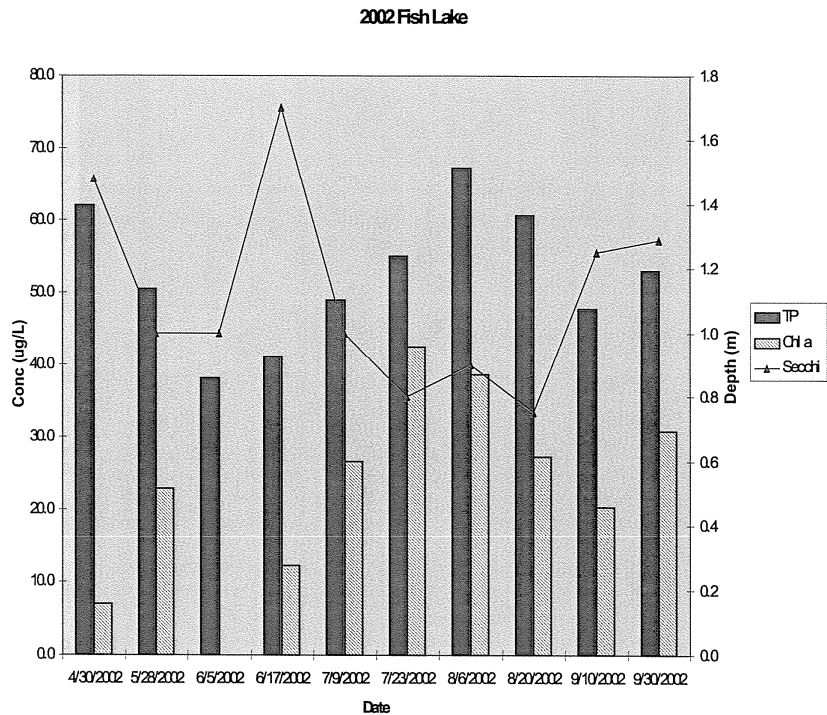


Fish Lake.

The mean total phosphorus (TP) concentration for Fish Lake in 2002 was 52.4 $\mu\text{g/L}$ (micrograms/liter), slightly above the long-term average of 49.0 $\mu\text{g/L}$. The higher than average concentration was probably due in part to the above average rainfall received last summer. More important than the high average TP concentration were the very high levels measured in August. The TP concentrations were above 60 $\mu\text{g/L}$, much higher than concentrations observed in previous years for the same time period. The Commission goal for Fish Lake is 35 $\mu\text{g/L}$, significantly lower than the observed concentration. Although efforts have been made to reduce pollutant loading to the lake through retrofitting of detention basins and lakeshore restoration, there has been no improvement in the lake quality over the past eight to ten years.

Sample Id	Sample Date	Secchi m	Temp °C	DO mg/L	DO %	Cand $\mu\text{S/cm}$	pH	TP $\mu\text{g/L}$	SRP $\mu\text{g/L}$	TN mg/L	Chl- α $\mu\text{g/L}$
FISH	30-Apr-02	1.48	9.71	12.95	114.1	0.46	8.28	62.00		1.57	7.00
FISH	28-May-02	1.00	18.01	15.84	167.6	0.42	8.73	50.45		1.23	22.92
FISH	05-Jun-02	1.00	19.40			0.38		38.06		1.22	
FISH	17-Jun-02	1.70	22.51	10.73	124.1	0.43	8.55	41.15		1.10	12.18
FISH	09-Jul-02	1.00	30.07	10.93	144.9	0.37	8.46	49.00	3.72	0.93	26.55
FISH	23-Jul-02	0.80	27.21	11.23	141.6	0.40	8.48	55.09	5.43	1.26	42.53
FISH	06-Aug-02	0.90	24.24	9.27	110.7	0.39	7.95	67.34		1.36	38.72
FISH	20-Aug-02	0.75	23.32	11.66	136.9	0.35	8.03	60.64	5.02	1.02	27.30
FISH	10-Sep-02	1.25	25.00	8.80		0.39		47.74	2.73	1.25	20.30
FISH	30-Sep-02	1.29	17.25	9.12	94.9	0.40	7.30	53.00	1.66	1.32	30.80
	Mean	1.12		11.17	129.35	0.40	8.22	52.45	3.71	1.23	25.37
	Std.Dev.	0.31		2.21	23.01	0.03	0.46	9.19	1.57	0.18	11.46
	Summer Mean (June-Sept)	1.09		10.25	125.52	0.39	8.13	51.50	3.71	1.18	28.34



While the TP concentration in 2002 was higher than average, the chlorophyll a concentration was near the long terra average. This was probably due to the flushing out of the algae by the excessive rainfall. The clarity of Fish Lake in 2002 was the poorest in monitoring history. Presumably this was due to turbidity caused by runoff water and the algae growth. Typically, runoff induced turbidity is minimal in larger lakes, but the excessive rainfall in 2002 did result in sediment movement into the main basin of many lakes.

