
Appendix H

Water Quality Data: Lake Calhoun, Lake of the Isles, Cedar Lake

Source: Minnehaha Creek Watershed
District 1987 Hydrologic Data
Report, Minnehaha Creek
Watershed District

MINNEAPOLIS CITY LAKES - CALHOUN

DATE	5/20/87		7/21/87		9/25/87	
	surf	bott	surf	bott	surf	bott
DEPTH meters	--	23	--	23	--	23
SECCHI DISC meters	1.5	--	2.3	--	2.4	--
TEMPERATURE °C	17.5	6.0	25.5	6.0	17.0	7.0
DISSOLVED OXYGEN mg/l	10.2	0.8	8.2	0.2	8.3	0.2
CHLOROPHYLL <u>a</u> ug/l	10	--	1	--	10	--
TOTAL PHOSPHORUS mg/l	0.04	0.14	0.02	0.25	0.04	0.40
ORTHO PHOSPHORUS mg/l	0.02	0.10	0.01	0.22	0.01	0.38
AMMONIA NITROGEN mg/l	0.05	0.78	0.18	1.6	0.07	4.6
NITRATE NITROGEN mg/l	<0.02	0.06	<0.02	0.08	0.26	<0.02
NITRITE NITROGEN mg/l	0.01	0.02	0.01	0.04	<0.01	<0.01
CHLORIDE mg/l	83	82	80	80	74	82
pH	8.4	7.2	8.5	7.2	7.8	7.1
ALKALINITY mg/l	148	152	110	163	122	182
SPECIFIC CONDUCTANCE umhos/cm	600	600	432	486	460	655
IRON ppm	<0.05	<0.05	<0.05	<0.05	<0.05	0.05

LAKE CALHOUN

Depth	5/18/87		7/21/87		9/25/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	°C	mg/l	°C	mg/l	°C	mg/l
0	17.5	10.2	25.5	8.2	17.0	8.3
1	17.5	10.2	25.0	8.2	17.0	8.2
2	17.5	10.2	24.5	8.2	17.0	8.2
3	16.5	10.2	24.5	8.4	17.0	8.2
4	16.5	9.9	24.5	8.2	17.0	8.1
5	16.0	9.3	23.5	7.9	17.0	8.0
6	15.0	8.9	22.0	6.4	17.0	7.8
7	12.5	7.6	18.0	2.2	17.0	7.5
8	11.0	5.8	14.0	0.3	16.0	4.1
9	9.0	4.5	10.5	0.2	15.5	0.7
10	8.5	4.2	9.0	0.2	10.5	0.3
11	7.5	4.2	8.0	0.2	9.0	0.3
12	7.0	4.1	7.0	0.2	8.0	0.3
13	6.5	4.0	6.5	0.2	7.5	0.3
14	6.0	3.8	6.5	0.2	7.0	0.3
15	6.0	3.8	6.5	0.2	7.0	0.2
16	6.0	3.6	6.5	0.2	7.0	0.2
17	6.0	3.4	6.5	0.2	7.0	0.2
18	6.0	3.0	6.5	0.2	7.0	0.2
19	6.0	2.5	6.5	0.2	7.0	0.2
20	6.0	1.8	6.5	0.2	7.0	0.2
21	6.0	1.2	6.0	0.2	7.0	0.2
22	6.0	0.8	6.0	0.2	7.0	0.2
23	--	0.8	6.0	0.2	7.0	0.2

MINNEAPOLIS CITY LAKES - LAKE OF THE ISLES

DATE	5/20/87		7/21/87		9/25/87	
	surf	bott	surf	bott	surf	bott
DEPTH meters	--	10	--	10	--	10
SECCHI DISC meters	2.0	--	0.8	--	0.8	--
TEMPERATURE °C	19.0	6.0	27.5	7.0	17.0	8.5
DISSOLVED OXYGEN mg/l	9.4	0.2	10.4	0.2	9.4	0.3
CHLOROPHYLL <u>a</u> ug/l	12	--	15	--	33	--
TOTAL PHOSPHORUS mg/l	0.06	0.05	0.04	0.17	0.06	0.24
ORTHO PHOSPHORUS mg/l	0.02	0.02	0.01	0.11	0.02	0.20
AMMONIA NITROGEN mg/l	0.06	0.50	0.12	2.6	0.03	3.8
NITRATE NITROGEN mg/l	<0.02	<0.02	0.03	0.02	<0.02	<0.02
NITRITE NITROGEN mg/l	0.02	0.01	0.01	0.02	<0.01	<0.01
CHLORIDE mg/l	83	79	73	78	62	76
pH	7.9	6.9	8.7	7.1	8.1	7.0
ALKALINITY mg/l	135	148	108	182	114	195
SPECIFIC CONDUCTANCE umhos/cm	550	500	356	464	390	655
IRON ppm	<0.05	<0.05	<0.05	<0.05	<0.05	0.10

DIAMOND LAKE

Depth	5/18/87		7/21/87		9/24/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	Temp	D.O.	Temp	D.O.	Temp	D.O.
Meters	°C	mg/l	°C	mg/l	°C	mg/l
0	16.5	7.7	24.0	4.4	17.0	11.0
1	16.5	7.5	23.5	2.2	15.5	8.9
2	--	--	--	--	15.5	4.1

HIAWATHA LAKE

Depth	5/18/87		7/21/87		9/24/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	Temp	D.O.	Temp	D.O.	Temp	D.O.
Meters	°C	mg/l	°C	mg/l	°C	mg/l
0	18.5	7.3	25.0	9.9	17.0	8.7
1	18.5	7.3	25.0	9.8	16.5	8.4
2	18.5	7.3	25.0	8.8	16.5	7.7
3	18.0	3.8	24.0	4.0	16.5	7.2
4	15.5	1.6	22.5	0.6	16.0	6.2
5	14.0	0.2	19.5	0.3	16.0	4.1
6	10.0	0.2	15.5	0.2	16.0	3.3
7	--	--	15.0	0.2	16.0	2.5

LAKE OF THE ISLES

Depth	5/18/87		7/21/87		9/24/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	Temp	D.O.	Temp	D.O.	Temp	D.O.
Meters	°C	mg/l	°C	mg/l	°C	mg/l
0	19.0	9.4	27.5	10.4	17.0	9.4
1	18.5	9.2	27.0	10.4	17.0	9.4
2	18.5	9.2	25.0	6.9	16.5	9.2
3	18.0	7.8	24.0	5.2	16.5	9.0
4	17.5	5.8	22.0	2.1	16.5	6.8
5	13.5	0.5	19.0	0.3	16.0	4.9
6	9.0	0.5	13.0	0.3	16.0	3.7
7	7.5	0.3	10.0	0.2	14.0	0.3
8	6.5	0.2	8.0	0.2	9.0	0.3
9	6.0	0.2	7.0	0.2	9.0	0.3
10	6.0	0.2	--	--	8.5	0.3

BROWNIE LAKE

Depth	5/18/87		7/21/87		9/25/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	°C	mg/l	°C	mg/l	°C	mg/l
0	18.0	9.2	27.5	9.6	17.0	9.3
1	17.5	9.1	25.5	6.9	17.0	9.2
2	16.5	7.6	25.0	5.6	17.0	9.2
3	13.0	1.8	24.5	5.4	17.0	9.2
4	9.0	0.4	24.0	4.2	16.5	9.1
5	6.0	0.3	18.0	0.2	16.5	8.8
6	5.0	0.3	8.5	0.2	15.5	8.5
7	4.5	0.3	6.0	0.2	9.5	7.3
8	4.5	0.2	5.5	0.2	6.5	3.3
9	5.0	0.2	5.5	0.2	6.0	0.4
10	5.5	0.2	5.5	0.2	6.0	0.4
11	5.5	0.2	5.5	0.2	6.0	0.4
12	5.5	0.2	5.5	0.2	6.0	0.4
13	5.5	0.2	5.5	0.2	6.0	0.4

CEDAR LAKE

Depth	5/18/87		7/21/87		9/25/87	
	Temp	D.O.	Temp	D.O.	Temp	D.O.
in	°C	mg/l	°C	mg/l	°C	mg/l
0	18.0	9.3	28.0	9.4	17.0	8.8
1	18.0	9.3	26.0	9.3	17.0	8.6
2	18.0	9.3	25.5	9.3	17.0	8.2
3	17.5	9.3	25.0	8.1	17.0	8.1
4	14.0	8.9	24.0	6.6	17.0	8.1
5	10.0	8.5	22.0	4.2	17.0	8.0
6	8.0	4.2	17.5	0.5	17.0	7.9
7	7.0	2.2	11.5	0.2	16.0	7.2
8	6.5	1.8	8.5	0.2	12.0	0.3
9	6.0	1.2	7.0	0.2	8.5	0.3
10	5.5	0.6	6.5	0.2	7.5	0.3
11	5.0	0.4	6.0	0.2	7.0	0.3
12	5.0	0.3	5.5	0.2	6.5	0.3
13	5.0	0.3	5.5	0.2	6.0	0.2
14	5.0	0.2	5.5	0.2	6.0	0.2
15	5.0	0.2	5.5	0.2	6.0	0.2

MINNEAPOLIS CITY LAKES - CEDAR

DATE	5/18/87		7/21/87		9/25/87	
	surf	bott	surf	bott	surf	bott
DEPTH meters	--	15	--	15	--	15
SECCHI DISC meters	2.5	--	1.2	--	1.3	--
TEMPERATURE °C	18.0	5.0	28.0	5.5	17.0	6.0
DISSOLVED OXYGEN mg/l	9.3	0.2	9.4	0.2	8.8	0.2
CHLOROPHYLL <u>a</u> ug/l	11	--	10	--	22	--
TOTAL PHOSPHORUS mg/l	0.06	0.23	0.06	0.39	0.04	0.55
ORTHO PHOSPHORUS mg/l	0.04	0.19	0.02	0.35	0.02	0.52
AMMONIA NITROGEN mg/l	0.15	1.2	0.09	2.8	0.02	4.1
NITRATE NITROGEN mg/l	<0.02	<0.02	<0.02	0.02	0.02	<0.02
NITRITE NITROGEN mg/l	0.01	0.02	<0.02	0.02	<0.01	<0.01
CHLORIDE mg/l	81	73	65	70	60	75
pH	8.4	7.2	8.6	7.2	7.9	7.1
ALKALINITY mg/l	161	169	137	178	138	208
SPECIFIC CONDUCTANCE umhos/cm	345	350	367	432	420	600
IRON ppm	<0.05	<0.05	<0.05	<0.05	<0.05	0.05