

LAKE: LOON P (VLMP 31)
 TOWN: ACTON
 COUNTY: YORK

MIDAS: 9695
 TRUE BASIN: 1
 SAMPLE STATION: 1

WHOLE LAKE INFORMATION

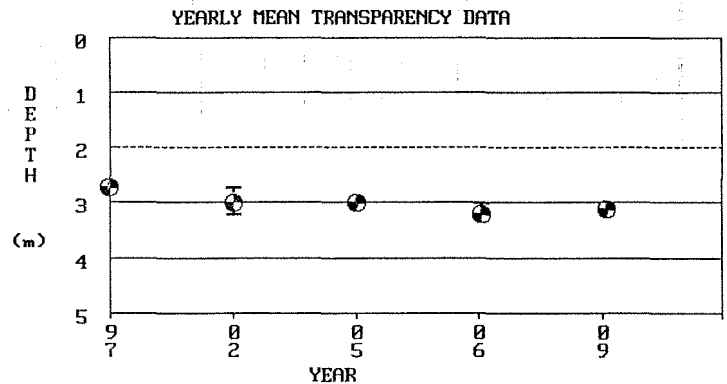
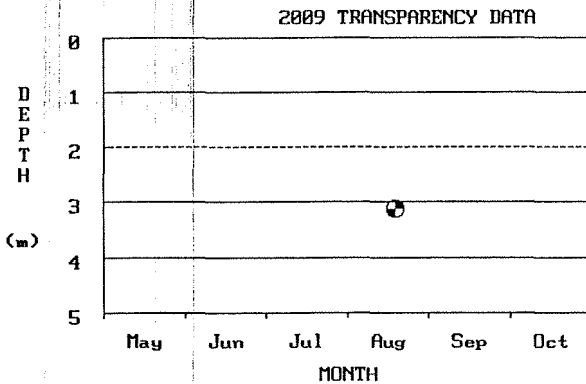
MAX. DEPTH: 3 m. (10 ft.)
 MEAN DEPTH: 2 m. (7 ft.)
 DELORME ATLAS #: 02
 USGS QUAD: GREAT EAST LAKE
 IFW REGION A: Sebago Lake (Gray)
 IFW FISH. MANAGMENT: Warmwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 35.0 ha. (86.5 a.)
 FLUSHING RATE: 1.70 flushes/yr.
 VOLUME: 661971.9 cu. m. (537 ac.-ft.)
 DIRECT DRAINAGE AREA: 1.70 sq. km. (0.66 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 P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:



Note: 2009 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 CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHL
1979	-	-	-	-	-	-	-	-	-	-	-	-	1.4	1.4	1.4	-	-	-	-
1997	18	7.18	12.0	61	12	-	-	-	2.7*	2.7*	2.7*	1	2.6	2.7	2.7	-	-	-	-
2002	-	-	-	-	-	-	-	-	2.7*	3.0*	3.2*	6	-	-	-	-	-	-	-
2005	26	7.29	10.4	86	12	-	-	-	3.0*	3.0*	3.0*	1	4.8	4.8	4.8	-	-	-	-
2006	-	-	-	-	-	-	-	-	3.0*	3.2*	3.2*	3	-	-	-	-	-	-	-
2009	-	-	-	-	13	-	-	-	3.1*	3.1*	3.1*	1	2.5	2.5	2.5	-	-	-	-
SUMMARY:	22	7.23	11.2	74	12	-	-	-	2.7*	3.0*	3.2*	5	1.4	2.8	4.8	-	-	-	-

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LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH	SAMPLE DATE					
	08/27/97		08/17/05		08/18/09	
<u>m</u>	<u>°C</u>	<u>ppm</u>	<u>°C</u>	<u>ppm</u>	<u>°C</u>	<u>ppm</u>
0.0	23.2	7.7	25.5	7.2	27.2	7.9
1.0	22.7	7.5	25.5	7.2	26.9	7.9
2.0	22.3	7.9	25.3	7.3	26.8	8.0
3.0	-	-	24.7	7.4	24.0	4.7

WATER QUALITY SUMMARY

LOON POND, ACTON

Midas: 9695, Basin: Primary

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 present water quality, track algae blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for Loon Pond has been collected since 1997. During this period, two years of basic chemical information were collected, in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Loon Pond is considered to be slightly below average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algae blooms on Loon Pond is moderate.

Water Quality Measures: Loon Pond is a non-colored lake (average color 22 SPU) with an average SDT of 2.9 m (9.5 ft). However, the lake may be somewhat clearer than that since on several occasions the secchi disk hit bottom before it went out of sight. The average water column TP for Loon Pond is 12 parts per billion (ppb), while Chla has ranged from 1.4 to 4.8 ppb (average 3 ppb). Recent dissolved oxygen (DO) profiles show no DO depletion since the pond is much too shallow to thermally stratify in the summertime. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low.

Loon Pond is managed as a warm-water fishery by the Department of Inland Fisheries and Wildlife.

See the ME-DEP *Explanation of Lake Water Quality Monitoring Report* for measured variable explanations. Additional lake information can be obtained by contacting the Maine DEP at 207-287-3901 or the VLMP at 207-783-7733, or on the Internet at <http://www.pearl.maine.edu> and/or <http://www.maine.gov/dep/blwq/lake.htm>.

Filename: LOON9695, Revised: 3/06 by rjb