

resources, the water resources of the prairie provinces. Under federal acts passed in 1912 and 1913, Canada passed to the control of British Columbia the administration of all unrecorded waters in the "railway belt" and of the Peace River bloc in British Columbia. By agreements which were explicitly confirmed by amendments to the British North America Act, Canada transferred the interest of the crown "in waters and water powers" within each of these provinces to the provinces.

South of the 60th parallel, the responsibility to develop streams and waters is primarily that of the provinces. They must plan to develop domestic and industrial supplies of water. Irrigation, power, flood control, abatement of pollution, recreational uses of water are the provinces' prime responsibility. The federal government, in turn, has a responsibility to protect and develop inland fisheries, to protect the navigability of streams and, by virtue of its jurisdiction in agriculture, a responsibility to ensure an adequate supply of water for agricultural purposes. In the international field, the federal government has a responsibility to ensure that boundary waters are not polluted to the detriment of health.

Clearly the federal and provincial legislatures have complementary responsibilities as regards the use and quality of Canada's fresh water supplies. Precisely because the need has not become manifest until recently and because of the divided responsibilities, there have not been in Canada the sort of comprehensive basin studies covering the multiple use of water.

I am going to digress for a moment here. These are recent publications in the United States. This one is by John V. Krutilla and Otto Eckstein on "multiple purpose river development—studies in applied economic analysis." That is an example of the type of thing we lack in Canada. This is an American publication.

Another publication prepared by the government of the United States is the report to the inter-agency committee on water resources, and is "proposed practices for economic analysis of river basin projects." That is an example of governmental activity in the United States which we lack in Canada.

These are only two of a number of pieces of literature which could be pointed to as examples of how other countries are moving forward on the examination of rivers as a river basin system.

It is true that we have admirable hydrometric studies prepared by my department's water resources branch. These cover a vast number of rivers and bodies of water of the Yukon, Fraser, Columbia, Mackenzie, Nelson, St. Lawrence, Hamilton and Saint John river basins—to mention just some of them. Canada is fortunate in having, spread across the nation, in the various provinces and among the federal government officials, a number of highly qualified individuals who know a great deal about each one of these river basins. But even in the federal government, this knowledge is disseminated throughout several departments. When it comes to irrigation uses of water, the Department of Agriculture has very knowledgeable officials. On hydrometric surveys, on the hydraulic use of water and on a number of other related subjects, officials of the water resources branch have a national and international reputation. Equally respected as regards the levels of the Great Lakes and ground-water determinations are the officials of the Department of Mines and Technical Surveys. Officials of the Department of National Health and Welfare are very knowledgeable regarding the possible damage to health arising out of pollution of national and international streams. Pollution of Canada's fresh water supplies is a matter of deep concern for members of the departments of Fisheries and of Transport, as well as to the members of the Canadian wildlife service. The Department of Public Works and the Department of Transport share an abiding interest in the navigability of waters. All these interests are