

#### Appendix 4

**Henry Lake** is a 77-acre lake located in Hassan Township. Because the maximum depth of the lake is only 1.5 m (5 feet), the entire lake area is considered littoral zone (the 0-15 foot depth area of the lake dominated by aquatic vegetation). Additionally, because of the lake's shallowness it does not maintain a thermocline (a density gradient owed to changing water temperatures throughout the lake's water column).

This marks the third year that Henry Lake has been involved in CAMP (1995 and 2005 being the others). Other than the 1995, 2005 and 2006 CAMP data, a search through the STORET nationwide water quality database yielded no additional information. On each sampling day the lake was monitored for TP, CLA, TKN, and Secchi transparency, as well as the lake's perceived physical condition and recreational suitability.

The lake was monitored 11 times between early-May and mid-October, 2006. The lake's 2006 overall grade and individual grade for CLA is the best on record; however, the individual grade for TPO is the worst on record.

#### 2006 summer (May-October) data summary

<i>Parameter</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Grade</i>
<b>TP</b> (µg/l)	193.7	56.0	419.0	F
<b>CLA</b> (µg/l)	18.7	6.6	75.0	B
<b>Secchi</b> (m)	1.28	1.1	1.5	C
<b>TKN</b> (mg/l)	1.90	1.10	2.80	
			<b>Overall Grade</b>	C

Because so little water quality data is available for Henry Lake 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, additional years of data collection are needed.

The average user perception rankings were 4.0 for physical condition (4 - "high algal color"), and 4.6 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 Kent Johnson of the Metropolitan Council at (651) 602-8117 or [kent.johnson@metc.state.mn.us](mailto:kent.johnson@metc.state.mn.us).