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

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	TANNERY POND	Lake Area (ha):	6.47
Town:	WILMOT	Maximum depth (m):	3.0
County:	Merrimack	Mean depth (m):	1.0
River Basin:	Merrimack	Volume (m^3):	67000
Latitude:	43°25'00" N	Relative depth:	1.1
Longitude:	71°54'05" W	Shore configuration:	2.88
Elevation (ft):	670	Areal water load (m/yr):	321.0
Shore length (m):	2600	Flushing rate (yr^{-1}):	310.0
Watershed area (ha):	4193.5	P retention coeff.:	0.03
% watershed ponded:	6.2	Lake type:	artificial

BIOLOGICAL:	28 December 1989	3 August 1989
DOM. PHYTOPLANKTON (% TOTAL) #1	PERIDINIUM 25%	DINOBRYON 75%
#2	TABELLARIA 20%	
#3	DINOBRYON 15%	
PHYTOPLANKTON ABUNDANCE (cells/mL)		2050.0
CHLOROPHYLL-A (µg/L)		8.50
DOM. ZOOPLANKTON (% TOTAL) #1	SYNCHAETA 59%	KERATELLA 22%
#2	KERATELLA 32%	SYNCHAETA 21%
#3	POLYARTHRA 9%	
ROTIFERS/LITER	22	76
MICROCRUSTACEA/LITER	0	50
ZOOPLANKTON ABUNDANCE (#/L)	22	126
VASCULAR PLANT ABUNDANCE		Sparse
SECCHI DISK TRANSPARENCY (m)		2.2
BOTTOM DISSOLVED OXYGEN (mg/L)	14.2	1.8
BACTERIA (fecal col., #/100 ml) #1		
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

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

CHEMICAL:

Lake: TANNERY POND
Town: WILMOT

	28 December 1989		3 August 1989		
DEPTH (m)	1.0	1.5	1.0		2.0
pH (units)	6.7		6.8		6.6
A.N.C. (Alkalinity)	6.4		6.8		7.2
NITRATE NITROGEN			< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN			0.31		0.59
TOTAL PHOSPHORUS	0.006	0.003	0.016		0.019
CONDUCTIVITY (µ mhos/cm)	58.1	59.0	58.0		56.6
APPARENT COLOR (cpu)	10	11	36		42
MAGNESIUM			0.51		
CALCIUM			4.0		
SODIUM			6.0		
POTASSIUM			0.80		
CHLORIDE			8		8
SULFATE			4		4
TN : TP			19		31
CALCITE SATURATION INDEX			3.1		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1989

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	3	0	2	5	Meso.

COMMENTS:

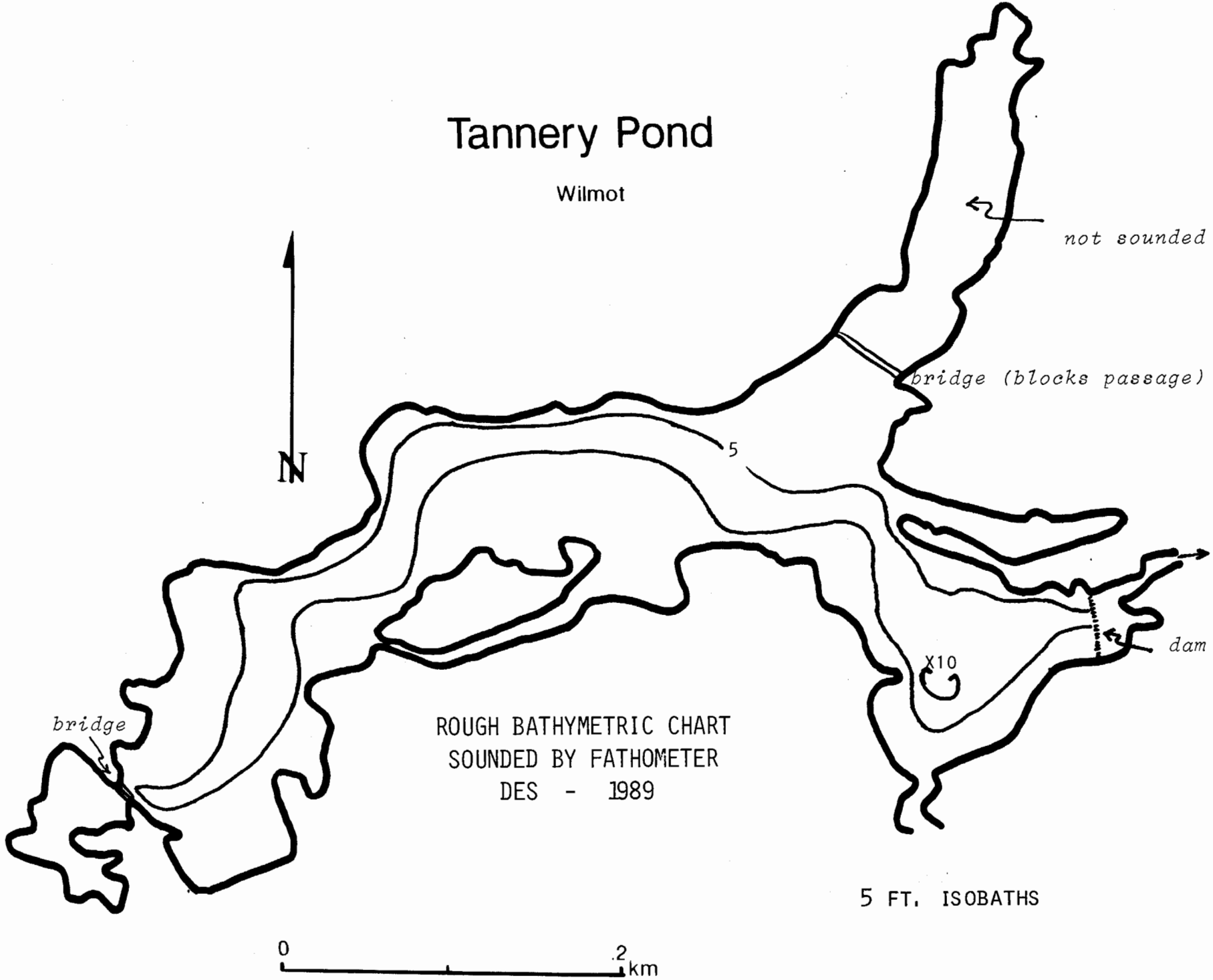
1. This pond is an artificial impoundment on the outlet stream from Pleasant Lake. It is located just downstream from Chase Pond, another impoundment on the same stream.

2. The dam was reportedly modified and the water level raised in recent years. The outline map of the pond is rough at best.

3. Dominant genera of whole-water phytoplankton were tiny green flagellates (20%), Tetraëdron (15%), and Chlamydomonas (10%).

Tannery Pond

Wilmot



FIELD DATA SHEET

LAKE: TANNERY POND TOWN: WILMOT
DATE: 08/03/89 WEATHER: PARTLY SUNNY

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	25.0	7.7	92 %
	1.0	24.0	7.8	91 %
	2.0	23.0	4.7	54 %
	2.5	22.0	1.8	20 %

SECCHI DISK (m): 2.2 COMMENTS:

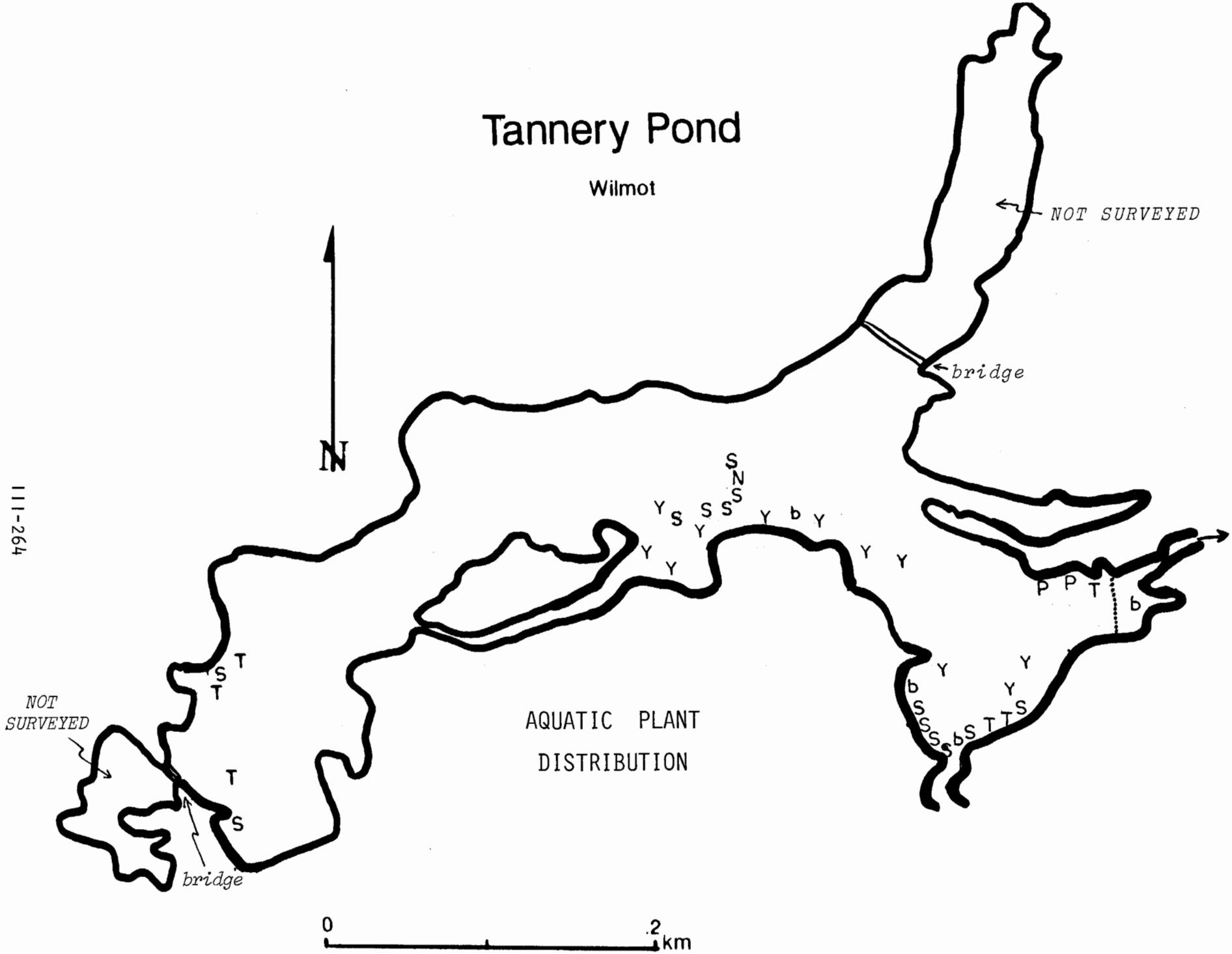
BOTTOM DEPTH (m): 2.6

TIME: 1205

*Dissolved oxygen values are in mg/L

Tannery Pond

Wilmot



AQUATIC PLANT SURVEY

LAKE: TANNERY POND TOWN: WILMOT DATE: 08/03/89

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
d	Dulichium arundinaceum	Three-way sedge	Sparse
b	Scirpus	Bulrush	Sparse
Y	Nuphar	Yellow water lily	Scattered
T	Typha	Cattail	Sparse
S	Sparganium	Bur reed	Scattered
N	Nymphaea	White water lily	Sparse

OVERALL ABUNDANCE: Sparse

GENERAL OBSERVATIONS: