

such waters available, why let them go all the way down to James Bay and then pump them back up. Everyone admits that it takes more power to pump the water back up than you get out of it letting it go downstream, and power would be one reason for letting it go down.

The proposal for a navigation canal to Hudson Bay to my mind is not a feasible proposal in that there certainly is no traffic at the present time that would warrant that; the navigation season is so short. We have Fort Churchill on Hudson Bay and it is open to navigation three to four months of the year. A canal through northern Ontario would freeze up early and stay frozen late. I do not foresee the economic necessity of a canal through there. Mr. Kierans boils his proposal down to the export, the selling of some of this water to the United States. This is a policy matter that the government will have to decide, whether it desires to sell water to the United States of whether it does not.

● (1.00 p.m.)

The CHAIRMAN: Mr. Hopkins, are you—?

Mr. HOPKINS: Mr. Chairman, I will not question farther because I know everyone wants to leave. We are well overdue now.

The CHAIRMAN: You have one further question. No. I see. Mr. McCutcheon.

Mr. McCUTCHEON: Thank you very much, Mr. Chairman. I would like to have one matter clarified for me. I get the impression that there is some little doubt about where these programs are instigated, whether the federal departments should be doing more or wait until the provinces do something. I am going to skirt that. It will probably come up at another time and I will only refer to places where the federal departments are involved. My first question, and it is a direct one, has to do with Lake Erie. I would like to direct it, I believe, to Dr. Prince. My question is simply this. Is the lower end of Lake Erie lost?

Mr. PRINCE: Mr. Chairman, I assume that the question refers to the loss to pollution.

Mr. McCUTCHEON: Right.

Mr. PRINCE: I think the lower end of Lake Erie is somewhat impaired; I do not think that it is in as bad shape as the western basin, the upper end. The question of it being lost for all time is one that we do not know the answer to. Certainly, some of the pollution constituents that have got into the lakes over the past decade of two are likely to remain with us for many years to come. The question of direct flushing out by flow is a complex matter of dilution, and if one could hope that in a year or two that it would take to drain Lake Erie at its present rate of flow, one could replace the water completely, I am afraid that this would not occur because of mixing and further dilution. Where the sediments are affected by certain constituents there, there appears to be some exchange between the gluten sediment mixture in the bottom and the waters in a rather complex manner that is not fully understood. If I were asked for my opinion regarding the lower basin of Lake Erie I would say that it is moderately badly impaired but is not comparable to the western basin to the west of Point Pelee.