DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	LITTLE POND	Lake Area (ha):	4.45
Town:	WEBSTER	Maximum depth (m):	3.6
County:	Merrimack	Mean depth (m):	2.5
River Basin:	Merrimack	Volume (m^3):	110000
Latitude:	43°19'50" N	Relative depth:	1.5
Longitude:	71°42'09" W	Shore configuration:	1.07
Elevation (ft):	510	Areal water load (m/yr):	28.72
Shore length (m):	800	Flushing rate (yr^{-1}):	11.60
Watershed area (ha):	279.7	P retention coeff.:	0.44
% watershed ponded:	0.0	Lake type:	natural

BIOLOGICAL:		9 February 1995	30 June 1994
DOM. PHYTOPLANKTON (% TOTAL)	#1	ASTERIONELLA 65%	CHRYSOSPHAERELLA 30%
	#2		DINOBRYON 30%
	#3		CERATIUM 25%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (μg/L)			6.94
DOM. ZOOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	KERATELLA 67%
	#2		TINTINNIDIUM 11%
	#3		
ROTIFERS/LITER		2	1788
MICROCRUSTACEA/LITER		2	109
ZOOPLANKTON ABUNDANCE (#/L)		4	2224
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			1.5
BOTTOM DISSOLVED OXYGEN (mg/L)		7.6	0.3
BACTERIA (E. coli, #/100 ml)	#1		10
	#2		< 10
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 2.0
Hypolimnion volume (m^3) : 3000
Anoxic volume (m^3) : 37500

CHEMICAL:

Lake: LITTLE POND
Town: WEBSTER

	9 February 1995		30 June 1994		
DEPTH (m)	1.5		1.0		2.5
pH (units)	6.0		6.7		6.2
A.N.C. (Alkalinity)	7.9		13.9		13.7
NITRATE NITROGEN	< 0.10		< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.24		0.57		0.46
TOTAL PHOSPHORUS	0.009		0.035		0.021
CONDUCTIVITY (μmhos/cm)	82.8		85.0		86.8
APPARENT COLOR (cpu)	37		75		85
MAGNESIUM			1.10		
CALCIUM			5.3		
SODIUM			9.6		
POTASSIUM			0.59		
CHLORIDE	14		15		15
SULFATE	6		2		2
TN : TP	27		16		22
CALCITE SATURATION INDEX			2.7		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1994

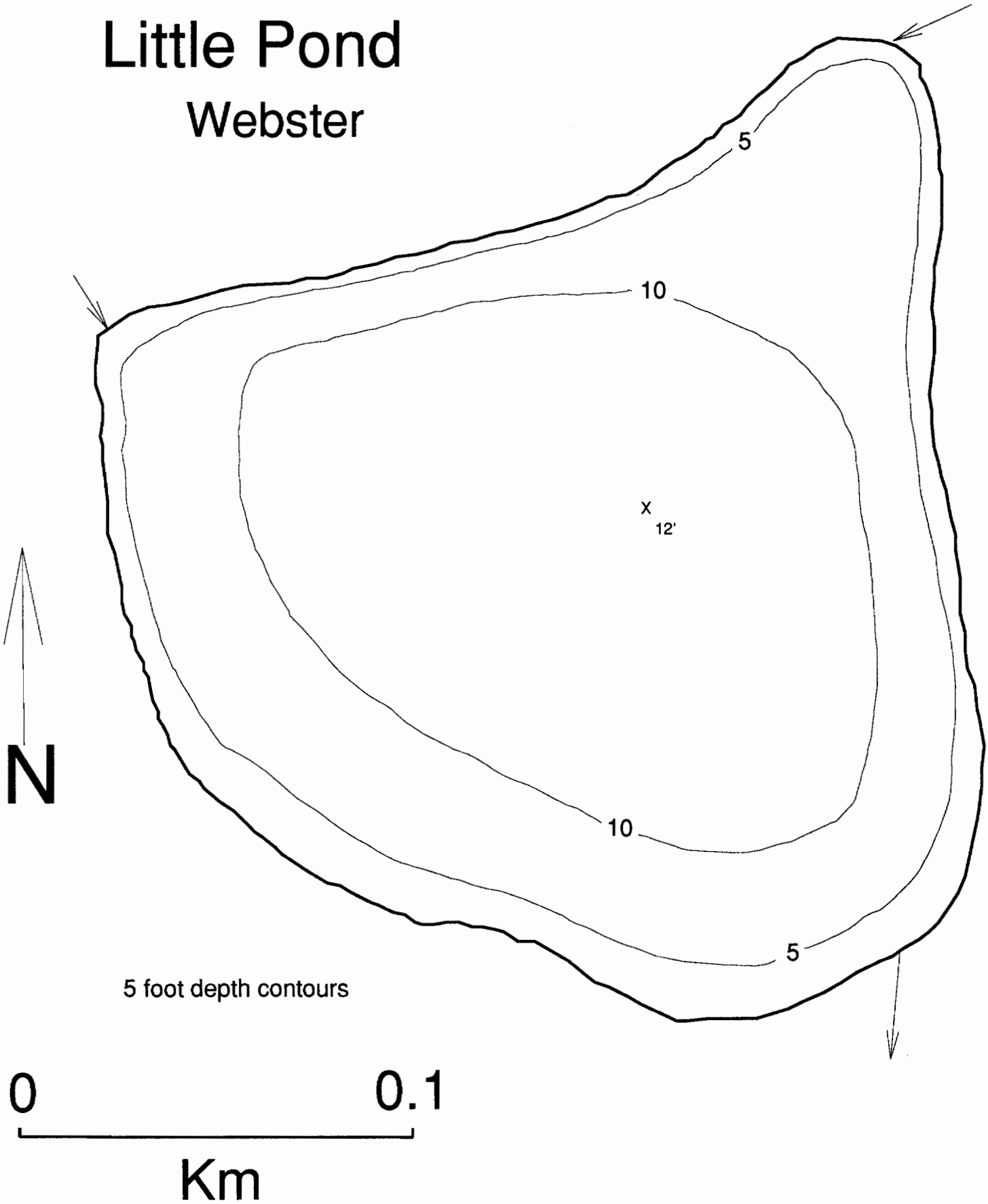
D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
4	4	4	1	13	Eutro.

COMMENTS:

1. AKA Couch Pond.
2. This is a small, shallow, tea-colored, eutrophic weedy pond surrounded by wetlands. It is located along Beaverdam Brook about 1 mile upstream from Walker Pond.
3. Sodium and chloride levels suggest road salt does reach the pond.
4. Canoe access only via tributary from road.

Little Pond

Webster



FIELD DATA SHEET

LAKE: LITTLE POND
DATE: 06/30/94

TOWN: WEBSTER
WEATHER: MOSTLY CLOUDY; WARM & HUMID

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	22.0	6.8	77 %
	1.0	21.0	4.0	45 %
	2.0	17.0	0.5	5 %
	3.0	13.0	0.3	3 %
	3.5	12.5	0.3	3 %

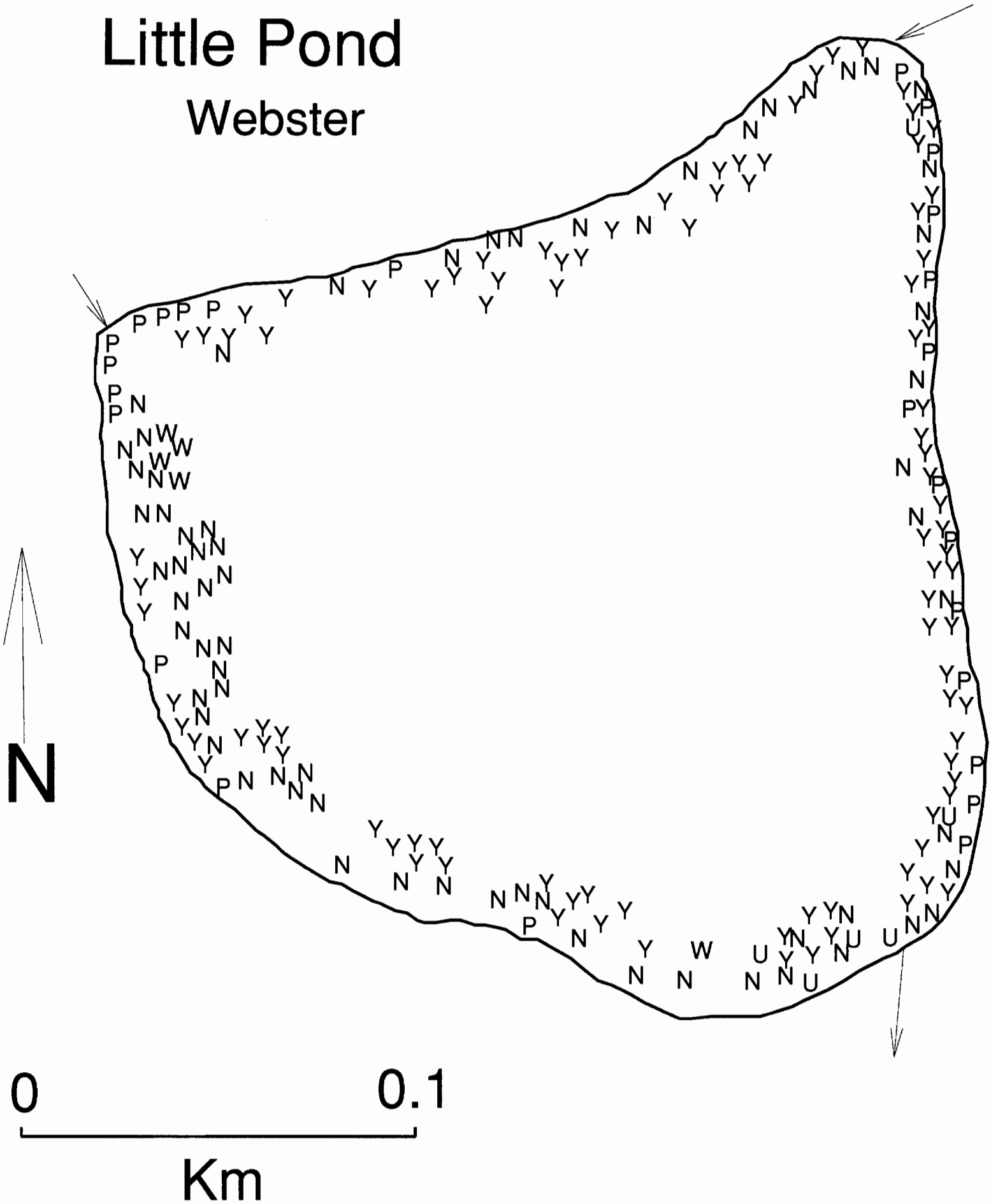
SECCHI DISK (m): 1.5
BOTTOM DEPTH (m): 3.5
TIME: 1210

COMMENTS:
1. Pond did show thermal stratification despite being less than 12 feet deep.
2. No dissolved oxygen present below 6 feet.

*Dissolved oxygen values are in mg/L

Little Pond

Webster



AQUATIC PLANT SURVEY

LAKE: LITTLE POND TOWN: WEBSTER DATE: 06/30/94

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
N	Nymphaea	White water lily	Scattered
Y	Nuphar	Yellow water lily	Common
W	Potamogeton	Pondweed	Scattered
U	Utricularia	Bladderwort	Common
P	Pontederia cordata	Pickerelweed	Scattered

OVERALL ABUNDANCE: Common/Abun

GENERAL OBSERVATIONS:

1. Water darkness restricted visibility into the pond. Bottom anchor drags brought up sterile grass-like vegetation that was probably over most of the bottom. Bladderwort was noted in all the tributaries and may have been over much of the bottom.

2. This is essentially a small open-water area in the middle of a wetland where a brook flows through.