

The mean phosphorus concentrations in Fish, Weaver and Jubert Lake for 2000 were 55, 41, and 73<sub>1</sub>2g/l, respectively, for the period of April through October. Total phosphorus is the limiting nutrient that can cause algal blooms and excessive weed growth. Total nitrogen averages for 2000 were 1.3 and 1.1 mg/l for Fish and Weaver Lakes. In Jubert Lake through the CAMP, total Kjeldahl nitrogen (TKN) was analyzed. This value is less than the total nitrogen because it excludes the nitrate and nitrite values that are usually low in lakes. The mean TKN in Jubert Lake for 2000 was 1.9 mg/l.

The average transparencies for Fish, Weaver and Jubert Lakes in 2000 were 4.6, 6.2, and 2.2 feet, respectively. Chlorophyll a concentrations averaged 24.9, 13.0 and 34 m g/l for Fish, Weaver and Jubert Lakes. Both Fish and Weaver Lakes have highly developed watersheds. They receive extensive recreational use and are important resources for the watershed. Jubert Lake is in a more rural setting with a combination of agricultural and large lot residential land uses in its watershed. For these three lakes, a list of parameters and concentrations is attached in Appendix 2.2. Long-term water quality trends and the summary of lake sampling history of these lakes are also included in Appendices 2.1 and 2.3. In addition to the parameters listed, dissolved oxygen, temperature, conductivity and pH profiles were measured for each sampling date in Fish and Weaver Lakes.

Weaver Lake long-term averages for 1981-2000 were 35.8 ag/l, 7.2 feet and 14.9ug/l for phosphorus, transparency and chlorophyll a. Weaver Lake was sampled 18 times in the 20-year period. The average for the most recent five years was 36.0ug/l, 6.5 feet and 12.7<sub>1</sub>g/l. The phosphorus goal was not exceeded in Weaver Lake until 1989 when the 35yg/l goal was exceeded for the periodof 1989-1993. Since that time the goal has been met three times. The transparency goal of 4.9 feet has been met every year except for 1981. Chlorophyll a has been within the goal limit of 20ug/l for all but five of the years, mostly in the 1980's.

Phosphorus concentrations in Fish and Weaver Lake were increasing until about 1993 when they stabilized. The watersheds of Fish and Weaver Lakes were almost completely developed by the mid 1990s. The nutrient loading has remained fairly steady since 1993.

Weaver Lake					
Date	TP µg/l	TN mg/l	Chl.a µg/l	SDT feet	Alkalinity mg/L
Apr 12, 2000	37	0.76	13.0	6.6	
Apr 25, 2000	41	1.00	0.0	14.1	120
May 10, 2000	22	0.84	2.0	19.0	166
May 23, 2000	69	0.86	7.0	6.6	114
Jun 07, 2000	42	1.08	15.0	5.9	95
Jun 21, 2000	36	1.03	14.0	6.2	130
Jul 05, 2000	61	1.22	14.0	3.9	85
Jul 19, 2000	52	1.72	27.0	3.3	90
Aug 02, 2000	48	1.47	27.0	2.6	89
Aug 16, 2000	47	1.33		2.6	92
Aug 29, 2000	42	1.23	15.0	3.3	94
Sep 13, 2000	26	1.32	11.0	6.6	108
Oct 04, 2000	13	1.03	11.0	7.9	111
Mean	41	1.1	13.0	6.2	108
Median	42	1.1	13.5	6.6	101.5
Std. Dev.	15.3	0.3	8.2	3.1	23.1

