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

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	ANDERSON POND	Lake Area (ha):	5.50
Town:	GRANTHAM	Maximum depth (m):	2.0
County:	Sullivan	Mean depth (m):	1.2
River Basin:	Connecticut	Volume (m^3):	63500
Latitude:	43°32'15" N	Relative depth:	0.8
Longitude:	72°07'30" W	Shore configuration:	1.32
Elevation (ft):	1255	Areal water load (m/yr):	1.28
Shore length (m):	1100	Flushing rate (yr^{-1}):	1.10
Watershed area (ha):	15.7	P retention coeff.:	0.87
% watershed ponded:	0.0	Lake type:	natural

BIOLOGICAL:	16 February 1989	17 August 1988
DOM. PHYTOPLANKTON (% TOTAL) #1	DINOBRYON 95%	STAURASTRUM SP. 85%
#2		
#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)		
CHLOROPHYLL-A (µg/L)		16.99
DOM. ZOOPLANKTON (% TOTAL) #1	POLYARTHRA 61%	COLOTHECA 25%
#2	SYNCHAETA 33%	NAUPLIUS LARVA 22%
#3		KERATELLA 18%
ROTIFERS/LITER	1406	177
MICROCRUSTACEA/LITER	0	109
ZOOPLANKTON ABUNDANCE (#/L)	1472	287
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		1.0
BOTTOM DISSOLVED OXYGEN (mg/L)	7.3	8.2
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m^3): None

CHEMICAL:

Lake: ANDERSON POND
Town: GRANTHAM

	16 February 1989		17 August 1988		
DEPTH (m)	1.5		1.0		
pH (units)	6.3		7.4		
A.N.C. (Alkalinity)	10.2		11.4		
NITRATE NITROGEN	< 0.05		< 0.05		
TOTAL KJELDAHL NITROGEN	0.58		0.62		
TOTAL PHOSPHORUS	0.015		0.024		
CONDUCTIVITY (µ mhos/cm)	49.0		38.8		
APPARENT COLOR (cpu)	35		40		
MAGNESIUM			0.58		
CALCIUM			4.0		
SODIUM			2.1		
POTASSIUM			0.40		
CHLORIDE	4		3		
SULFATE	4		4		
TN : TP	39		26		
CALCITE SATURATION INDEX			2.3		

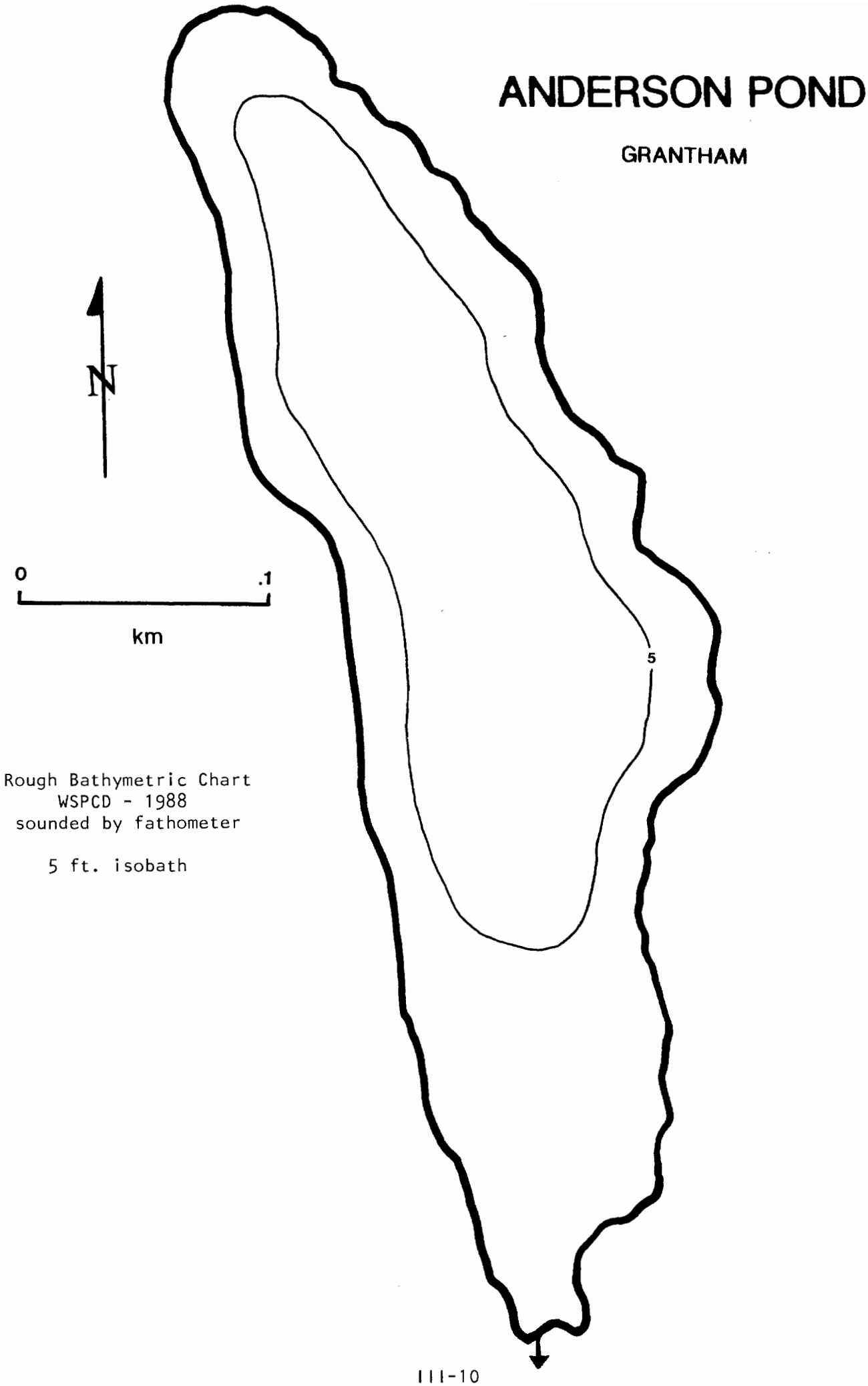
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1988

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	5	3	3	11	Eutro.

COMMENTS:

1. Anderson Pond is located within the Eastman Pond development. There is no public access.
2. Tea colored water; phosphorus and algae above desirable levels.
3. No whole-water plankton sample analyzed.



Rough Bathymetric Chart
WSPCD - 1988
sounded by fathometer

5 ft. isobath

FIELD DATA SHEET

LAKE: ANDERSON POND
DATE: 08/17/88

TOWN: GRANTHAM
WEATHER: CLEAR, HOT,& SUNNY

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	25.0	8.4	101 %
	1.0	24.0	8.3	98 %
	1.5	23.5	8.2	95 %

SECCHI DISK (m): 1.0

BOTTOM DEPTH (m): 2.0

TIME: 1130

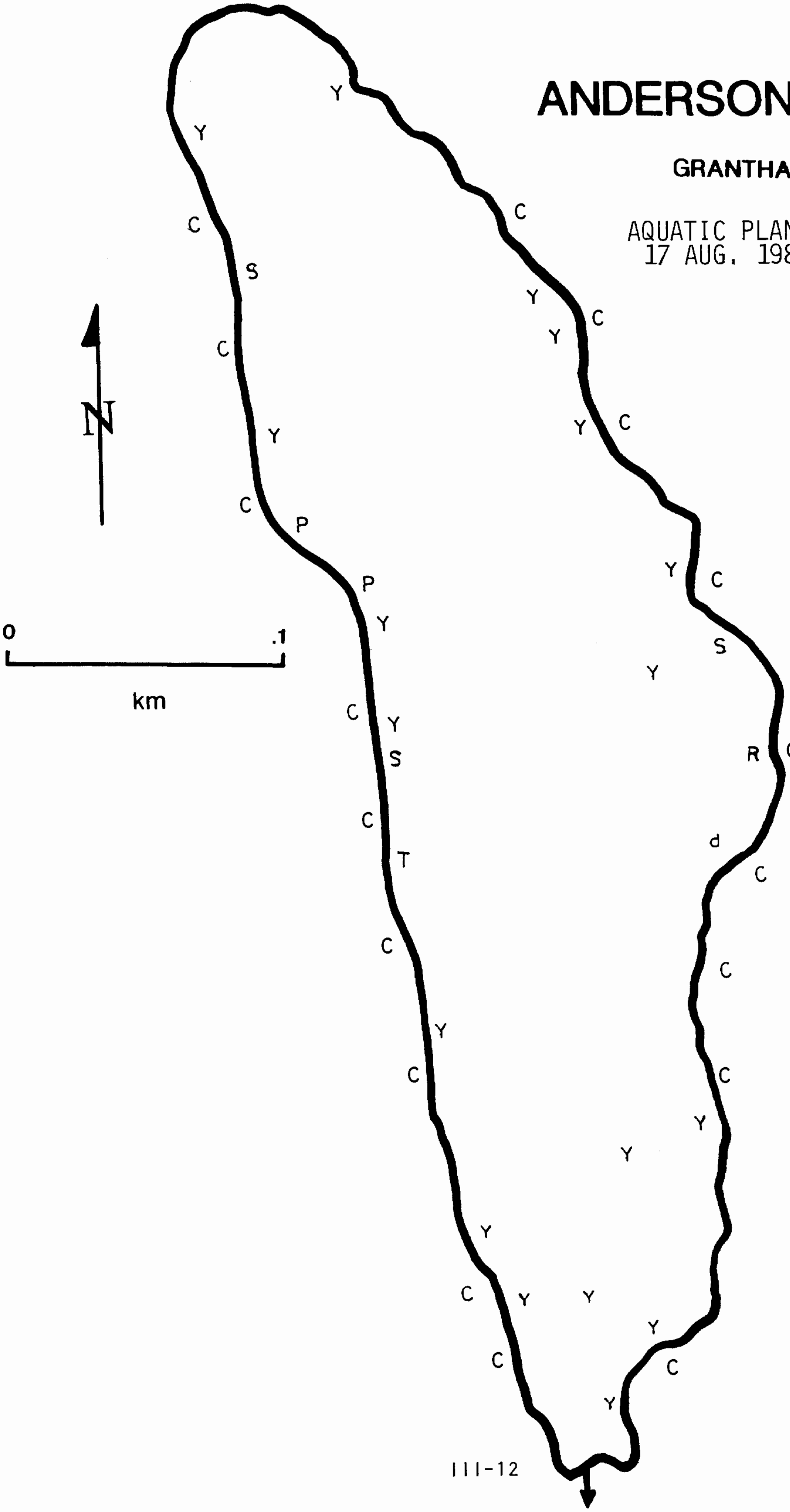
COMMENTS:

*Dissolved oxygen values are in mg/L

ANDERSON POND

GRANTHAM

AQUATIC PLANTS
17 AUG. 1988



AQUATIC PLANT SURVEY

LAKE: ANDERSON POND TOWN: GRANTHAM DATE: 08/17/88

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
P	Pontederia cordata	Pickerelweed	Common
Y	Nuphar	Yellow water lily	Scattered
T	Typha	Cattail	Sparse
S	Sparganium	Bur reed	Sparse
d	Dulichium arundinaceum	Three-way sedge	Sparse
R	Sarracenia purpurea	Pitcher-plant	Sparse
C	Chamaedaphne calyculata	Leatherleaf	Common

OVERALL ABUNDANCE: Common

GENERAL OBSERVATIONS: