

Landforms left by glaciers

Climatic fluctuations during the Pleistocene Epoch (2 000 000 to 10 000 years ago) caused glaciers to grow and decay. As the last ice sheet that covered British Columbia retreated at the end of the Pleistocene, it left behind many distinctive landforms and sediments.

During the last glaciation, east-flowing glaciers scoured the bedrock and deposited **till**, a poorly sorted sediment containing stones up to boulder size. Till blankets flat to moderately sloping terrain above the valley floor. Elongate and spoon-shaped hills of glacial debris (**drumlins**) are oriented parallel to the direction of glacier flow.

Streams of meltwater flowed through tunnels within, beneath, and on the glaciers. Sand and gravel accumulated in these tunnels, forming long, narrow, sinuous ridges (**eskers**). The ridges are an excellent source of sand and gravel. Where meltwater streams flowed away from the ice front, they deposited sand and gravel as **outwash fans** and **outwash plains**. Isolated and buried ice blocks in the outwash melted to form depressions known as **kettles**. Meltwater was also dammed in places by ice or sediments, forming **glacial lakes**. When the ice sheet disappeared, the lakes drained, leaving behind nutrient-rich silty and clayey sediments that form some of the best agricultural land in central British

Figure 16a. End of glaciation (12 000 years ago)

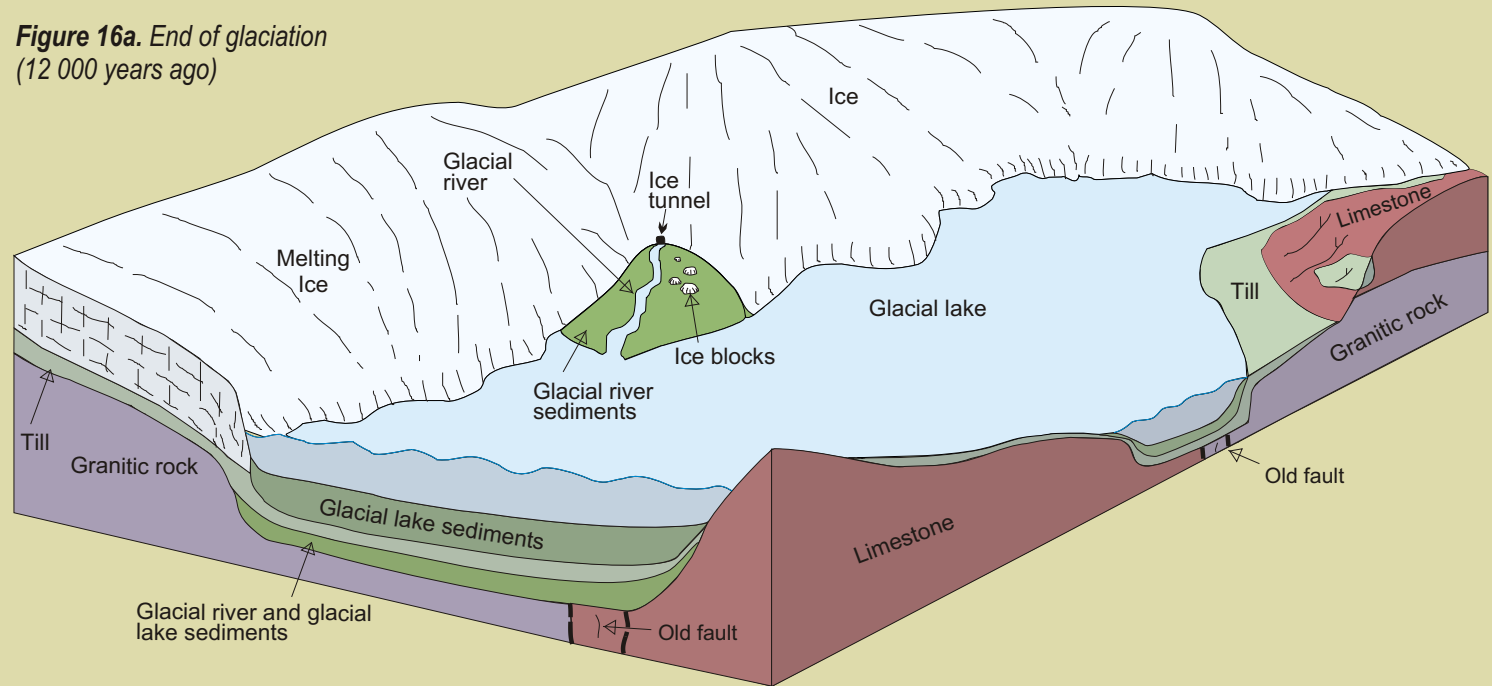


Figure 16b. Present day

