



Ministry of the  
Environment

West Central  
Region

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140 Centennial Parkway North  
Stoney Creek, Ontario L8E 3H2  
Telephone: (416) 561-7410

July 26, 1978

Mr. J. G. Hutchison  
293 Longfellow Drive  
Waterloo, Ontario  
N2L 2S2

Dear Mr. Hutchison:

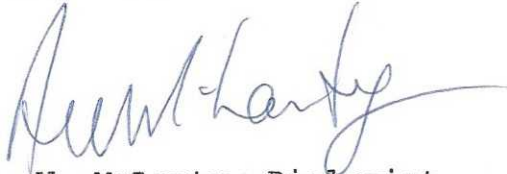
Your June 9th letter requesting information on the Self-Help Program has been forwarded to this office for response, as we are responsible for the Waterloo area. There has not been a Self-Help Program operating on Sunfish, although Paradise and Lakeside Park Lakes have been studied in the past. Presumably, you are interested in having such a program established at Sunfish Lake.

The Self-Help Program relates algae production (represented by the chlorophyll concentration) to water clarity (represented by Secchi depth), and the relationship is predictable assuming that only the suspended algae affect water clarity. In many cases, inorganic material such as soil particles can cause turbidity and reduce the clarity measured by Secchi depth in a manner in no way related to algae production. In this situation, the Secchi:chlorophyll relationship becomes invalid thus negating the benefits of the entire program. This is the case, for example, at Puslinch Lake where boat traffic stirs up the sediment to a considerable degree. I understand there is no motor boat traffic permitted on Sunfish Lake and so a Self-Help Program may be viable.

I have included an information package outlining the theory upon which the program is based and explaining the procedures involved in measurement of the Secchi depth and collection and shipment of chlorophyll samples. I have also enclosed a copy of a Self-Help Program report entitled "A Report on the Status of Paradise Lake, Wellesley Township, Waterloo County".

Ideally, the program should commence in the springtime, but there is no reason to wait until next spring. If you are interested in establishing a program this summer and can arrange to have the samples collected and shipped to our lab C.O.D., please feel free to contact me at your convenience. I will make arrangements then to visit Sunfish Lake and provide the necessary equipment.

Yours very truly,

A handwritten signature in blue ink, appearing to read "A. W. McLarty". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

A. W. McLarty, Biologist  
Water Resources Assessment  
Technical Support Section

Encl.

AWM/du

cc: A. Thachuk