DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	NAY POND	Lake Area (ha):	22.50
Town:	MILAN	Maximum depth (m):	3.0
County:	Coos	Mean depth (m):	1.5
River Basin:	Connecticut	Volume (m^3):	338000
Latitude:	44°34'13" N	Relative depth:	0.6
Longitude:	71°17'01" W	Shore configuration:	1.13
Elevation (ft):	1055	Areal water load (m/yr):	6.72
Shore length (m):	1900	Flushing rate (yr^{-1}):	4.50
Watershed area (ha):	273.0	P retention coeff.:	0.61
% watershed ponded:	0.0	Lake type:	natural

BIOLOGICAL:		28 January 2002	26 July 2001
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 65%	TABELLARIA 40%
	#2	ASTERIONELLA 35%	DINOBRYON 25%
	#3		MICROCYSTIS 15%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			2.89
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 42%	CALANOID COPEPOD 28%
	#2	POLYARTHRA 42%	ASPLANCHNA 18%
	#3		VORTICELLA 18%
ROTIFERS/LITER		99	93
MICROCRUSTACEA/LITER		5	149
ZOOPLANKTON ABUNDANCE (#/L)		119	317
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			2.7 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		12.6	7.6
BACTERIA (E. coli, #/100 ml)	#1		30
	#2		< 10
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

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

CHEMICAL:

Lake: NAY POND
Town: MILAN

	28 January 2002		26 July 2001		
DEPTH (m)	1.5		1.5		
pH (units)	6.8		6.9		
A.N.C. (Alkalinity)	6.6		7.5		
NITRATE NITROGEN	0.07		< 0.05		
TOTAL KJELDAHL NITROGEN	0.30		0.40		
TOTAL PHOSPHORUS	0.005		0.012		
CONDUCTIVITY (µmhos/cm)	180.2		158.3		
APPARENT COLOR (cpu)	14		18		
MAGNESIUM			1.18		
CALCIUM			5.4		
SODIUM			20.8		
POTASSIUM			0.98		
CHLORIDE	46		39		
SULFATE	8		5		
TN : TP	74		33		
CALCITE SATURATION INDEX			2.8		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2001

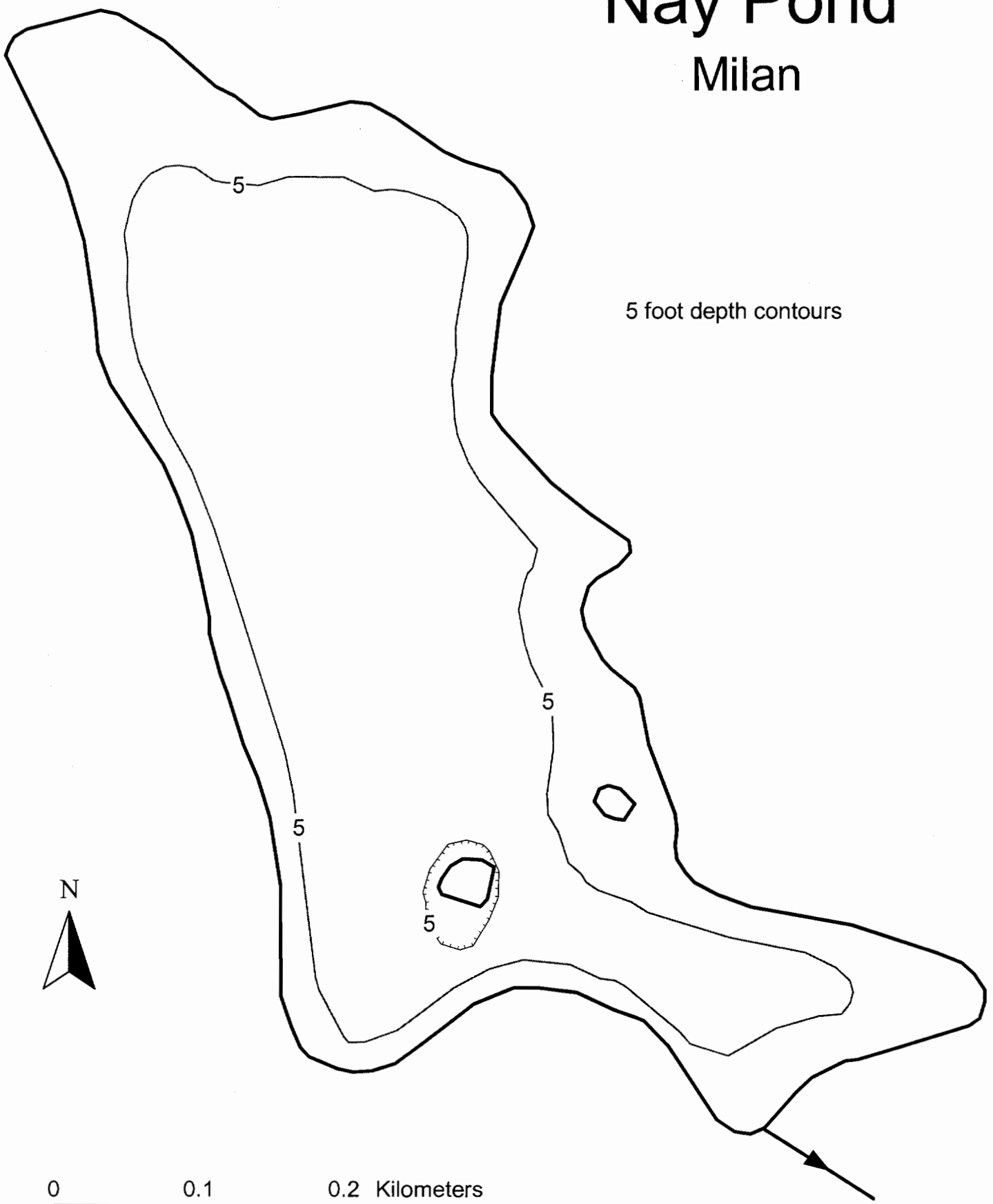
D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	2	1	0	3	Oligo.

COMMENTS:

1. Previously surveyed in 1981.
2. A good-sized improved boat launch site owned by NH Fish & Game was present.
3. Moderately developed with about 20 houses and two new large homes under construction.
4. 14 different genera of zooplankton were observed in the summer sample.
5. Elevated sodium, chloride and conductivity levels suggest some road-salt runoff.

Nay Pond

Milan



FIELD DATA SHEET

LAKE: NAY POND
DATE: 07/26/2001

TOWN: MILAN
WEATHER: Mostly sunny; windy & cool

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	24.9	7.5	90 %
	1.0	24.9	7.5	90 %
	2.0	24.8	7.7	92 %

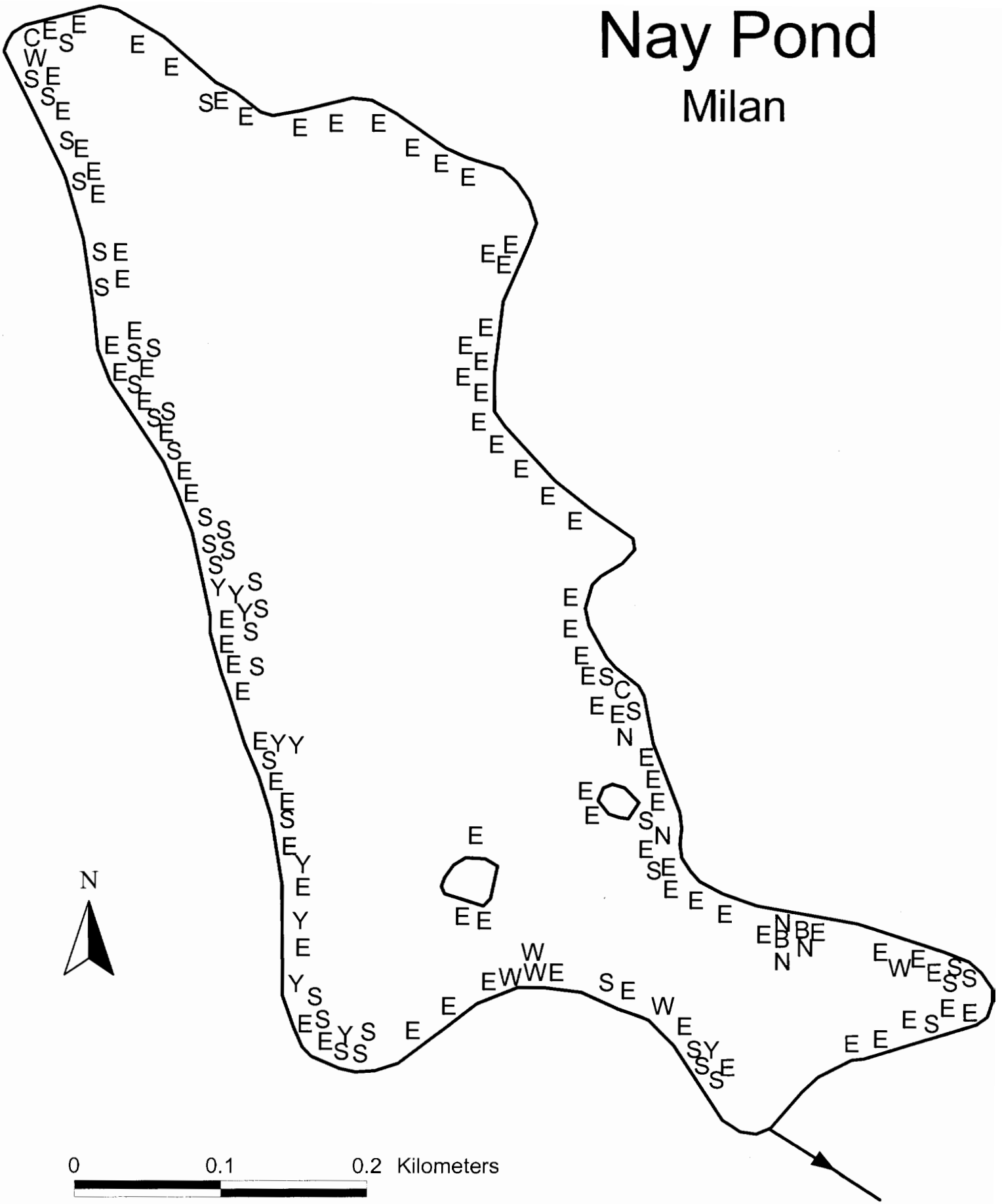
SECCHI DISK (m): 2.7 VOB

COMMENTS:

BOTTOM DEPTH (m): 2.7

TIME: 1130

*Dissolved oxygen values are in mg/L


Nay Pond
Milan
N
0
0.1
0.2 Kilometers

AQUATIC PLANT SURVEY

LAKE: NAY POND TOWN: MILAN DATE: 07/26/2001

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
S	Sparganium	Bur reed	Scattered
E	Eriocaulon septangulare	Pipewort	Scattered
W	Potamogeton	Pondweed	Sparse
C	Cyperaceae	Non-flowering sedge	Sparse
N	Nymphaea	White water lily	Sparse
B	Brasenia schreberi	Water shield	Sparse
Y	Nuphar	Yellow water lily	Sparse

OVERALL ABUNDANCE: Scattered

GENERAL OBSERVATIONS: