

THE WATER WEALTH OF CANADA: WITH SPECIAL REFERENCE TO THE OTTAWA RIVER BASIN

The only source of water, no matter where we find it, whether coursing down in rivers or rising from the soil in springs, is the rainfall. This rain, flowing in rivulets on the surface or seeping through the ground, eventually reaches a creek, a swamp, or a lake, thus collecting to form a flowing river.

There are four uses of water to mankind. First and foremost, drinking water is an absolute essential to life, and this constitutes a first call upon all our sources of supply. Secondly, if the rainfall is not sufficient, plant life is possible only by means of irrigation. Irrigation, however, not only furnishes moisture, but the water conducted to the soil contains silt and mineral salts which renew the land. This is well shown in the Nile valley, where the overflow, covering the ground with silt and mineral salts, has made it possible to raise unrotated crops for thousands of years. This phase of irrigation is often forgotten, but, when more intensive methods of cultivation are adopted, many streams in the well-watered provinces of the east may yet be turned on to the land for the sole purpose of fertilizing it. In the third place, transportation necessitates an assured depth of water in our streams, and, to this end, it is necessary to conserve the rainfall in swamps, lakes or artificial reservoirs. The low water in the autumn will not prevent a continued supply. The use of water for power purposes is the last charge upon the supply. It is a remunerative business, and so the production of energy adjacent to centres of population has been seized upon by capital. If not controlled, would demand the whole flow for this purpose.

Under these four heads of usefulness each of the rivers of Canada will be discussed, that is, under a geographical arrangement we will consider the principal rivers in their relationship to population. This practically means the relationship of water to the river in a particular district.

Pacific Coast—Beginning on the Pacific, the rugged coast-strip extends 50 to 100 miles inland from the ocean and rises in that distance to a general elevation of 8,000 feet, serves to condense