LAKE: DEERING L (VLMP SCW)
TOWN: ORIENT
COUNTY: AROOSTOOK

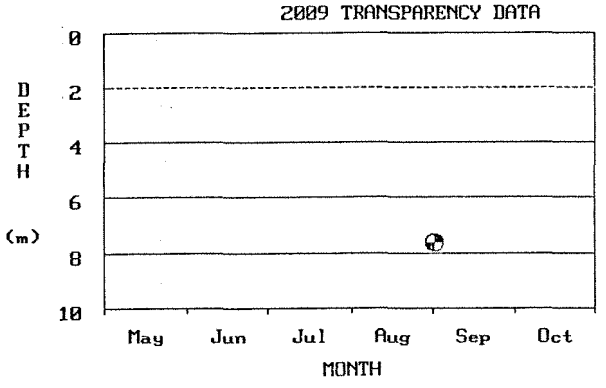
MIDAS: 507
TRUE BASIN: 1
SAMPLE STATION: 1

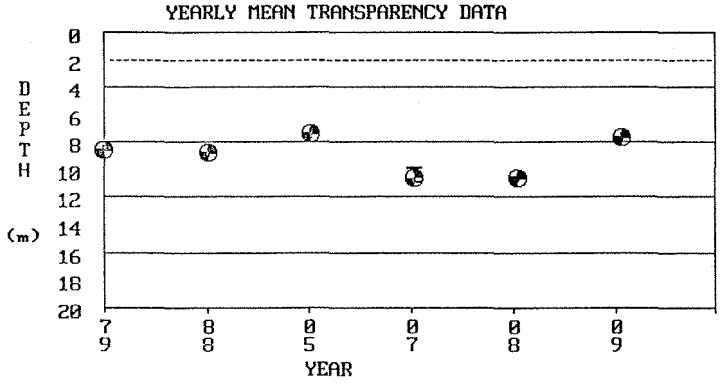
WHOLE LAKE INFORMATION
MAX. DEPTH: 15 m. (49 ft.)
MEAN DEPTH: 9 m. (30 ft.)
DELORME ATLAS #: 53
USGS QUAD: ORIENT
IFW REGION F: Penobscot (Enfield)
IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: 194.0 ha. (479.4 a.)
FLUSHING RATE: 0.22 flushes/yr.
VOLUME: 16275373.0 cu. m. (13203 ac.-ft.)
DIRECT DRAINAGE AREA: 7.73 sq. km. (2.98 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. DEERING L 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 visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1979	-	-	-	-	-	-	-	-	8.5	8.5	8.5	1	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	7	9	8.7	8.7	8.7	1	-	-	-	-	-	-	-
2005	10	7.43	10.1	39	-	-	-	-	7.3	7.3	7.3	1	5.8	5.8	5.8	-	-	-	-
2007	-	-	-	-	-	-	-	-	9.8	10.6	10.8	3	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	10.5	10.6	10.6	3	-	-	-	-	-	-	-
2009	-	-	-	-	-	4	-	-	7.6	7.6	7.6	1	-	-	-	-	-	-	-
SUMMARY:	10	7.43	10.1	39	-	4	7	9	7.3	8.9	10.8	6	5.8	5.8	5.8	-	-	-	-

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TOWN: ORIENT *TRUE BASIN: 1
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LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE			
DEPTH	08/16/88		08/08/05	
m	°C	ppm	°C	ppm
0.0	23.3	8.4	-	-
1.0	23.5	8.1	23.4	8.8
2.0	23.3	8.1	22.7	9.0
3.0	23.3	8.1	22.4	9.1
4.0	23.3	8.1	22.2	9.1
5.0	23.3	8.1	22.0	9.1
6.0	21.8	8.7	21.7	9.3
7.0	19.2	8.9	16.7	11.5
8.0	17.4	8.3	13.3	11.3
9.0	15.5	6.8	11.9	9.9
10.0	14.5	5.8	11.0	8.2
11.0	13.9	4.6	10.6	7.7
12.0	13.0	4.1	10.4	6.4
13.0	-	-	10.2	5.7
14.0	-	-	10.1	5.0

WATER QUALITY SUMMARY

DEERING LAKE, ORIENT

Midas: 0507, Sample Station # 01

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 Deering Lake have been collected since 1979. During this period, 1 year of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Deering Lake is considered to be above average, based on measures of SDT, total phosphorus (TP) and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Deering Lake is low.

Water Quality Measures: Deering Lake is a non-colored lake (average color 10 SPU) with an average SDT of 8.8m (29ft). The water column TP for Deering Lake has not been determined at this time. Chla has only been taken once in 2005 and was 5.8 ppb. A recent dissolved oxygen (DO) profile showed no DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low. 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.

See ME-DEP DATA Explanation for the measured variable explanations. Additional lake information can be found on the Internet at www.pearl.maine.edu and/or www.maine.gov/dep/blwq/lake.htm, or contact ME-DEP at 207-287-3901 or VLMP at 207-783-7733.

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