Ottawa, London, Windsor, Québec City and Kitchener account for more than one-third of the population.

The largest tract of continuous settlement is in Manitoba, Saskatchewan and Alberta, north of the United States border. This block occupies about 6.2% of Canada's area and contains five major cities, Edmonton, Calgary, Winnipeg, Saskatoon and Regina. North of this mainly agricultural block, astride the Alberta–British Columbia border, is the Peace River district, an agricultural area which reaches the 57th parallel.

The southern half of British Columbia is settled in interconnecting strips following mountain valleys and coastal plains. BC's population is most dense, however, in the lower mainland, principally in the Vancouver area.

North of the areas already described are a number of remote settlements, the largest being in Ontario and Quebec between the 47th and 50th parallels. Outside these urban-rural blocks are numerous settlements related to mining, forest industries, transportation, administration, defence, hunting and fishing but with little or no agriculture.

1.2 Physical features

1.2.1 Mountains

The great Cordilleran mountain system is Canada's most impressive physical feature. Many peaks in the various ranges of the Canadian Cordillera are over 4 500 m (metres) high and approximately 1 502 km² of territory lie above the 3 048 m mark. Mount Logan, 5 951 m above sea level, in the St. Elias Mountains of Yukon is the highest point in Canada.

Rossland, BC, is the highest city in Canada (1 056 m) and Lake Louise, Alta., is the highest hamlet (1 540 m). Chilco Lake in British Columbia, with an area of 194 km², is the highest major lake (1 171 m). Heights of the more important Canadian mountains and other elevations are given in Table 1.2.

1.2.2 Inland waters

Abundant water supplies have been essential to the development of Canada's fisheries and wildlife resources, hydroelectric power, agriculture, recreational activities, transportation, domestic water supply and industrial production.

Each year more than 7 250 000 million tonnes of water fall on Canada as rain and snow. Much of it evaporates, some is stored in lakes, groundwater reservoirs and glaciers, and a larger amount runs off in rivers or streams to the oceans. The Atlantic and Pacific coastal regions experience the highest precipitation (100-140 cm), followed by Ontario and Quebec (65-90 cm) and the semi-arid Prairie region (40-55 cm). Canada's northland receives the lowest precipitation (15-40 cm).

About 30% of the mean annual precipitation occurs as snow, and much of it remains stored in its natural form for several months until spring. Then flooding may occur, when river levels rise, and the melting snow cannot be carried off rapidly enough.

Despite abundant water in southern Canada, certain areas, particularly the Prairies, are inadequately supplied. This is due in part to sparse rainfall and also because almost half of Canada's water flows northward through undeveloped areas, largely unused.

About 7.6% of Canada's total area is covered by lakes and rivers, making surface water the most important source of freshwater for water users throughout Canada (Table 1.1). Lakes are natural regulators of river flow; they smooth out peak flows during flooding and sustain stream flow during dry seasons. Among the largest freshwater bodies in the world are the Great Lakes with an area of almost 246 000 km²; 36% is in Canada and 64% in the United States (Table 1.3). These lakes are sufficiently large to have measurable, although slight, tides. Other large lakes in Canada are Great Bear Lake, Great Slave Lake and Lake Winnipeg. Countless smaller lakes are scattered throughout the country, particularly in the Canadian Shield. It has been estimated that over 30,000 lakes greater than 3 km² exist in Canada. The size and elevation of lakes that are more than 600 km² in area are listed in Table 1.4.

Groundwater as a source of freshwater for communities, industries and irrigators contributes about 10% of the water supplied by municipal water systems. In some areas, particularly the Prairies, groundwater is the principal source of water for streams during extended dry weather periods.

The volume of water stored as snow and ice in North America's glaciers is many times greater than all the lakes, rivers and reservoirs. Most of this is permanently frozen in polar ice caps which have a strong indirect influence on the hydrologic cycle through their effect on weather patterns. In temperate regions, alpine glaciers exert a direct influence on the hydrologic cycle as water from melting glaciers frequently sustains stream flow during dry seasons. In hot summer months, glaciers may contribute up to 25% of the flow of the Saskatchewan and Athabasca rivers. About 75% of glaciated areas of Canada are in the Arctic islands and 25% on the mainland.

In Canada 90% of water used comes from streams and other surface sources such as lakes and man-made reservoirs. The combined mean annual flow of all streams has been estimated at 105 million cubic decimetres per second, equivalent to about 60% of Canada's mean annual precipitation. Table 1.5 lists principal rivers.

Water problems associated with storage, distribution, and water quality are of major concern since they have a direct bearing on Canada's quality of life and economic growth.

The international boundary between Canada and the United States, including Alaska, is 8 900 km