



The Hudson Bay drainage basin is the largest in area and its main river is the Nelson. The Winnipeg River, a tributary of the Nelson, is completely developed for hydro-electric power but development of the Nelson itself is just beginning. The two branches of the Saskatchewan River, tributary to the Nelson, drain the great agricultural region of the mid-west and are now the sources of important irrigation projects.

The Arctic drainage basin is dominated by the Mackenzie, one of the world's longest rivers. It flows 2,635 miles from the head of the Finlay River to the Arctic Ocean and drains an area in the three westernmost provinces of approximately 700,000 sq miles. Except for a 16-mile portage in Alberta, barge navigation is possible from Waterways on the Athabasca River to the mouth of the Mackenzie, a distance of 1,700 miles.

The rivers of the Pacific basin rise in the mountains of the Cordilleran Region and flow to the Pacific Ocean over tortuous, precipitous courses, rushing through steep canyons and tumbling over innumerable falls and rapids. They provide power for large hydro-electric developments and in season swarm with salmon returning inland to their spawning grounds. The Fraser River rises in the Rocky Mountains and toward its mouth flows through a rich agricultural area. The Columbia is an international river which has a total fall of 2,650 feet during its course and has thus a tremendous power potential. Although a considerable portion of the United States potential has been developed, Canadian development is relatively slight. The Yukon River is also an international river but, although the largest on the Pacific slope, it is at present relatively unimportant economically.

Utilization of inland water. Over 44% of all water withdrawn in Canada (excluding withdrawals associated with hydro projects) is for one end use, condenser cooling in thermal steam-electric plants. However, about 99% of this water is returned for re-use. Municipal water use, including small industrial processors served by the municipal supply systems of Canada, accounts for some 10% of current daily water withdrawals. On average, approximately 75% of the water pumped into the system is discharged as storm and sanitary sewage containing waste materials.