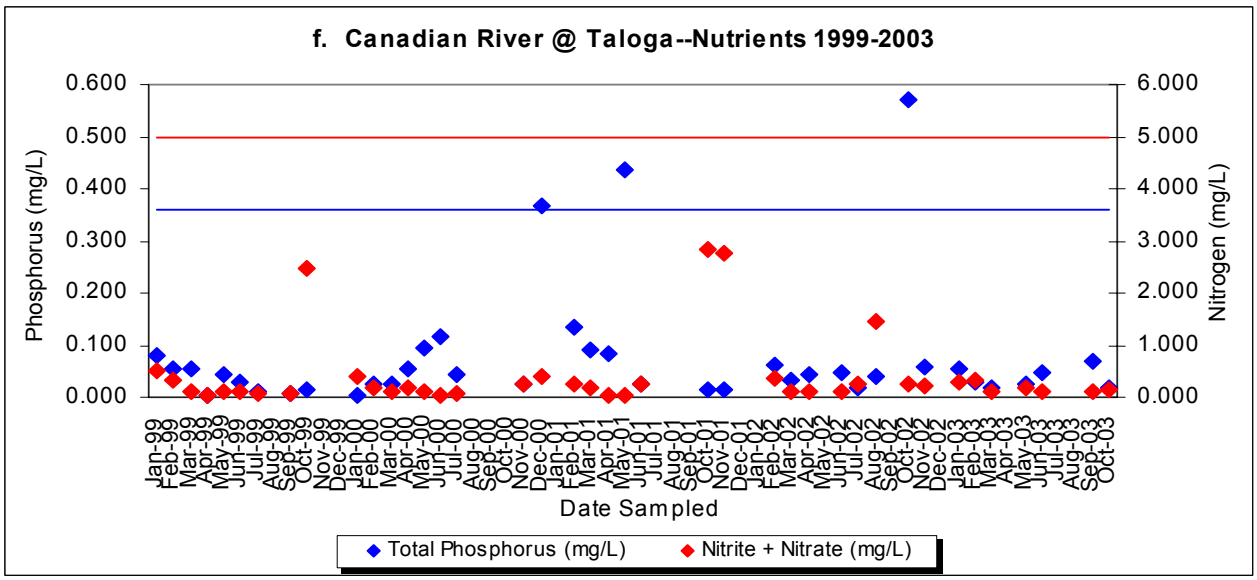







d. Canadian River @ Taloga--TDS 1999-2003
mg/L
3500.0
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
Date Sampled
TDS (mg/L)


e. Canadian River @ Taloga--Minerals 1999-2003
mg/L
1800.0
1600.0
1400.0
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
Date Sampled
Cl (mg/L)
Su (mg/L)


f. Canadian River @ Taloga--Nutrients 1999-2003
Phosphorus (mg/L)
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Nitrogen (mg/L)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Date Sampled
Total Phosphorus (mg/L)
Nitrite + Nitrate (mg/L)