

## Rice Lake [Maple Grove] (27-0116) – Elm Creek Watershed Management Commission

Rice Lake lies within the City of Maple Grove. The lake has a surface area of 252 acres. The maximum depth is 3.4 m (11 ft). The entire lake is considered littoral zone, which is the shallow 0 – 15 feet depth zone that is typically dominated by aquatic plants. Since the lake is relatively shallow, it does not maintain a thermocline, which is a density gradient caused by changing water temperatures throughout the water column. The MN DNR has designated the lake as being infested with Eurasian water milfoil (*Myriophyllum spicatum*).

On each sampling day the lake was monitored for total phosphorus (TP), chlorophyll-a (CLA), total kjeldahl nitrogen (TKN), and Secchi transparency (water clarity), as well as the lake's perceived physical condition and recreational suitability. The data are summarized in the figures and graphs on the following page.

### 2010 summer (May-September) data summary

<i>Parameter</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Grade</i>
<b>TP</b> (µg/l)	226.6	76.0	480.0	F
<b>CLA</b> (µg/l)	57.3	6.1	140.0	D
<b>Secchi</b> (m)	1.0	0.5	2.2	D
<b>TKN</b> (mg/l)	1.73	0.90	2.70	
			<b>Lake Grade</b>	D

The lake received a lake grade of D for 2010. Further monitoring is suggested to continue to build the water quality database for increasing power to detect water quality trends.

Throughout the monitoring period, the volunteer's opinions of the lake's physical condition and recreational suitability were ranked on a 1-to-5 scale. These user perception rankings are shown on the following page.

The Fisheries Section of the Minnesota Department of Natural Resources (MDNR) has conducted a fisheries survey on the lake. Information on the survey can be obtained through the MDNR Fisheries Section by calling (651) 259-5831 or by downloading the information off the Internet at <http://www.dnr.state.mn.us/lakefind/>.

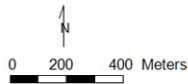
If you notice any errors in the lake's data or physical information, or are aware of any additional or missing information, please contact Brian Johnson of the Metropolitan Council at (651) 602-8743 or [brian.johnson@metc.state.mn.us](mailto:brian.johnson@metc.state.mn.us).

**Rice Lake**  
Maple Grove, Hennepin Co.

Lake ID: 270116-01  
WMO: Elm Creek  
Volunteer: George Schneider



● Sampling site  
Contours in meters



**2010 Data**

DATE	SURF TEMP (°C)	BOT TEMP (°C)	SURF DO (mg/l)	BOT DO (mg/l)	CLA (µg/l)	SURF TP (µg/l)	BOT TP (µg/l)	SECCHI (m)	PC	RS
4/18	17.0				13.0	65		1.0	3	3
5/9	14.0				6.1	76		1.8	2	2
5/15	17.0				15.0	103		1.6	3	3
5/29	24.0				22.0	116		2.2	3	2
6/7	24.3				140.0	92		0.7	4	3
6/20	25.0				62.0	130		0.8	3	3
7/12	26.0				94.0	448		1.0	4	4
7/25	29.0				86.0	480		1.0	4	4
8/7	27.0				110.0	233		0.5	4	4
8/22	27.0				21.0	354		0.5	4	4
9/5	20.0				38.0	287		0.5	4	4
9/19	17.0				36.0	174		0.7	3	3
10/3	15.0				16.0	94		0.7	3	3
10/16	14.0				23.0	98		1.3	3	3

**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												D
<b>Lake Grade</b>												

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total Phosphorus												
Chlorophyll a												
Secchi Depth			C								D	D
<b>Lake Grade</b>												

Year	2004	2005	2006	2007	2008	2009	2010
Total Phosphorus				F	F	F	F
Chlorophyll a				F	D	F	D
Secchi Depth	C	D	D	F	C	D	D
<b>Lake Grade</b>	<b>F D F D</b>						

Source: Metropolitan Council and STORET data

