

2.—Available and Developed Water Power in Canada, Feb. 1, 1924.

Provinces.	Available 24-hour power at 80 p.c. efficiency.		Turbine installation.
	At ordinary minimum flow.	At estimated flow for maximum development (dependable for 6 months).	
	h.p.	h.p.	h.p.
British Columbia.....	1,931,142	5,103,460	355,517
Alberta.....	475,281	1,137,505	33,067
Saskatchewan.....	513,481	1,087,756	—
Manitoba.....	3,270,491	5,769,444	162,025
Ontario.....	4,950,300	6,808,190	1,445,480
Quebec.....	6,915,244	11,640,052	1,116,398
New Brunswick.....	50,406	120,807	44,539
Nova Scotia.....	20,751	128,264	54,950
Prince Edward Island.....	3,000	5,270	2,239
Yukon and Northwest Territories.....	125,220	275,250	13,199
Total.....	18,255,316	32,075,998	3,227,414

The figures in columns 1 and 2 in the above table represent 24-hr. power, and are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or lesser power capacity, which are not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at such points as definite studies have been carried out and the results made matters of record.

The figures in column 3 represent the actual water wheels installed throughout the Dominion. These figures should not be placed in direct comparison with the available power figures in columns 1 and 2 for the purpose of deducing therefrom the percentage of the available water power resources developed to date. The actual water wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated as in column 3. The figures quoted above, therefore, indicate that the "at present recorded water power resources" of the Dominion will permit of a turbine installation of 41,700,000 h.p. In other words, the present turbine installation represents only 8 p.c. of the present recorded water power resources.

The above figures may be said to represent the minimum water power possibilities of the Dominion. To illustrate, the detailed analyses which have been made of the water power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow. It is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial h.p. These figures provide for a diversity factor between installed power and consumers' demands.

Table 3 analyses the developed water power, and shows the extent to which the great pulp and paper industry of the Dominion owes its development to water power.