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CANADA'S WATER

(Based on *Water*, a booklet published by the Inland Waters Directorate of Environment Canada, Ottawa.)

As regards fresh surface water, Canada is one of the world's most fortunate countries. There are probably more lakes in Canada than in any other country in the world -- so many that they have not even been counted, much less measured. Estimates, however, have placed the total lake area at 292,000 square miles. Since the country's total area is over 3.8 million square miles, this means that about 7.6 per cent of Canada is covered by fresh water. Most of its lakes have not yet been surveyed but, including the Canadian share of the Great Lakes, they contain as much as one-seventh of the world's fresh, liquid, surface water.

Stream-flow the true
measure of water supply

Not all the stored water in Canada's lakes is available for use. It would be unrealistic to suggest, for instance, that the entire 5,500 cubic miles of water in the Great Lakes, of which an estimated 1,800 cubic miles are in Canada, could be removed and used. The water is very valuable where it is, as storage that can be drawn on in time of drought to be replaced in time of plenty. But the true measure of a country's water supply is its stream-flow rather than its storage capacity.

Not all Canada's rivers have been gauged but their combined average flow is about 3,500,000 cubic feet a second.

This means that each year, on the average, Canada's rivers carry about 750 cubic miles of water to the oceans, almost 9 per cent of the total flow of all the rivers of the world. Set against a population that is less than 1 per cent of the world's population, Canada's endowment of fresh water is generous indeed.

Even though the flow is not uniformly distributed throughout the country, nor during the year (a large portion of the annual supply, for example, is frozen for several months during the winter, to be released only when spring arrives), 750 cubic miles of water are available every year, replenished by the continual operation of the hydrologic cycle.