



**The Pacific drainage basin** contains rivers that rise in the mountains of the Cordilleran region and flow to the Pacific Ocean through steep canyons and over innumerable falls and rapids. They provide power for large hydroelectric developments and in season swarm with salmon returning inland to their spawning grounds.

**Use of inland water.** Dams built across large rivers have met the major share of Canada's electric energy needs over past years and still meet two-thirds of that need today. Recreation, transportation, wildlife and fisheries are other important uses of water in its natural setting.

Uses which withdraw water from its source are classified as municipal and industrial. Current industrial uses and their relative share of water are thermal power generation (cooling) 52%, manufacturing 27%, agriculture 8% and the mineral industry 2%. The remaining 11% is attributed to municipal water use. In manufacturing and the mineral industry, water is recirculated, that is, it is used more than once before being returned to source. Agriculture is the only use that consumes most of the water withdrawn, with as little as 23% being available for other users; in contrast, thermal electric generation returns to source more than 99% of the water withdrawn.

**1.2.3 Coastal waters**

Canada's coastlines, measuring nearly 244 000 km on the mainland and offshore islands, are collectively among the longest of any country in the world.

**Atlantic.** Along this coast, over time the sea has inundated valleys, lower parts of the Appalachian Mountains and the Canadian Shield. The submerged continental shelf has great width and diversity of relief. From the coast of Nova Scotia its width varies from 60 to 100 nautical miles, from Newfoundland 100 to 280 nautical miles at the entrance of Hudson Strait, and northward it merges with the submerged shelf of the Arctic Ocean. The outer edge varies in depth from 183 to 366 m. The overall gradient of the Atlantic continental shelf is slight but the whole area is studded with shoals, plateaus, banks, ridges and islands. The 73 m line is an average of 12 nautical miles from the Nova Scotia Coast and is the danger line for shipping. The whole floor of the marginal sea is traversed by channels and gullies cutting deep into the shelf. Large areas undergo constant change because of continuous marine deposit of materials eroded by rivers, wave action, wind and ice.

**Hudson Bay and Hudson Strait** bite deeply into the continent. Hudson Bay is a shallow inland sea