

WATER CHEMISTRY

STATION

54 McKenzie Lake

Date	Secchi disc m	Chlorophyll a ug/l	Colour hazen	Alkalinity mg/l	Hardness mg/l	TDS mg/l	pH	Total P ug/l	Total N ug/l	Iron mg/l	Silica mg/l
1978											
Jun. 19	4.0	1.3				29		18	430		
Jul. 4	5.0	1.5				29		6	280		
Jul. 7	4.5	1.8				31		2	250		
Jul. 10	3.5	2.5				28		4	410		
**Jul. 17	4.8	5.1	34	15	14	29	4.7	--	--	0.10	
			30	6.0	13	29	5.9	6	410	0.15	
Aug. 2	5.5	1.0				31		2	730		
Aug. 6	5.2	1.4				30		4	250		
Aug. 16	4.2	2.5						4	132		
Aug. 23	4.5	2.7	11	7.0	14	31	6.6	6	210	0.05	
			13	6.0	15	32	6.4	6	210	0.10	
Sept. 27	4.0	1.3						4	350		
Oct. 27	4.2	1.0	14	7.0	12	30	6.6	6	430	L .05	
			11	6.0	11	30	5.9	6	510	0.05	
MEAN	4.5	2.0	20	6.6	13	30	5.2	6	347	L 0.07	
			18	6	13	30	6.0	6	377	0.10	

LAKE SURVEY SUMMARY SHEET

1978

LOCATION:

McKenzie
gazeteer name
District of Nipissing
county

McKenzie
topographic map name
Sabine
township

McKenzie
local name
Madawaska
watershed

WATERSHED:

Area 68.9 km² description Precambrian forested

LAKE:

Area 3.12 km²; depth max. 34 m; depth mean 9.0 m;
vol. 28.1 x 10⁶ m³; length 4.8 km; width 0.65 km;
elev. _____ m; shoreline 12.88 km; littoral zone _____ %.

HYDROLOGY:

Estimated annual inflow 23.49 x 10⁶ m³; areal water load 7.53 m;
water exchange rate 0.8 yr.⁻¹; retention coeff. 0.64;
response time 0.9 to 1.5 yr.

ESTIMATED NUTRIENT SUPPLY (P):

Upstream lakes 49 Kg; land runoff 281 Kg; atmosphere ¹⁵⁶234 Kg;
shoreline development 39 Kg; waste discharges 0 Kg.

SHORELINE DEVELOPMENT:

Cottages 53; resorts 1 (6); permanent residences 0;
vacant lots _____; crown land 50 %; patent land 50 %.

BOTTOM FAUNA:

	<u>Stn. 54</u>	<u>Stn.</u>	<u>Stn.</u>	<u>Stn.</u>
total no./m ² :	92			
no. of taxa:	4			
diversity index:	1.81			
community composition:	Chaoborus, Tanypodinae, Hydracarina, Oligochaet			