The maintenance of a relatively pollution free Lake is a complex and continuing undertaking. In 1971 water quality studies were conducted and cottage sewage systems were examined. The water quality level was reasonably good but a large number of the sewage systems were unsatisfactory. Last summer most defective sewage disposal systems were improved and further work is expected this year.

We also instituted a limited water quality monitoring system. During the late summer of 1972 we received some very unsatisfactory pollution level reports from our water samples which indicated that the water in the Lake may have been deteriorating in spite of the remedial action that had been taken. A few tests can be unreliable and to obtain more complete information, Dr. Fred Green, Vice Chairman for Pollution Control, is instituting a water quality monitoring system for the entire Lake in cooperation with the Government of Ontario, that will be in effect early this year.

Sonar tests taken by the Ministry of Natural Resources to determine Lake depths show that the Lake at its deepest levels reaches 90 feet. However, at these depths the bottom is covered with muck, some of it 30 feet thick, and this presents pollution control problems that are best illustrated by the conditions that occurred on Lake Erie. For years, no one thought that the water in Lake Erie would become polluted, even though pollutants were being dumped into the Lake, and everyone knew it. What was happening was that the deep soft bottom, of what was a relatively shallow lake, was absorbing the pollutants and the water appeared to be relatively clean. When the bottom became saturated and the pollutants were no longer being absorbed, the water in the Lake suddenly became seriously polluted. We do not know if this will happen on Otty Lake but we do know that similar conditions exist, in a miniature form, so it is important for us to be careful.

We also know that the Lake has a limited water exchange compared to lakes that are joined to river systems, and we know that it does not have any oxygen below the twenty-five foot level except in the spring and fall turnovers. As a result the trout that were placed in the Lake during the past few years have not survived.

We have been informed by the Fisheries Branch of the Ministry of . Natural Resources that these conditions precede serious pollution in other forms, and that they have recommended against any further cottage building on Otty Lake. We are not alone, there are many other lakes in Lanark County that are in the same position.

All of the experts we have contacted agree that Otty Lake is overpopulated, and some estimate the overpopulation by as much as 100%. This is a major factor in water quality and environmental deterioration. It is illustrated by the fact that we have one cottage for each 3.9 acres of water surface, as compared to one cottage for each 14.5 acres of water surface on Rideau Lake. A lake can only handle a given number of sewage disposal systems before pollution levels begin to accelerate.

This is not good news but it illustrates the situation we are facing and for that matter the present state of many recreational lakes. We are going to control it and here are the steps that we have taken.

We have asked the various levels of government concerned with land use on Otty Lake to stop all further building on the Lake until we know more about the Lake's condition. At the same time we arranged a meeting with the local municipal representatives to outline our position and to ask for their cooperation. This meeting was held in Perth last January and discussions took place which we hope will have a beneficial effect. At the conclusion of the meeting the following recommendations and suggestions were established.

- 1. Immediate action be taken to prepare a long-range plan for environmental management on Otty Lake within the framework of Ontario's environmental management policy. This work to be complete by August 1, 1973.
- 2. The Otty Lake Pollution Control Committee is to work in close cooperation with the Tay Valley Area Planning Board and the municipal governments in the Otty Lake area.
- 3. Pending completion of the long-range plan, further shoreline building be suspended.
- 4. In future when cottages are sold, the owners should be required to produce sewage fitness certificates from the Medical Officer of Health, or other appropriate authority, to certify that the sewage systems are satisfactory.
- 5. Consideration be given to the establishment of properly supervised green belt areas, and the use of off-lake cottage developments as envisaged by the CORTS Committee.
- 6. All low lying land not suitable for green belts, or access corridors, be preserved as game and wildfowl sanctuaries, and under no circumstances should land of this type be reclaimed through land fill programmes.
- 7. Cottage development on small islands and on rocky sub-marginal land should be permanently stopped, and in those situations where the land has already been used, caution should be exercised in approving the use of septic tanks and pressurized water systems.
- 8. Immediate action should be taken to determine the optimum number of cottages and permanent homes. If the ideal number has been reached, further construction should stop. If it has been exceeded, a formula for cottage population control should be considered.
- 9. The Government of Ontario should establish regulations to control the gas and oil emissions from marine engines.
- 10. The general approach should be underlined by the importance of preserving the natural beauty of the Lake through proper planning and zoning.

The Chairman of the Committee presented these recommendations to the Provincial Secretary for Ontario, The Hon. A. L. Lawrence, on February 15, 1973, and he indicated his support. Arrangements for the long-range plan are now underway and we will keep you posted on future developments.

We are fortunate to have this opportunity to take positive action to save the Lake. We know that there are critics who feel that we are alarmists and that what we are doing is bad for tourism and the economy of Perth and the surrounding area. We understand this view, but it is better to be safe than sorry, and if we let the Lake go, and it dies, then there will be nothing left for any of us.

We don't know what the outcome of the study will be. It is unlikely that the Lake will have more shoreline cottages, and it is possible that some plan for future cottage population control will be needed. But we are going to get the facts, and when we do you will receive them along with our recommendations.

We hope that our elected representatives will act on these recommendations. If they fail to do so, then the cottagers will have to decide on what further action should be taken. We have followed the established procedures, and will continue to do so, but it may become necessary to look at the composition of local government, to determine whether the cottagers, who represent the majority of the taxpayers in these municipalities, should have a stronger voice in municipal management.

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Mr. Michael Quinn, Vice Chairman for Wildlife and Fishing, reports that 10,000 small mouth bass fingerlings will be put into the Lake this spring, and he reports that the fish biologists are now uncertain about ling removal. The ling are bottom feeders, and though they do eat other fish, they also clean up some of the pollutants that we are concerned about. I should point out that this is a recent view, and that the work undertaken in the past was based upon the best advice available at that time. The Committee is still awaiting advice from the Rideau Valley Conservation Authority on the preservation of the Great Blue Heronry.

Mr. David Code, Vice Chairman for Recreation, is preparing the sailing course that was announced in our last report, but it will now be extended to cover canoeing. Interested persons should get in touch with Mr. Code at 456 Hillcrest Avenue in Ottawa.

Five of the younger members of our Committee attended the Perth Conference and their presence was most helpful. We have asked them to attend the meetings of the Executive for the balance of the year, and we will propose a constitutional amendment to provide for a young members advisory group. They are the people who will manage the Committee in the near future and they should be given a chance to take part now.

The Secretary, Mrs. John Burns, is completing the work on cottage locations and she will ensure that all Area Counsellors have copies of the Constitution by early summer. It has been suggested that cottage locations be placed on a map and made available to members at a nominal cost. If you are interested you should contact her. For your information I am attaching an up-to-date list of your Executive Members and Area Counsellors. We would like to welcome Ron Wilson to the Executive. He is the new Area 8 Counsellor.

The 1973 fees are now due. Please make your \$2.00 cheque payable to the Otty Lake Pollution Control Committee and send it to Mrs. John Burns at 764 Lonsdale Road, Manor Park, Ottawa, Ontario, KIK OKI.

The majority of property owners support the Committee and this is appreciated. However, in the past we have sent these reports and related pollution control material to all property owners as a public service. This policy is under review and in future this material may not be sent to non-members. We understand that a few people may not wish to support the Committee but they cannot expect the membership to carry them.

We usually conclude these reports with comments about keeping the Lake clean. Slogans and words are easy to write but the time is approaching when they may have to be replaced by action. The only people who can save the Lake are the cottagers and their elected representatives, and unless the situation improves we may be coming to you for more active support.

In the meantime we strongly recommend that all septic tanks be examined before the beginning of the 1973 season, and pumped out if necessary. We have evidence that frequent septic tank cleaning may have a very beneficial effect on water quality levels in overpopulated lakes. Here is the procedure. Lift the opening on the settling compartment and measure the depth of sludge with a stick. The sludge in a properly functioning tank should not exceed the one third level. If it has reached two thirds the tank should be pumped at once. If it does not have any appreciable amount of sludge this may be normal for an infrequently used system, but it also may indicate a flooded system where the amount of water has been too great to allow the bacteria to work, with the result that the waste has become suspended and carried out into your tile field. This could be serious. If in doubt, check with the Perth Health Unit.

John Kimble Abbott, Chairman, Otty Lake Pollution Control Committee