DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	DUBLIN POND	Lake Area (ha):	96.60
Town:	DUBLIN	Maximum depth (m):	31.1
County:	Cheshire	Mean depth (m):	10.1
River Basin:	Connecticut	Volume (m^3):	9798500
Latitude:	42°54'23" N	Relative depth:	2.8
Longitude:	72°05'02" W	Shore configuration:	1.29
Elevation (ft):	1479	Areal water load (m/yr):	1.68
Shore length (m):	4500	Flushing rate (yr^{-1}):	0.20
Watershed area (ha):	303.7	P retention coeff.:	0.84
% watershed ponded:	0.0	Lake type:	natural w/dam

BIOLOGICAL:		19 February 2002	10 July 2001
DOM. PHYTOPLANKTON (% TOTAL)	#1	MELOSIRA 65%	ASTERIONELLA 70%
	#2	TABELLARIA 9%	TABELLARIA 25%
	#3	DINOBRYON 7%	
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			1.26
DOM. ZOOPLANKTON (% TOTAL)	#1	KELLICOTTIA 40%	POLYARTHRA 25%
	#2	(SPARSE - NO DOMINANT)	DIFFLUGIA 13%
	#3		VORTICELLA 12%
ROTIFERS/LITER		9	47
MICROCRUSTACEA/LITER		1	28
ZOOPLANKTON ABUNDANCE (#/L)		10	112
VASCULAR PLANT ABUNDANCE			Sparse
SECCHI DISK TRANSPARENCY (m)			7.1
BOTTOM DISSOLVED OXYGEN (mg/L)		5.7	3.4
BACTERIA (E. coli, #/100 ml)	#1		< 10
	#2		5
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 8.8
Hypolimnion volume (m^3) : 2473500
Anoxic volume (m^3) : None

CHEMICAL:

Lake: DUBLIN POND
Town: DUBLIN

	19 February 2002		10 July 2001		
DEPTH (m)	9.0	18.0	4.0	11.0	24.0
pH (units)	6.9	6.6		6.3	6.1
A.N.C. (Alkalinity)	4.1	4.1		3.3	3.4
NITRATE NITROGEN	< 0.05	< 0.05			< 0.05
TOTAL KJELDAHL NITROGEN	< 0.10	0.20			
TOTAL PHOSPHORUS	0.013	0.005	<0.005	0.005	0.006
CONDUCTIVITY (µmhos/cm)	91.2	91.8		88.7	91.0
APPARENT COLOR (cpu)	7	8	< 5	7	10
MAGNESIUM			0.68		
CALCIUM			2.5		
SODIUM			12.2		
POTASSIUM			0.67		
CHLORIDE	21	21			21
SULFATE	4	4			5
TN : TP		40			
CALCITE SATURATION INDEX					

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2001

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
2	0	0	0	2	Oligo.

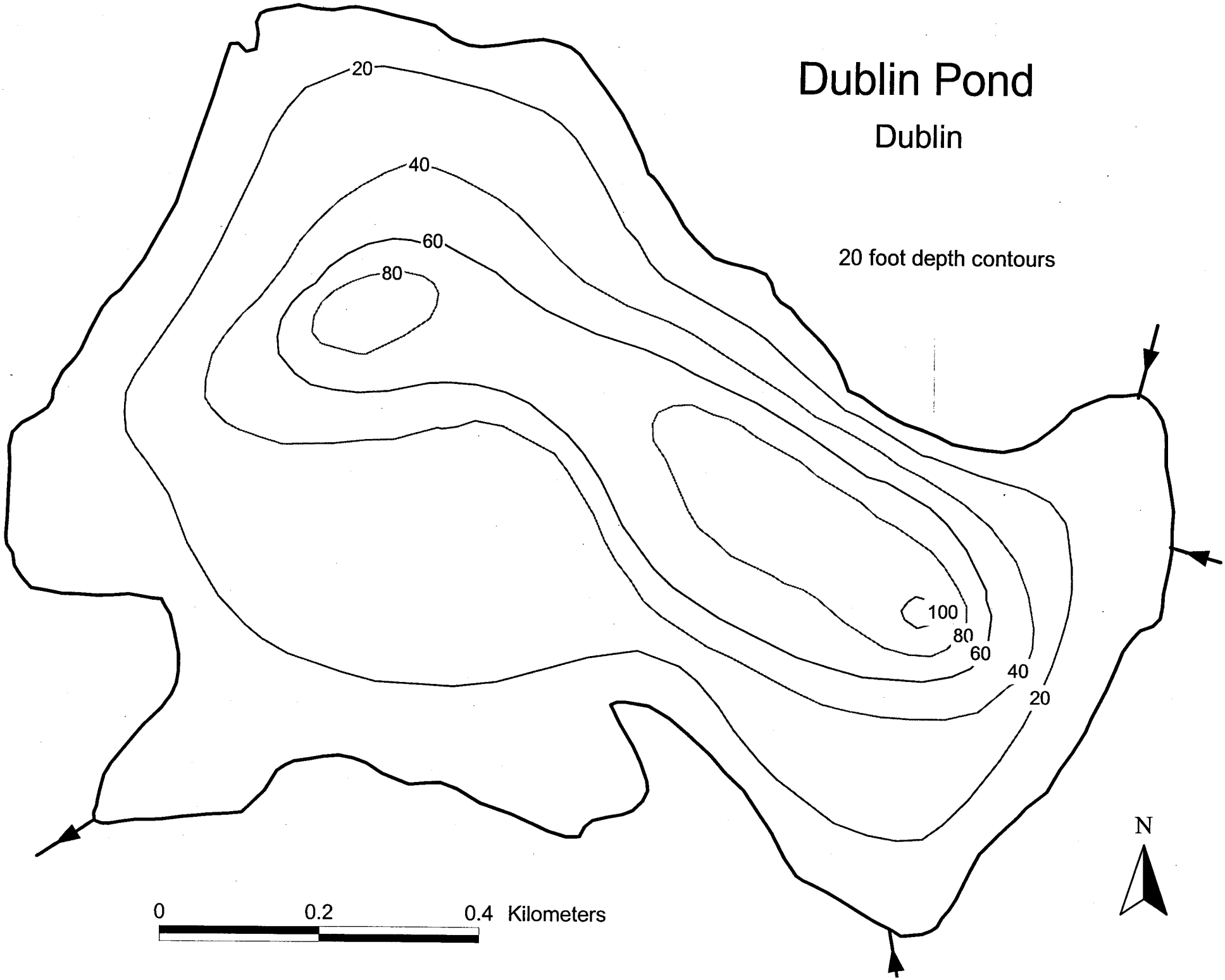
COMMENTS:

1. Previously surveyed in 1979 and 1991.
2. The outlet of Dublin Pond has been sampled spring and fall since 1983 as part of the acid outlet pond trend study
3. Rough launch site into shallow water with little parking available.
4. 10 mph speed limit except from 4:00 pm to ½ hour after sunset; skicraft are banned.
5. Winter bottom dissolved oxygen was sufficient but not as high as in the past or as high as expected in a clear, oligotrophic pond.

Dublin Pond

Dublin

20 foot depth contours



FIELD DATA SHEET

LAKE: DUBLIN POND
DATE: 07/10/2001

TOWN: DUBLIN
WEATHER: Breezy, sunny & warm

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	21.4	8.9	101 %
	1.0	21.4	8.3	94 %
	2.0	21.3	7.4	84 %
	4.0	21.2	7.4	83 %
	6.0	20.3	7.6	84 %
	7.0	19.9	7.9	86 %
	8.0	14.1	10.4	101 %
	9.0	12.2	11.4	106 %
	10.0	12.0	10.7	100 %
	11.0	9.1	11.4	99 %
	12.0	7.1	11.5	95 %
	13.0	6.3	11.5	93 %
	14.0	5.9	10.6	85 %
	16.0	5.5	9.6	76 %
	18.0	5.2	8.3	65 %
	20.0	5.0	8.0	63 %
	21.0	5.0	7.7	60 %
	22.0	5.0	5.3	42 %
	24.0	4.9	4.2	33 %
	26.0	4.9	3.7	29 %
	28.0	4.9	3.5	27 %
	29.0	4.9	3.3	26 %

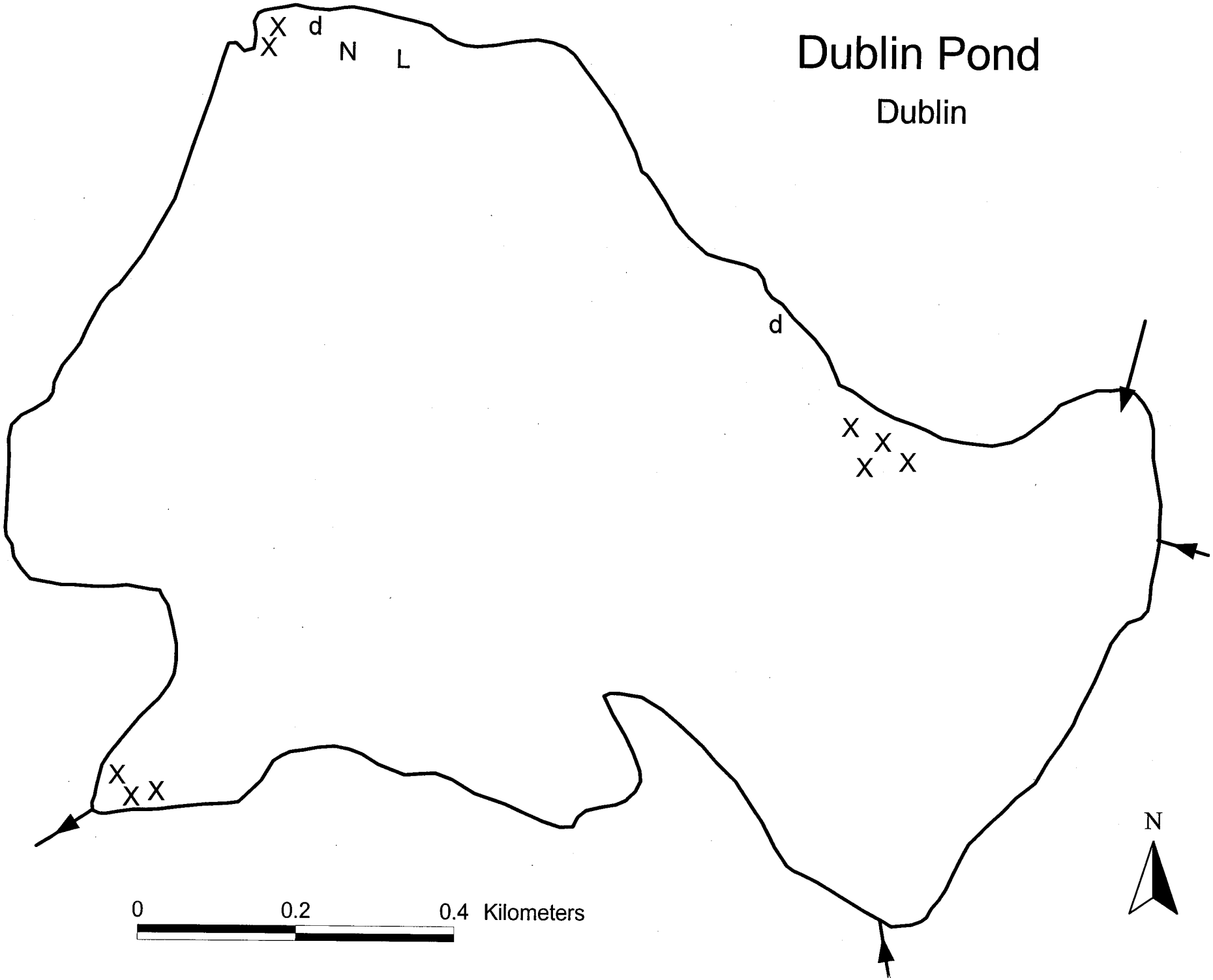
SECCHI DISK (m): 7.1
BOTTOM DEPTH (m): 30.5
TIME: 1152

COMMENTS:

*Dissolved oxygen values are in mg/L

Dublin Pond

Dublin



AQUATIC PLANT SURVEY

LAKE: DUBLIN POND TOWN: DUBLIN DATE: 07/10/2001

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
X		Sterile thread-like leaf	Sparse
d	Dulichium arundinaceum	Three-way sedge	Sparse
N	Nymphaea	White water lily	Sparse
L	Lobelia dortmanna	Water lobelia	Sparse

OVERALL ABUNDANCE: Sparse

GENERAL OBSERVATIONS:

1. Exotic milfoil was not observed during this survey but was discovered later in 2001. Its distribution within the pond has been kept in check through hand pulling.