

ENVIRONMENTAL FEATURES OF WALLOON LAKE
AND ITS WATERSHED
(EMMET AND CHARLEVOIX COUNTIES, MICHIGAN)

WITH SPECIAL REFERENCE TO NUTRIENT MANAGEMENT¹

Technical Report No. 6

by

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This report is technical in content and has not been written for a general, non-scientific audience. It will be most valuable for natural resource management officials and those with a background in science, particularly limnology. However, the management section contains information pertinent to lake property owners, and has therefore been written as non-technically as possible. Readers who encounter unfamiliar terminology in this report can find definitions and background information in Inland Lake Protection for Northern Michigan (1975) and The Walloon Lake Profile (1976), available from The Walloon Lake Association or The University of Michigan Biological Station.

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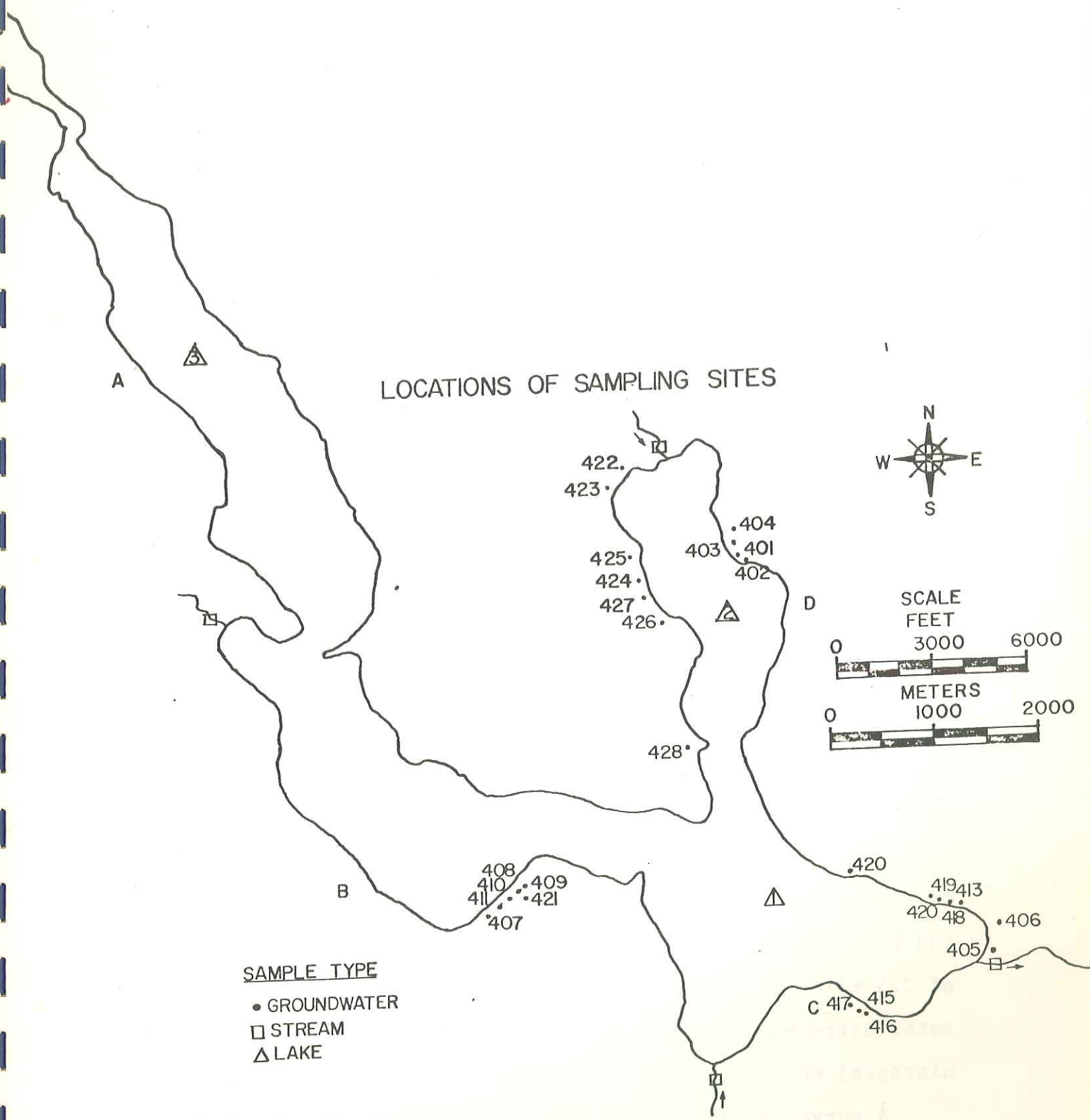


Fig. 3. Location of Sampling Stations for Water Chemistry, summer, 1977. Basins are indicated by letter as on Figure 2.

APPENDIX II

Selected Data on the Soils and
Water of Walloon Lake and its Watershed

A. Surface Water Nutrient Chemistry

1977

B. Results of Groundwater Sampling

1977

C. Flow Rates of the Bear River

1976 - 1977

from the Septic
Walloon Lake

A.

Surface Water
Nutrient Chemistry
Summer, 1977

	Date	T.P. (ppb)	NO ₃ -N (ppb)	NH ₃ -N (ppb)	Cl (ppm)	Chl α (ppb)
Bear Creek	4-17	1.00	100.0	38.0	2.80	-
	5-5	7.20	76.0	19.0	3.90	-
	6-10	6.00	20.0	10.0	2.50	-
	7-7	9.00	7.50	12.0	3.80	-
	7-30	7.80	3.00	6.0	3.30	-
South Arm Creek	7-7	32.00	13.0	16.0	3.10	-
	7-30	21.00	42.0	27.0	4.20	-
North Arm Creek	5-5	6.60	N.D.	8.6	3.40	-
	7-7	43.00	43.0	153.0	12.00	-
Skornia Creek	7-7	27.00	40.0	17.0	3.60	-
West Basin (Center)	6-27	5.00	40.0	10.0	3.50	1.51
	7-30	6.00	16.0	6.0	3.00	2.12
North Basin (Center)	6-27	6.00	5.0	10.0	3.50	2.39
	7-30	7.80	4.50	18.0	3.60	2.40
Central Basin (Center)	6-27	7.50	15.0	10.0	3.50	2.53