

LAKE: FOREST L (VLMP 05)
 TOWN: WINDHAM
 COUNTY: CUMBERLAND

MIDAS: 3712
 TRUE BASIN: 1
 SAMPLE STATION: 1

WHOLE LAKE INFORMATION

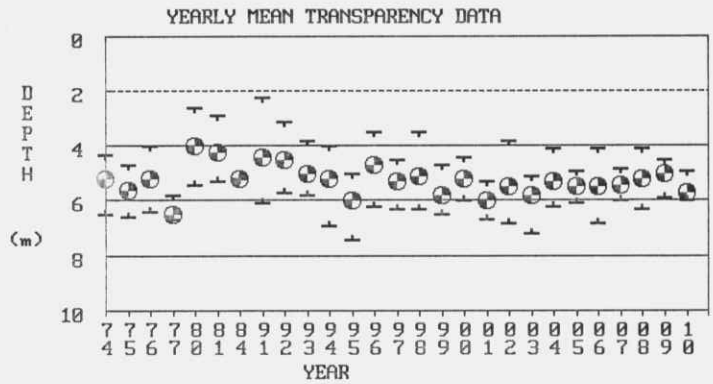
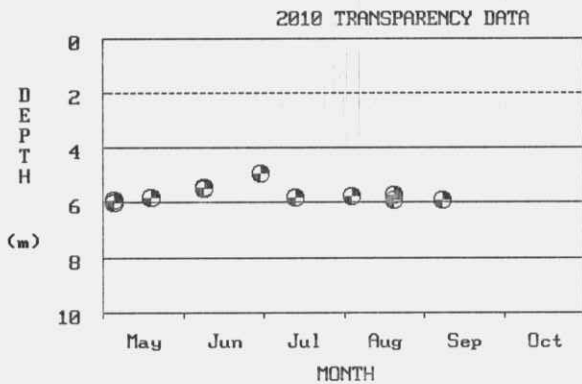
MAX. DEPTH: 12 m. (38 ft.)
 MEAN DEPTH: 4 m. (12 ft.)
 DELORME ATLAS #: 05
 USGS QUAD: CUMBERLAND CENTER
 IFW REGION A: Sebago Lake (Gray)
 IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 82.0 ha. (202.6 a.)
 FLUSHING RATE: 1.43 flushes/yr.
 VOLUME: 3200000.0 cu. m. (2596 ac.-ft.)
 DIRECT DRAINAGE AREA: 7.75 sq. km. (2.99 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. FOREST L has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:



Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

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

YEAR	MEAN	MEAN	MEAN	MEAN	TOTAL PHOS. MEANS (ppb)				SECCHI DISK (m.)				CHLOROPHYLL A (ppb)			TROPHIC STATE INDICES			
	COLOR (SPU)	pH	ALK (mg/l)	COND. (uS /cm)	EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	G	SEC	CHI
1974	-	-	-	-	-	-	7	-	4.3	5.2	6.5	5	2.7	3.7	6.2	-	-	46	45
1975	26	5.42	4.0	34	-	-	8	-	4.7	5.6	6.6	6	3.6	4.9	7.2	-	-	43	-
1976	-	-	-	-	12	-	-	-	4.0	5.2	6.4	6	1.4	4.2	8.5	47	-	46	-
1977	-	-	-	-	-	-	-	-	5.8	6.5	6.7	2	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	2.6	4.0	5.4	4	-	-	-	-	-	-	-
1981	20	6.20	2.0	31	9	-	34	-	2.9	4.2	5.3	4	4.0	4.0	4.0	-	-	-	-
1984	15	6.60	4.0	-	6	-	34	-	5.2	5.2	5.2	1	2.5	2.5	2.5	-	-	-	-
1991	20	-	-	-	7	-	25	-	2.2	4.4	6.1	5	-	-	-	-	-	55	-
1992	22	7.11	4.5	2	9	-	-	-	3.1	4.5	5.7	6	2.8	2.8	2.8	-	-	54	-
1993	12	-	4.0	-	9	-	25	-	3.8	5.0	5.8	6	1.4	2.1	2.8	-	-	48	-
1994	-	6.40	-	-	-	-	-	-	4.0	5.2	6.9	6	-	-	-	-	-	46	-
1995	-	6.42	4.5	-	-	-	-	-	5.0	6.0	7.4	6	-	-	-	-	-	39	-
1996	15	-	-	-	-	-	-	-	3.5	4.7	6.2	5	-	-	-	-	-	52	-
1997	-	6.44	9.4	-	-	-	-	-	4.5	5.3	6.3	6	-	-	-	-	-	45	-
1998	27	5.96	5.5	69	8	-	22	10	3.5	5.1	6.3	5	3.4	3.4	3.4	-	-	47	-

WATER QUALITY SUMMARY

FOREST LAKE, WINDHAM

MIDAS: 3712, 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 data for Forest Lake have been collected since 1974. During this period, 15 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Forest Lake is considered above average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Forest Lake is moderate.

Water Quality Measures: Forest Lake is a non-colored lake (average color 19 SPU) with an average SDT of 5.2 m (17.1 ft). The range of water column TP for Forest Lake is 6 - 12 parts per billion (ppb) with an average of 8 ppb. Chla ranges from 1.4 - 8.5 ppb with an average of 3.4 ppb. Recent dissolved oxygen (DO) profiles show 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 stresses certain cold water fish and persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

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

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