

French Lake CAMP Results

This was the fourth year that the French Lake, located within the boundaries of Dayton, has been involved in CAMP (Citizen Assisted Monitoring Program). The 352-acre lake (218 acres of open water) has a maximum depth of 2.0 m (roughly 6 feet). (See Table 2 in the Commission's *2004 Annual Report*.) A search through the STORET nationwide water quality database for data on the lake provided limited data (just Secchi data in 1985). Therefore, the 2001- 2004 CAMP data are the only known available nutrient water quality data for the lake.

The lake was monitored seven times from early-May to mid-October, 2004. Once again, the dry late-summer conditions resulted in the lake becoming unnavigable. Results are shown below.

2004 summer (May-September) data summary

<i>Parameter</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Grade</i>
TP (µg/l)	164.5	32.0	577.0	F
CLA (µg/l)	107.2	5.0	610.0	F
Secchi (m)	0.7	0.5	1.1	D
TKN (mg/l)	2.73	1.40	8.50	
			<i>Overall Grade</i>	F

The lake's 2004 water quality grades are similar to those recorded in 2002-2003 and worse than that of 2001 [D]).

As mentioned earlier, there was little water quality data found for French Lake prior to the 2001 CAMP data. Therefore it is not possible to determine any long-term or short-term trends. To better understand the lake's water quality and where it may be heading, more data are needed.

The average user perception rankings, on a 1-to-5 scale, were 2.8 for physical condition (between 2- "some algae present" and 3- "definite algae present"), and 4.7 for recreational suitability (between 4- "no swimming - boating OK" and 5- "no aesthetics possible").

If you notice any errors in the lake's data or physical information, or are aware of any additional or missing information, please contact Randy Anhorn, Metropolitan Council, (651) 602-8743 or randy.anhorn@metc.state.mn.us.



French Lake Monitoring

French Lake Dayton, Hennepin Co.

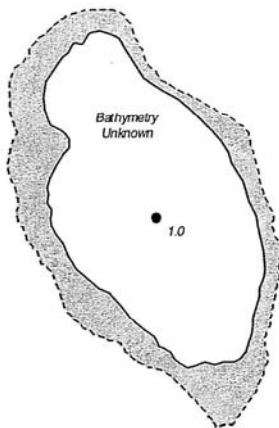
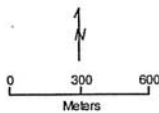
LAKE ID: 270127

WMO: Elm Creek

Volunteer: Steve Fowler

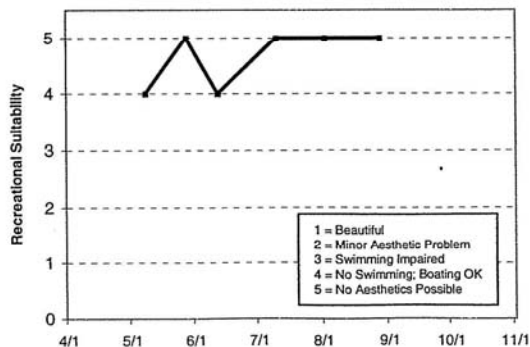
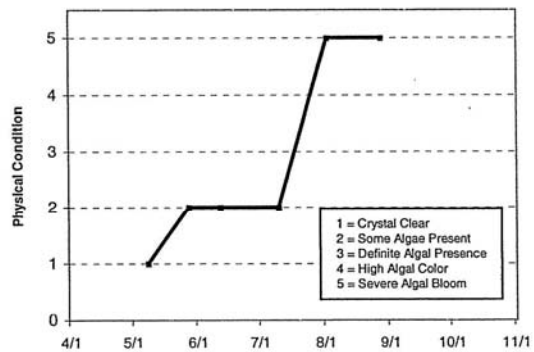
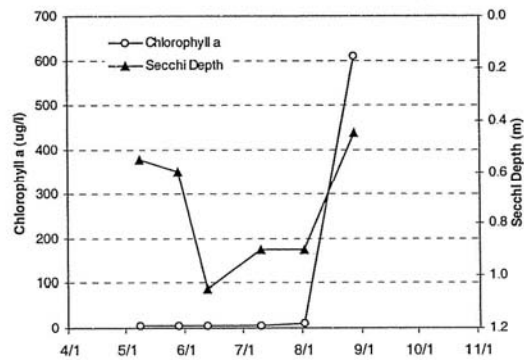
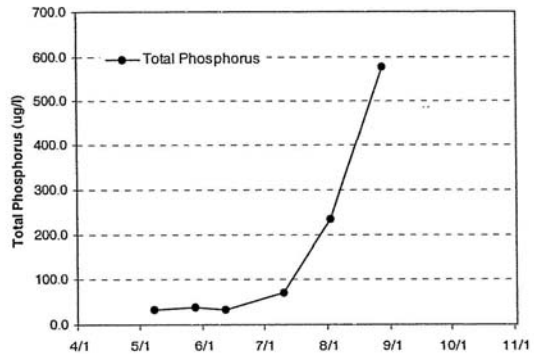
● Sampling site

Contours in meters



2004 Data

DATE	Surf. Temp (C)	Bot. Temp (C)	Surf. DO (mg/L)	Bot. DO (mg/L)	CLA (ug/L)	Surf. TP (ug/L)	Bot. TP (ug/L)	Secchi (m)	PC (1-5)	RS (1-5)
5/6/04	11.2				5.8	32.0		0.6	1	4
5/28/04	20.7				6.8	38.0		0.6	2	5
6/12/04	18.4				5	34.0		1.1	2	4
7/10/04	23.2				5.9	72.0		0.9	2	5
8/2/04	27.6				9.6	234.0		0.9	5	5
8/28/04	20.7				610	577.0		0.5	5	5
10/12/04	15.1				140	251.0		0.3	4	5



Lake Water Quality Grades Based on Summertime Averages

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total Phosphorus												
Chlorophyll a												
Secchi Depth						F						
Overall												

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Phosphorus										F	F	F	F
Chlorophyll a										C	F	F	F
Secchi Depth										F	F	F	D
Overall										D	F	F	F

Source: Metropolitan Council and STORET data

