

Board and the St. Lawrence Seaway Authority. The Central Mortgage and Housing Corporation provides funds for municipal sewage treatment facilities. Other agencies, such as the National Research Council, award grants-in-aid of research into resources and environmental problems.

1.5.2 Federal-provincial programs

Jurisdiction over some natural resources, such as water, is shared by the federal and provincial governments. In other instances where jurisdiction rests with one level of government, such as the federal responsibility for fisheries and provincial responsibility for forests, management practices for one resource may affect the management of others. Consequently, many of the federal government's environmental programs are carried out in co-operation with the provinces.

For water resources there are only two areas in which jurisdiction is not shared — the northern territories, and the sea and sea-bed beyond the recognized boundaries of the coastal provinces and out to the limits established by national claim and international convention. Within the boundaries of the provinces, however, both the federal and provincial governments possess significant, and sometimes overlapping, responsibilities.

Given the fact of divided jurisdiction, integrated water management requires institutional arrangements within which all jurisdictions, competences and capabilities can be brought together for joint goal-setting, planning and operation. These arrangements include consultative committees, set up with each province, to develop improved understanding of mutual problems and to advise governments on priorities for joint action. Consultative committee discussions pave the way for federal-provincial agreements to study particular river basins. For example, the Qu'Appelle Basin Study Agreement signed in August 1970 was a joint undertaking by the federal government and Saskatchewan and Manitoba to prepare a plan to guide the future development and management of the water and related land resources of the basin. Similarly, the preparatory work for the Saint John River Basin Agreement between Canada and New Brunswick, now in its third year under authority of the Canada Water Act, was facilitated by the Canada - New Brunswick Consultative Committee. When public controversy arose in 1970 over the reduced water levels in the Peace-Athabasca Delta, the Canada - Alberta Consultative Committee was used to provide a preliminary overview of the situation. A joint study was subsequently launched to determine possible remedial measures. It is anticipated that more integrated water management programs jointly undertaken by the provincial and federal governments will be agreed to throughout Canada; the Churchill River Basin is one such program that is envisaged for 1973.

Some other examples of established federal-provincial co-operative arrangements on the subject of water include the Prairie Provinces Water Board which apportions water among the three provinces, the Fraser River Joint Advisory Board which advises on a program to reduce the flood threat to the Fraser River Basin, and the Saskatchewan-Nelson River Basin Board which completed a major water supply study in 1972. There are joint federal-provincial arrangements for the protection and use of other renewable resources as well.

Current programs of major importance can be cited to exemplify the federal government's concern for the environment. On August 31, 1970, a major integrated management study agreement was signed by the governments of Canada and Manitoba. The purpose of the agreement is to determine the environmental effects of changing the levels of Lake Winnipeg and the stream flows in the Churchill and Nelson river systems caused by the development of the hydro-electric potential of north-central Manitoba. Another such program, undertaken in co-operation with Quebec, is an assessment of potential environmental impact associated with a large hydro-electric and other resource development proposal for the watersheds of southern James Bay. The potential environmental impact of the construction and operation of a major oil or gas pipeline and support facilities from the Arctic to central Canada is being assessed. Results of these study programs will be incorporated into the design of the development projects.

Co-operative research programs have been developed with industry and other organizations to reduce water pollution from pulp and paper mills. Recipients of contracts were: the Pulp and Paper Research Institute, Pointe Claire, Que.; the BC Research Council, Vancouver, BC; Domtar Limited, Cornwall, Ont.; MacMillan Bloedel Research Limited, Vancouver, BC; and the Research and Productivity Council of New Brunswick, Fredericton.