

LAKE: LOON L (VLMP 07)
 TOWN: DALLAS PLT
 COUNTY: FRANKLIN

MIDAS: 2384
 TRUE BASIN: 1
 SAMPLE STATION: 1

WHOLE LAKE INFORMATION

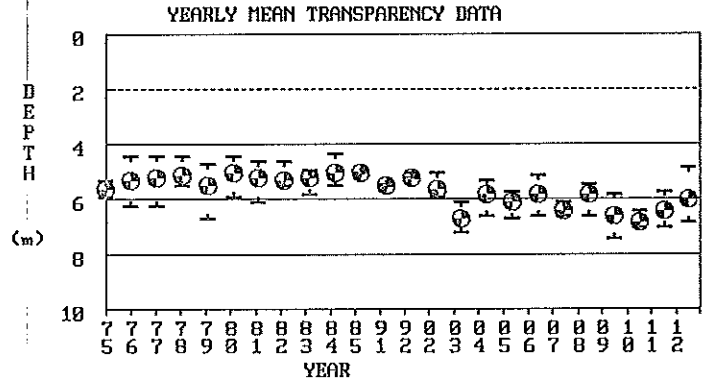
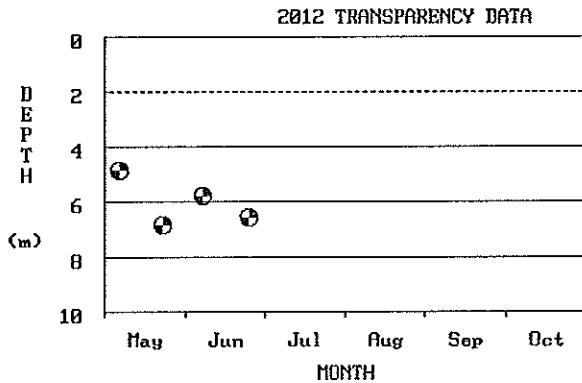
MAX. DEPTH: 15 m. (50 ft.)
 MEAN DEPTH: 6 m. (21 ft.)
 DELORME ATLAS #: 28
 USGS QUAD: KENNEBAGO LAKE
 IFW REGION D: Rangeley Lakes (Strong)
 IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 68.0 ha. (168.0 a.)
 FLUSHING RATE: 0.34 flushes/yr.
 VOLUME: 3810240.6 cu. m. (3091 ac.-ft.)
 DIRECT DRAINAGE AREA: 2.11 sq. km. (0.81 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. LOON L has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:



Note: 2012 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visible at bottom of lake (or one reading used in calculation was visible)].

YEAR	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS/cm)	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES			
					EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
					CORE	GRAB	GRAB	GRAB											
1975	-	7.03	16.5	-	-	-	-	-	5.3	5.6	5.9	4	-	-	-	-	-	-	-
1976	7	6.85	15.5	-	8	-	-	9	4.4	5.3	6.2	6	3.5	4.8	6.0	-	-	45	-
1977	-	6.17	16.0	-	-	-	-	-	4.4	5.2	6.2	5	-	-	-	-	-	46	-
1978	-	-	-	-	-	-	-	-	4.4	5.1	5.5	4	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	5	-	4.7	5.5	6.7	5	-	-	-	-	-	43	-
1980	-	-	-	-	-	-	-	-	4.4	5.0	5.9	5	-	-	-	-	-	48	-
1981	-	7.10	10.0	-	-	-	-	12	4.6	5.2	6.1	5	1.9	1.9	1.9	-	-	46	-
1982	-	6.50	-	-	-	-	-	-	4.6	5.3	5.5	6	-	-	-	-	-	45	-
1983	-	-	-	-	-	-	-	-	4.9	5.2	5.8	3	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	4.3	5.0	5.5	5	-	-	-	-	-	48	-
1985	15	7.10	8.0	29	5	-	-	11	5.0	5.0	5.0	1	4.2	4.2	4.2	-	-	-	-
1991	14	7.16	15.8	33	8	-	-	-	5.4	5.5	5.5	2	3.6	3.6	3.6	-	-	-	-
1992	-	7.20	20.4	-	-	-	-	-	5.0	5.2	5.2	2	-	-	-	-	-	-	-
2002	-	-	-	-	-	4	-	-	5.0	5.6	5.9	5	-	-	-	-	-	43	-
2003	9	-	12.2	39	4	-	-	-	6.1	6.7	7.2	4	1.8	1.8	1.8	-	-	-	-

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YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES			
	COLOR	pH	ALK	COND.	EPI	SURF	BOT.	PRO.	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
	(SPU)		(mg/l)	(uS	/cm)	CORE	GRAB	GRAB	GRAB										
2004	-	-	-	-	-	-	5	-	-	5.3	5.8	6.6	4	-	-	-	-	-	-
2005	15	7.34	10.0	38	6	-	-	8	-	5.7	6.1	6.7	4	2.8	2.8	2.8	-	-	-
2006	17	7.21	10.0	37	4	4	-	8	-	5.1	5.8	6.6	4	2.4	2.4	2.4	-	-	-
2007	-	-	-	-	-	-	-	-	-	6.1	6.4	6.6	3	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	5.4	5.8	6.6	3	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	5.8	6.6	7.4	3	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	6.4	6.8	7.0	4	-	-	-	-	-	-
2011	16	7.36	10.5	35	-	4	-	-	-	5.7	6.4	7.0	4	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	4.8	6.0	6.8	2	-	-	-	-	-	-
SUMMARY:	13	6.82	13.2	35	6	4	-	9	10	4.3	5.7	7.4	24	1.8	3.1	6.0	-	-	46

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH	SAMPLE DATE															
	08/27/84		09/12/85		09/03/91		09/07/02		08/11/03		09/14/04		08/15/05		08/23/06	
	m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C
0.0	22.2	9.0	15.5	9.6	19.0	9.3	19.0	7.8	23.8	8.8	18.3	8.5	23.5	8.3	19.8	8.9
1.0	-	-	15.5	9.7	18.9	9.3	19.0	7.8	23.6	8.8	18.3	8.6	23.3	8.3	19.8	9.0
2.0	-	-	15.5	9.6	18.5	9.3	19.0	7.7	23.6	8.9	18.3	8.6	23.0	8.3	19.8	9.0
3.0	-	-	15.7	9.6	18.4	9.3	18.9	7.6	23.4	8.9	18.3	8.6	22.9	8.2	19.8	8.9
4.0	-	-	15.5	9.5	18.3	9.3	18.8	7.7	21.0	9.4	18.3	8.6	22.9	8.1	19.7	8.9
5.0	-	-	15.5	9.5	18.2	8.2	18.7	7.6	19.8	9.2	18.3	8.6	19.6	9.8	19.7	8.9
6.0	-	-	15.5	9.4	18.1	9.2	18.6	7.5	17.8	9.6	18.2	8.6	14.3	11.3	18.8	7.9
7.0	-	-	15.4	9.4	18.0	8.9	18.3	7.3	13.3	11.1	18.2	8.6	11.4	9.6	14.9	4.3
8.0	-	-	13.9	5.7	16.6	4.3	14.2	3.8	10.7	10.1	18.2	8.6	9.9	7.3	10.9	3.2
9.0	-	-	9.2	1.8	12.0	0.7	10.9	0.7	8.7	6.9	17.7	7.5	9.2	4.7	9.6	2.1
10.0	-	-	8.3	0.6	10.5	0.3	10.7	0.2	8.1	5.8	17.3	6.7	8.8	3.3	8.9	1.1
11.0	-	-	7.9	0.4	9.0	0.2	10.9	0.1	7.4	3.7	14.9	1.9	8.7	2.2	8.3	0.4
12.0	-	-	-	-	8.9	0.2	10.8	1.1	7.2	2.4	15.1	1.9	8.5	1.2	8.0	0.2
13.0	-	-	-	-	-	-	10.8	0.1	7.1	1.8	10.6	1.8	8.3	0.7	7.8	0.2
14.0	-	-	-	-	-	-	10.8	0.1	6.9	0.7	9.3	1.4	8.3	0.6	7.6	0.2
15.0	-	-	-	-	-	-	-	-	-	-	8.8	1.1	8.2	0.5	-	-

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WATER QUALITY SUMMARY

LOON LAKE, DALLAS PLANTATION

MIDAS: 2384, Sample Station # 1

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Loon Lake have been collected since 1975. During this period, 12 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Loon Lake is considered average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Loon Lake is low.

Water Quality Measures: Loon Lake is a non-colored lake (average color 13 SPU) with an average SDT of 5.6 m (18.5 ft). The range of water column TP for Loon Lake is 5 - 8 parts per billion (ppb) with an average of 6 ppb. Chla ranges from 1.8 - 6.0 ppb with an average of 3.1 ppb. Recent dissolved oxygen (DO) profiles show low to moderate DO depletion in deep areas of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is moderate. Oxygen levels below 5 parts per million stress certain cold water fish and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

Maine Department of Inland Fisheries and Wildlife manages this pond as a cold-water fishery.

See the Maine DEP *Explanation of Lake Water Quality Monitoring Report* for measured variable explanations. Additional lake information can be obtained by contacting Maine DEP at 207-287-3901 or VLMP at 207-783-7733, and at these Websites:

<http://www.lakesofmaine.org> and <http://www.maine.gov/dep/water/lakes/index.html> and <http://www.mainevolunteerlakemonitors.org>.

Filename: loon2384, Revised: 02, 2/11, By: jp