

Table 2 presents a summary of the water-power resources of Canada according to the records of the Dominion Water and Power Bureau as at Dec. 31, 1949. In the case of developed power, the figures for 1948 are listed for comparative purposes.

### 2.—Available and Developed Water Power, by Provinces, 1948 and 1949

Province or Territory	Available 24-Hour Power at 80 p.c. Efficiency, December, 1949		Turbine Installation	
	At Ordinary Minimum Flow	At Ordinary Six-Month Flow	Dec. 31, 1948	Dec. 31, 1949
	h.p.	h.p.	h.p.	h.p.
Newfoundland.....	1,135,000	2,585,000	—	262,050
Prince Edward Island.....	500	3,000	2,617	2,617
Nova Scotia.....	25,500	156,000	140,884	145,384
New Brunswick.....	123,000	334,000	133,347	133,347
Quebec.....	8,459,000	13,064,000	5,939,697	6,130,097
Ontario.....	5,407,200	7,261,000	2,894,240	2,896,540
Manitoba.....	3,309,000	5,344,000	503,700	557,700
Saskatchewan.....	542,000	1,082,000	111,835	111,835
Alberta.....	507,800	1,258,000	106,560	107,225
British Columbia.....	7,023,000	10,998,000	1,009,769	1,238,069
Yukon and Northwest Territories.....	382,500	814,000	28,069	28,469
<b>Canada.....</b>	<b>26,914,500</b>	<b>42,899,000</b>	<b>10,870,718</b>	<b>11,613,333</b>

The figures listed in the first and second columns of Table 2 represent 24-hour power and are based upon rapids, falls and power sites of which the actual drop, or the head possible of concentration, has been measured or at least carefully estimated. Many unrecorded rapids and falls of undetermined power capacity exist on rivers and streams from coast to coast (particularly in the less-explored northern districts); these will become available for tabulation only as more detailed survey work is completed. Unless definite studies have been carried out and the results made matters of record, no consideration has been given to the power concentrations that are feasible on rivers and streams of gradual gradient, where economic heads possibly may be created by the construction of power dams. Thus, with regard to possible sites, the listed figures of available power (under two conditions of stream flow) represent only the *minimum water-power possibilities of Canada*.

The third and fourth columns give the total capacity of the water wheels actually installed; these figures should not be placed in direct comparison with those in the first and second columns to deduce the percentage of the available water-power resources developed. At developed sites, the water-wheel installation averages 30 p.c. greater than the corresponding calculated maximum available power figures included in the second column and covering the same sites. The above figures, therefore, indicate that the *at present recorded water-power resources* will permit of a turbine installation of more than 55,000,000 h.p.; also, that the turbine installation at Dec. 31, 1949, represents roughly only 21 p.c. of recorded water-power resources.

Table 3 shows clearly the consistent growth in capacity since the beginning of the century and the heavy increase in installation during the war years 1942 and 1943. During 1949 as a result of the great post-war activity in hydro-electric construction, more than 480,000 h.p. was added to the total capacity of the country; many other new plants and additions are under construction.