

depth of about 70 fathoms (128 m); the greatest charted depth in the centre of the Bay is 141 fathoms (258 m). Hudson Strait separates Baffin Island from the continental coast and connects Hudson Bay with the Atlantic Ocean. It is 430 miles (796 km) long and from 37 to 120 miles (69 to 222 km) wide; its greatest charted depth of 481 fathoms (880 m) is close inside the Atlantic entrance. Great irregularities of the sea floor are indicated but, except in inshore waters, few navigational hazards have been located.

Pacific. The marginal sea of the Pacific differs strikingly from the other marine zones of Canada. The hydrography of British Columbia is characterized by bold, abrupt relief — a repetition of the mountainous landscape. Numerous inlets penetrate the mountainous coasts for distances of 50 to 75 miles (93 to 139 km). They are usually a nautical mile or two (2 to 4 km) in width and of considerable depth, with steep canyon-like sides. From the islet-strewn coast, the continental shelf extends from 50 to 100 sea miles (93 to 185 km) to its oceanward limit at depths of about 200 fathoms (366 m). The sea floor drops rapidly to the Pacific deeps, parts of the western slopes of Vancouver Island and the Queen Charlotte Islands lying only four miles (7 km) and one mile (2 km), respectively, from the edge of the declivity. These detached land masses are the dominant features of the Pacific marginal sea. In a region so irregular in hydrographic relief, shoals and pinnacle rocks are numerous, necessitating cautious navigation.

Arctic. The submerged plateau extending from the northern coast of North America is a major part of the great continental shelf surrounding the Arctic Ocean, on which lie all the Arctic islands of Canada, Greenland, and most of the Arctic islands of Europe and Asia. This shelf is most uniformly developed north of Siberia where it is about 500 miles (926 km) wide; north of North America it surrounds the western islands of the archipelago and extends 50 to 300 miles (93 to 556 km) seaward from the outermost islands.

The floor of the submerged part of this continental margin is nearly flat to gently undulating, with isolated rises or hollows. Most of it has an average slope seaward of about one half a degree, with an abrupt break at the outer edge to the continental slope whose declivity is commonly six degrees or more. From the Alaskan border eastward to the mouth of the Mackenzie River the shelf is shallow and continuous with the coastal plain on the mainland; its outer edge lies at a depth of about 35 fathoms (64 m) and about 40 miles (74 km) offshore. This shelf is continuous with that north of Alaska and Siberia. Near the western edge of the Mackenzie River delta, it is indented by a deep valley, the Herschel Sea Canyon, whose head comes within 15 miles (28 km) of the coast. Between Herschel Sea Canyon and Amundsen Gulf, the typical features of the continental shelf are replaced by the submerged portion of the Mackenzie River delta, which forms a great pock-marked undersea plain, most of it less than 30 fathoms (55 m) deep, up to 75 miles (139 km) wide and 250 miles (463 km) long.

North and east of the submerged portion of the Mackenzie River delta, the continental shelf is more deeply submerged than that off the mainland and Alaska. Its gently undulating surface is, for the most part, 200 fathoms (366 m) or more below sea level, and most of the well-defined continental shoulder is over 300 fathoms (549 m) deep, giving way to the smooth continental slope which extends without significant interruption to the abyssal Canada Basin at about 2,000 fathoms (3 658 m). The deeply submerged continental shelf extends along the entire west coast of the Canadian Arctic archipelago from Banks Island to Greenland. All of the major channels between the islands — Amundsen Gulf, M'Clure Strait, Prince Gustav Adolf Sea, Peary Channel, Sverdrup Channel and Nansen Sound — have flattish floors at about the same depth as the shelf and appear to enter it "at grade", although there are a few local irregularities that may be the result of glacial action. No deep indentations or canyons are known to cut the continental slope or continental shelf off the archipelago, except one sinuous canyon that heads off Robeson Channel at the northeastern end, close to Greenland. Submerged sides of the channels of the archipelago, and slopes from