

15, 1960. That is the blue one here. The fourth is Hydro Electric Progress in Canada 1959, as of January 1, 1960.

With air and soil, water is the third essential to the maintenance of life on our planet. The basic cycle whereby resources of water are replenished on this earth makes of water and air the greatest of renewable natural resources. Precipitation—in the form of rain or snow—is followed by storage of water on or under the soil. Man can then use this surface or ground water, as it is called, for his domestic purposes, to grow food, to grow fish, to transport goods or to multiply his own energy in the form of electricity. As the surface or ground waters run their course they are subject to evaporation and transpiration which lift them to the skies where they are again released as precipitation to repeat the cycle.

Each year, about 8,000 billion tons of water fall on Canada as rain or snow. It is estimated that about two-thirds of this annual precipitation may evaporate or be used by plants. The remainder runs off in streams to constitute what is called surface water or it seeps through the soil or, as we call it, the ground—water table.

Canada's earliest beginnings depended on water. Inland waterways facilitated trade and transportation. They provided food in the form of fish and wildfowl. They also provided early sources of energy. It was in 1606 that one of the first water driven grist-mills in North America was established near Port Royal by Poutrincourt in what is now Nova Scotia.

Without a doubt, the harnessing of our rivers for transportation of the riches in fur and timber, followed by the production of vast amounts of electrical energy for the processing of our vast resources of wood, have been in the foundation on which central Canada's prosperity has been based. Water-borne transportation and hydro-electric power still play a dominant role in Canada's economy.

While Canada is a land almost surrounded by water, I think it would be wise to restrict our consideration on this subject to fresh water supplies.

Canada is blessed with more fresh water than any other nation in the world. About 7 per cent of Canada's surface consists of fresh water. The growing use of water is an essential companion of our progress as a nation. The most commonly used raw material of industry is water. A large papermill uses every day about the same amount of water needed by a city of 50,000 people. 65,000 gallons of water are required to produce one ton of finished steel. Clearly, then, the manner in which Canada's water resources are managed will determine, in a goodly measure, the extent and future of Canada's future progress and the standards of living of its people.

With the exception of certain sections of mid-western Canada, nearly every part of Canada is endowed with surface water and indeed, to some extent, water power resources. For over 65 years these resources of surface water have been inventoried and measured. The inventory of surface water, in cooperation with the provinces, has been intensified and developed fairly rapidly of recent years. Recently, this government decided to intensify the investigations into ground-water resources. It has also begun to examine some of the characteristics of surface water, which affect the flow and use of water, namely sedimentation. There is not yet enough inventorying and sampling being done of Canada's surface and ground-water supplies. This is a long-range matter.

As our population and economy expand, the need for planned development of Canada's water resources becomes evident. It is apparent that the prime responsibility in this field is one which rests with the provinces as far as their territories go. The prime responsibility for the development of water resources of the two northern territories rests with these territories and the federal government. Prior to 1930, Canada administered, among other natural