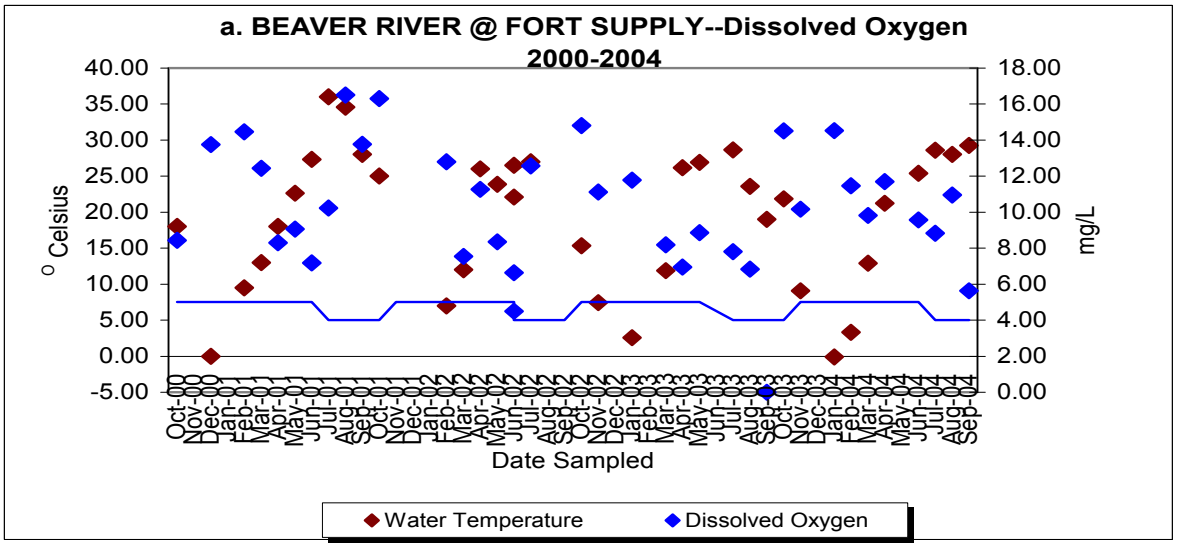
Beaver River near Fort Supply

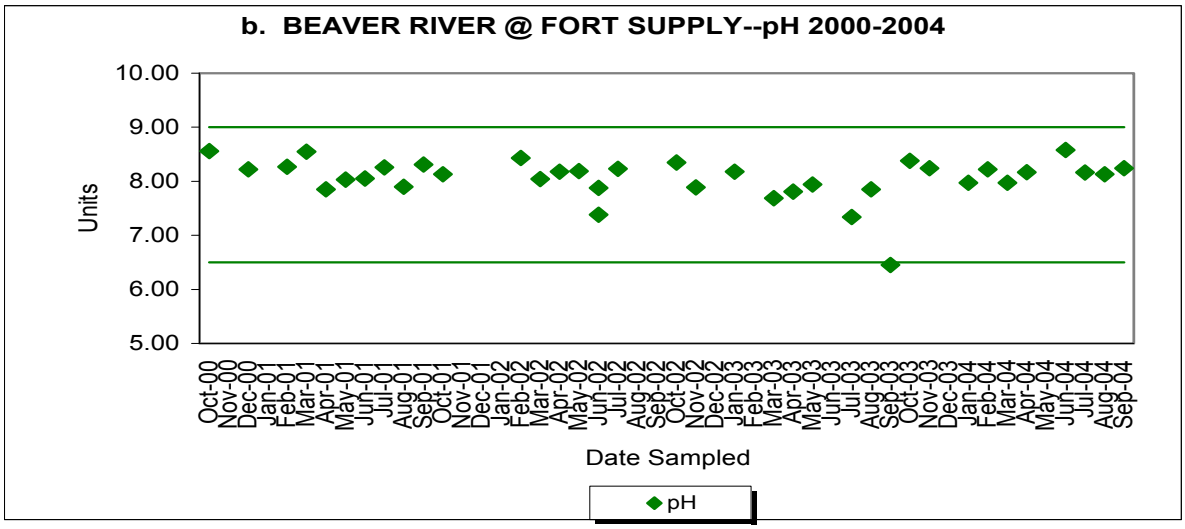
Station AT234450 (720500020010-002AT) is a permanent ambient trend monitoring station located on the Beaver River in Oklahoma. Situated in the extreme northwest corner of Woodward County, the site was established northwest of the town of Fort Supply on US Highway 183. The station is positioned near the terminal end of stream segment 720500020010 and is classified within the Lower Beaver River 8-digit HUC watershed (11100201). Water enters the stream system from Clear Creek and Otter Creek, among others.

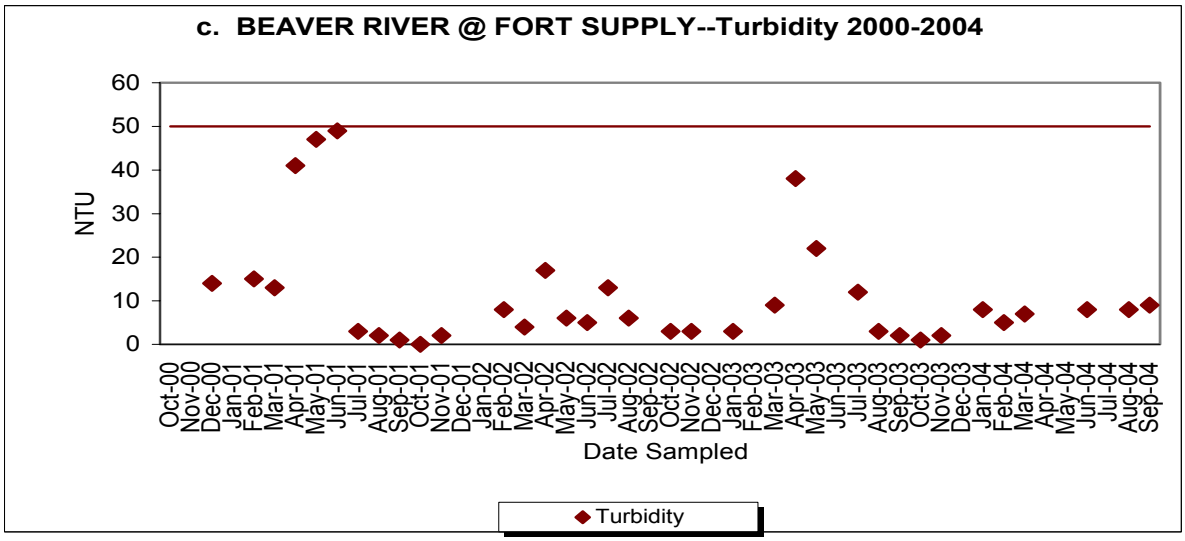
This station on the Beaver River has been active for all water quality variables since October of 2000. The following assessment of beneficial uses is based on data collected from October of 2000 through September of 2004. For purposes of reporting, this station is representative of the Beaver River from the confluence of Clear Creek (99.7681, 36.6469) downstream to the confluence of Wolf Creek with the Beaver River (99.5019, 36.5886). As per Oklahoma Water Quality Standards, Appendix A, Table 7 of Oklahoma Administrative Code (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).

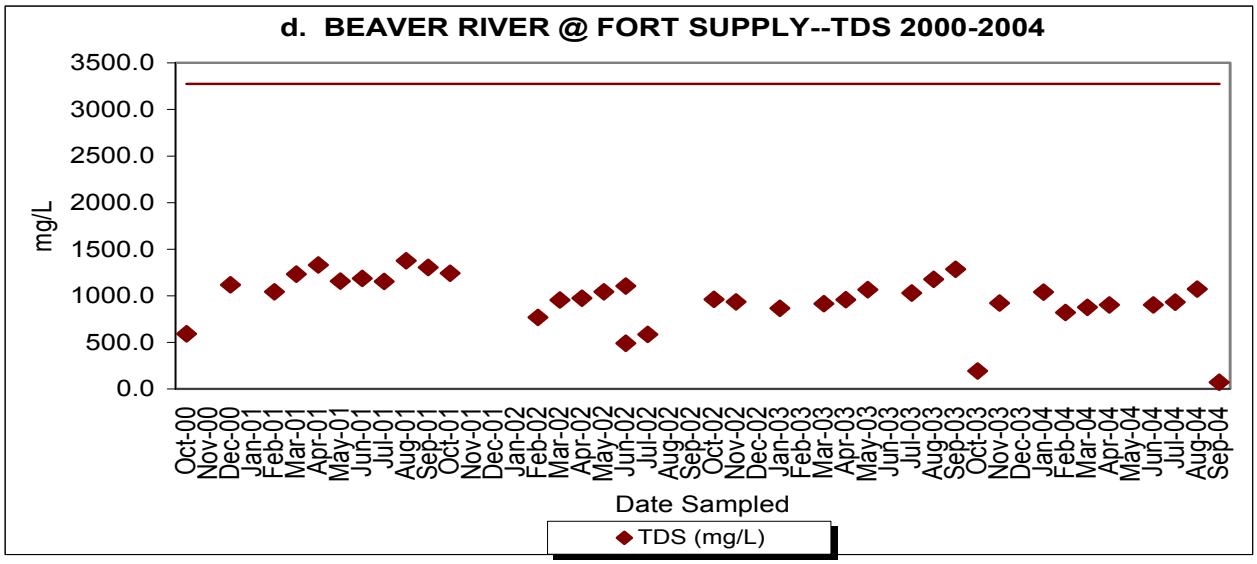
The WWAC beneficial use is supported. Dissolved oxygen (Figure 41a), pH (Figure 41b), turbidity (Figure 41c), and toxicant data met the criteria prescribed in the WWAC beneficial use. The AG beneficial use is supported for total dissolved solids, chlorides, and sulfates (Figure 41d and Figure 41e). The PBCR beneficial use is not supported (Table 23). Of the eighteen (18) enterococci concentrations, six (6) samples exceeded the prescribed screening level of 406 cfu/mL, and the geometric mean (175.2 cfu/mL) exceeded the prescribed mean standard of 33 cfu/mL. This segment of the Beaver 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 41f).

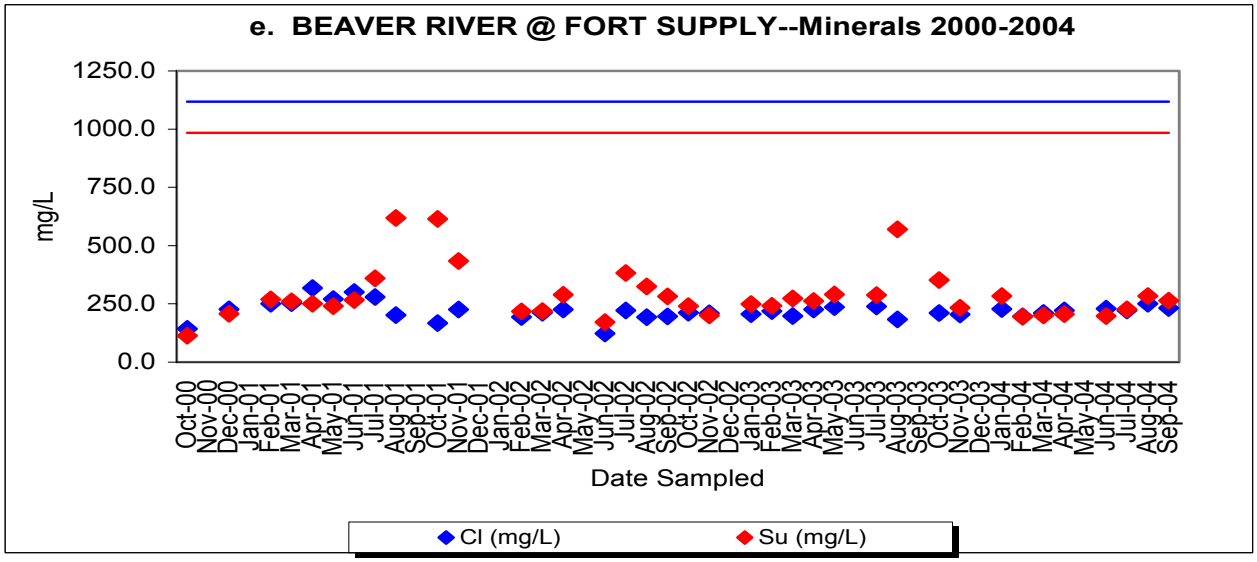
Figure 41a-f. Dissolved Oxygen (a), pH (b), Turbidity (c), Total Dissolved Solids (d), Minerals (e), and Nutrients (f) on the Beaver River at Fort Supply (AT234450), 2000-2004.

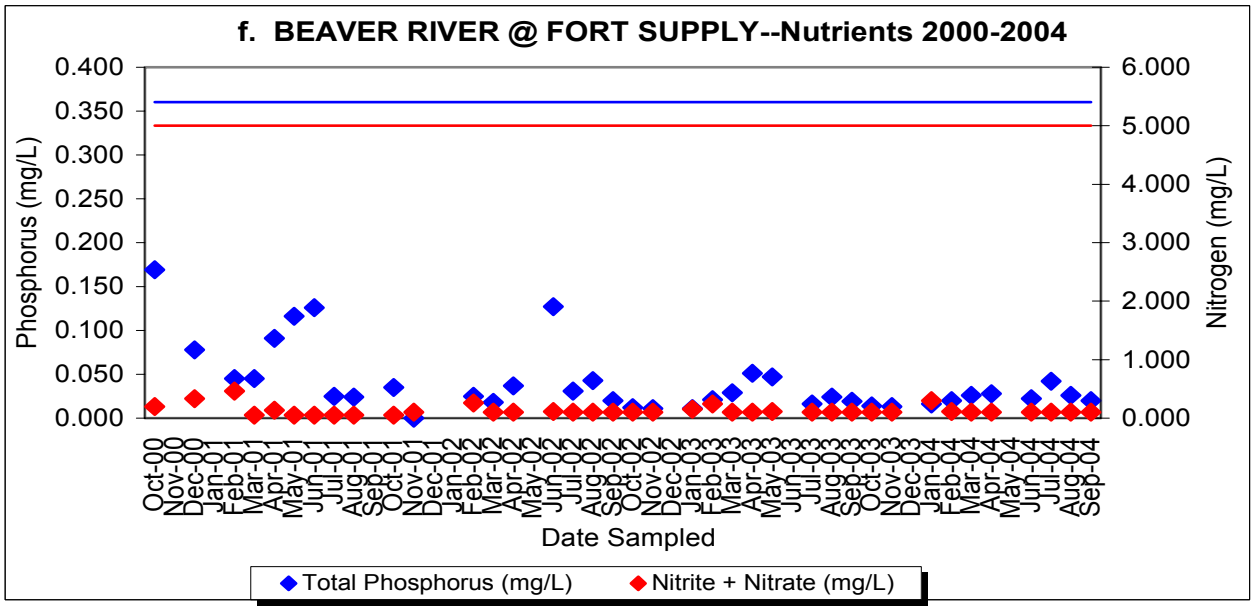







d. BEAVER RIVER @ FORT SUPPLY--TDS 2000-2004
mg/L
3500.0
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
Oct-00 Nov-00 Dec-00 Jan-01 Feb-01 Mar-01 Apr-01 May-01 Jun-01 Jul-01 Aug-01 Sep-01 Oct-01 Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02 Jun-02 Jul-02 Aug-02 Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03 Jul-03 Aug-03 Sep-03 Oct-03 Nov-03 Dec-03 Jan-04 Feb-04 Mar-04 Apr-04 May-04 Jun-04 Jul-04 Aug-04 Sep-04
Date Sampled
TDS (mg/L)


e. BEAVER RIVER @ FORT SUPPLY--Minerals 2000-2004
mg/L
1250.0
1000.0
750.0
500.0
250.0
0.0
Oct-00 Nov-00 Dec-00 Jan-01 Feb-01 Mar-01 Apr-01 May-01 Jun-01 Jul-01 Aug-01 Sep-01 Oct-01 Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02 Jun-02 Jul-02 Aug-02 Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03 Jul-03 Aug-03 Sep-03 Oct-03 Nov-03 Dec-03 Jan-04 Feb-04 Mar-04 Apr-04 May-04 Jun-04 Jul-04 Aug-04 Sep-04
Date Sampled
Cl (mg/L)
Su (mg/L)


f. BEAVER RIVER @ FORT SUPPLY--Nutrients 2000-2004
Phosphorus (mg/L)
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Nitrogen (mg/L)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Oct-00 Nov-00 Dec-00 Jan-01 Feb-01 Mar-01 Apr-01 May-01 Jun-01 Jul-01 Aug-01 Sep-01 Oct-01 Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02 Jun-02 Jul-02 Aug-02 Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03 Jul-03 Aug-03 Sep-03 Oct-03 Nov-03 Dec-03 Jan-04 Feb-04 Mar-04 Apr-04 May-04 Jun-04 Jul-04 Aug-04 Sep-04
Date Sampled
Total Phosphorus (mg/L)
Nitrite + Nitrate (mg/L)