NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION

LAKE TROPHIC DATA

MORPHOMETRIC:

LAKE	Hunts Pond	LAKE AREA (HA)	18.53
TOWN	Hancock	MAXIMUM DEPTH (M)	16.1
COUNTY	Hillsborough	MEAN DEPTH (M)	4.6
RIVER BASIN	Merrimack	VOLUME (M^3)	856,000
LATITUDE	42° 59'N	MUD SURFACE AREA (HA)	18.57
LONGITUDE	72° 02'W	RELATIVE DEPTH	3.3
ELEVATION (FT)	1295	SHORE CONFIGURATION	1.25
SHORE LENGTH (M)	1900	AREAL WATER LOAD (M/YR)	5.83
WATERSHED AREA (HA)	195.1	FLUSHING RATE (YR^{-1})	1.3
% WATERSHED PONDED	1.6%	PHOSPHORUS RETENTION COEFF.	0.63

BIOLOGICAL: DATE	28 JAN 1986	22 AUG 1985
DOM. PHYTOPLANKTON (% total) 1	Tabellaria (65%)	Uroglenopsis (60%)
2	Asterionella (30%)	
NUMBER OF ALGAL GENERA	4	18
SPECIES DIVERSITY		2.23
CHLOROPHYLL a (ug/L)		3.47
DOM. ZOOPLANKTON (% total) 1	Kellicottia (30%)	Nauplii larvae (45%)
2	Nauplii larvae (30%)	
ROTIFERS/LITER	57	20
MICROCRUSTACEA/LITER	28	65
TOTAL ZOOPLANK. CNTS (cells/L)	85	87
VASCULAR PLANT ABUNDANCE		Abundant
DOMINANT VASCULAR PLANTS 1		Pontederia
2		Utricularia
3		
SECCHI DISK TRANSPARENCY (M)		6.6
BOTTOM DISS. OXYGEN (mg/L)	7.3	0.2
SEDIMENT: % ORGANIC MATTER		

LAKE TYPE: An artificial pond.

SUMMER THERMAL STRATIFICATION: YES x NO ____ WEAK ____

IF YES, VOLUME OF HYPOLIMNION 57,500 (m^3) THERMOCLINE DEPTH 7.5 (m)

CHEMICAL: (mg/L unless indicated otherwise) LAKE: Hunts Pond

	WINTER		SUMMER		
DATE	28 JAN 1986		22 AUG 1985		
DEPTH (M)	5.0	10.0	2.5	7.5	13.5
pH (UNITS)	5.7	5.7	5.9	5.8	5.8
ALKALINITY (I. P.)	1.1	1.3	0.78	0.88	3.6
ALKALINITY (F.E.P.)	2.7	2.9	2.2	2.4	4.9
NITRITE+NITRATE NITROGEN			< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN			0.28		0.48
TOTAL PHOSPHORUS	0.007	0.005	0.006	0.007	0.020
SPEC. CONDUCT. (µMhos/cm)	24.6	25.4	22.2	21.6	24.3
APPARENT COLOR (UNITS)	15	20	10	10	30
TRUE COLOR (440 nm)(UNITS)	NR	NR	NR	NR	NR
MAGNESIUM			0.31		
CALCIUM			1.6		
SODIUM			1		
POTASSIUM			< 0.5		
CHLORIDE			2		3
TN : TP			47		24
INORG-N : INORG-P					
[Mg+Ca] : [Na+K]					
CALCITE SATURATION INDEX			5.3		

* = NOT DEFENSIBLE NR = NO RESULT

TROPHIC CLASSIFICATION: 1985

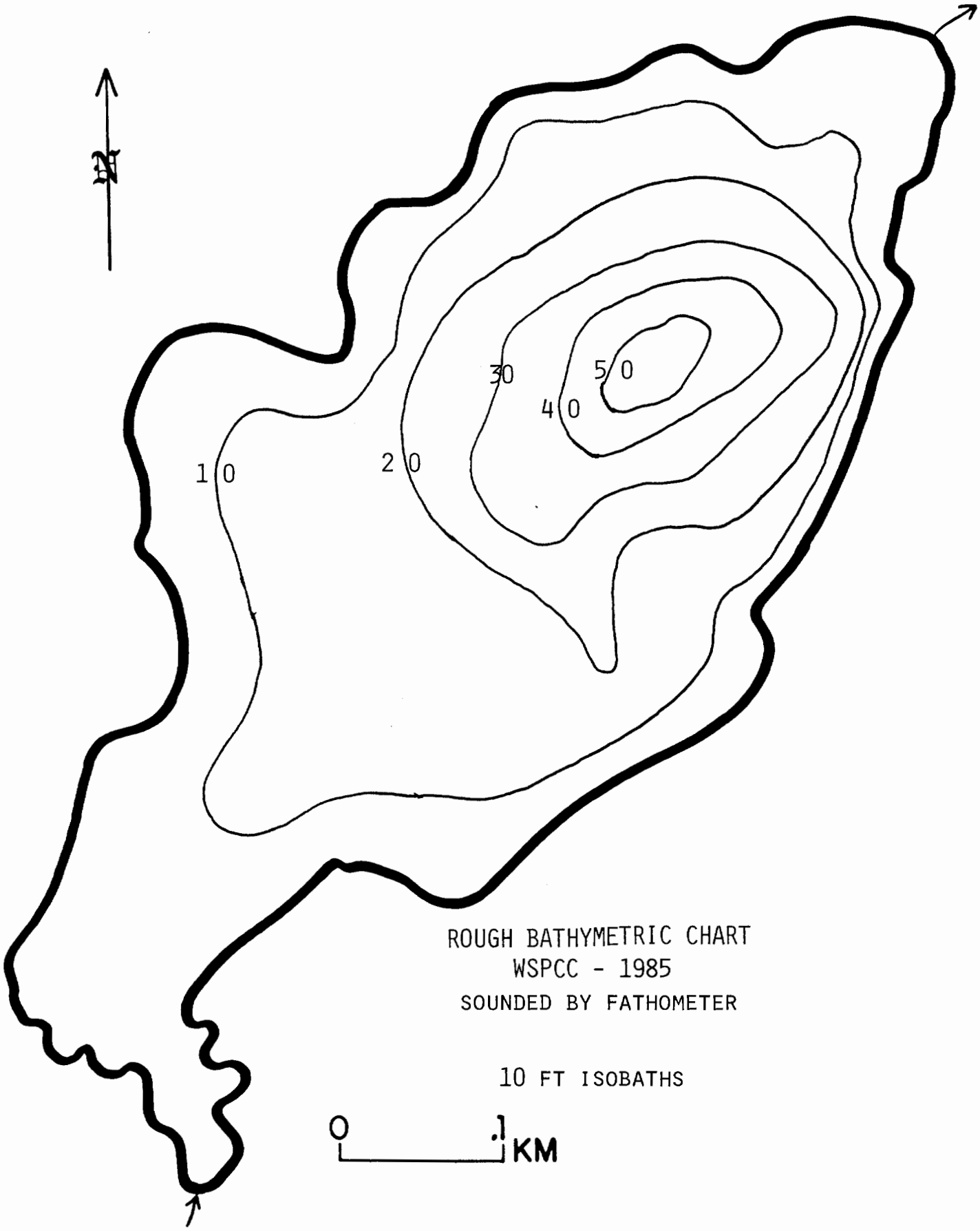
	D.O.	S.D.	PLANT ABUND.	CHL a	TOTAL PTS.	TROPHIC CLASS.
CLASSIFICATION POINTS:	6	1	3	0	10	Meso.

COMMENTS:

1. Good ramp, limited parking.
2. Only 4 camps on the lake.

HUNTS POND

HANCOCK



ROUGH BATHYMETRIC CHART
WSPCC - 1985
SOUNDED BY FATHOMETER

10 FT ISOBATHS

FIELD DATA SHEET

WATER BODY Hunts Pond TOWN Hancock By WSPCC

DATE COLLECTED 22 August 1985 WEATHER Partly sunny;light breeze;cool.

STATION	DEPTH (M)	TEMP. (°C)	*DISSOLVED OXYGEN	OXYGEN: % SATURATION			
DEEP SPOT	0.1	23.0	7.5	89%			
	1.0	23.0	7.5	89%			
	2.0	23.0	7.5	89%			
	3.0	22.9	7.5	87%			
	4.0	22.8	7.5	87%			
	5.0	22.8	7.5	87%			
	6.0	22.5	7.6	88%			
	7.0	19.5	9.8	107%			
	8.0	14.8	10.8	106%			
	9.0	11.3	9.5	88%			
	10.0 / 11.0	9.9 / 8.5	9.4 / 5.9	83% / 50%			
	12.0 / 13.0	8.0 / 7.5	1.5 / 0.2	13% / 2%			
	14.0	7.2	0.2	2%			
	15.0	7.2	0.2	2%			

COMMENTS:

SECCHI DISK (M) 6.6

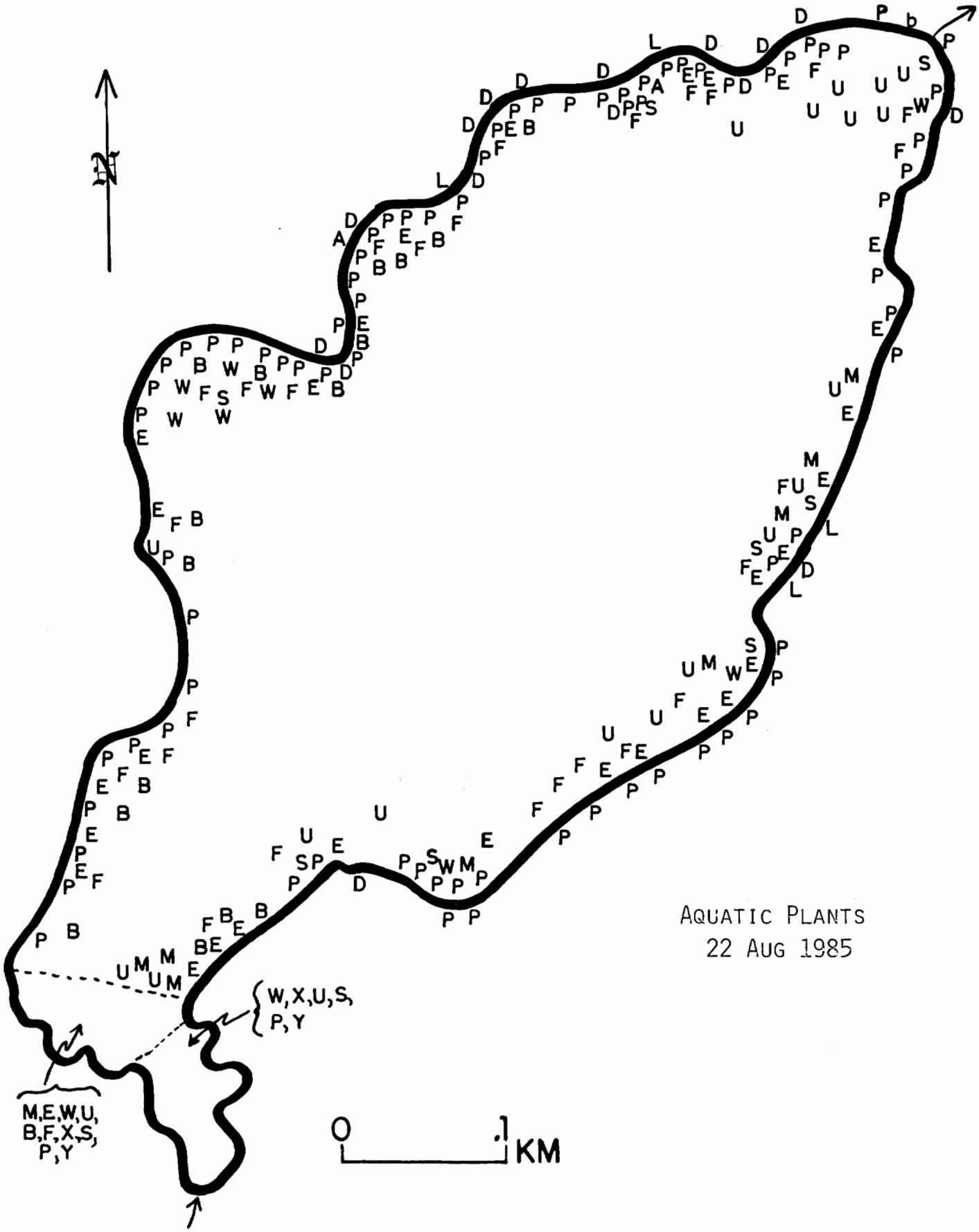
BOTTOM DEPTH (M) 15.5

TIME 1215 hrs.

* Dissolved oxygen values in mg/L

HUNTS POND

HANCOCK



AQUATIC PLANTS
22 AUG 1985

AQUATIC PLANT SURVEY

LAKE Hunts Pond TOWN Hancock DATE 22 AUG 85 BY WSPCC

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
M	Myriophyllum humile	Water milfoil	Sparse
U	Utricularia	Bladderwort	Common
B	Brasenia schreberi	Water shield	Common
F	Nymphoides cordatum	Floating heart	Scattered
X		Sterile,thread-like growth	Sparse
E	Eriocaulon septangulare	Pipewort	Scattered
W	Potamogeton	Pondweed	Scattered
S	Sparganium	Bur reed	Sparse
P	Pontederia cordata	Pickerelweed	Abundant
Y	Nuphar	Yellow water lily	Sparse
D	Dulichium arundinaceum	Three-way sedge	Scattered
A	Sagittaria	Arrowhead	Sparse
L	Lobelia dortmanna	Water lobelia	Sparse
b	Scirpus	Bulrush	Sparse

OVERALL ABUNDANCE Abundant

GENERAL OBSERVATIONS:

1. Plants were very abundant at the inlet area and common along most of the shoreline. Pickerelweed was abundant in most of the coves. Overall, plants were common to abundant; an abundant rating was used for classification purposes.

2. Filamentous algae was abundant along most of the shoreline and visible bottom.

3. Bladderwort was common along much of the shoreline, and probably extended out into the lake more than indicated on the map.