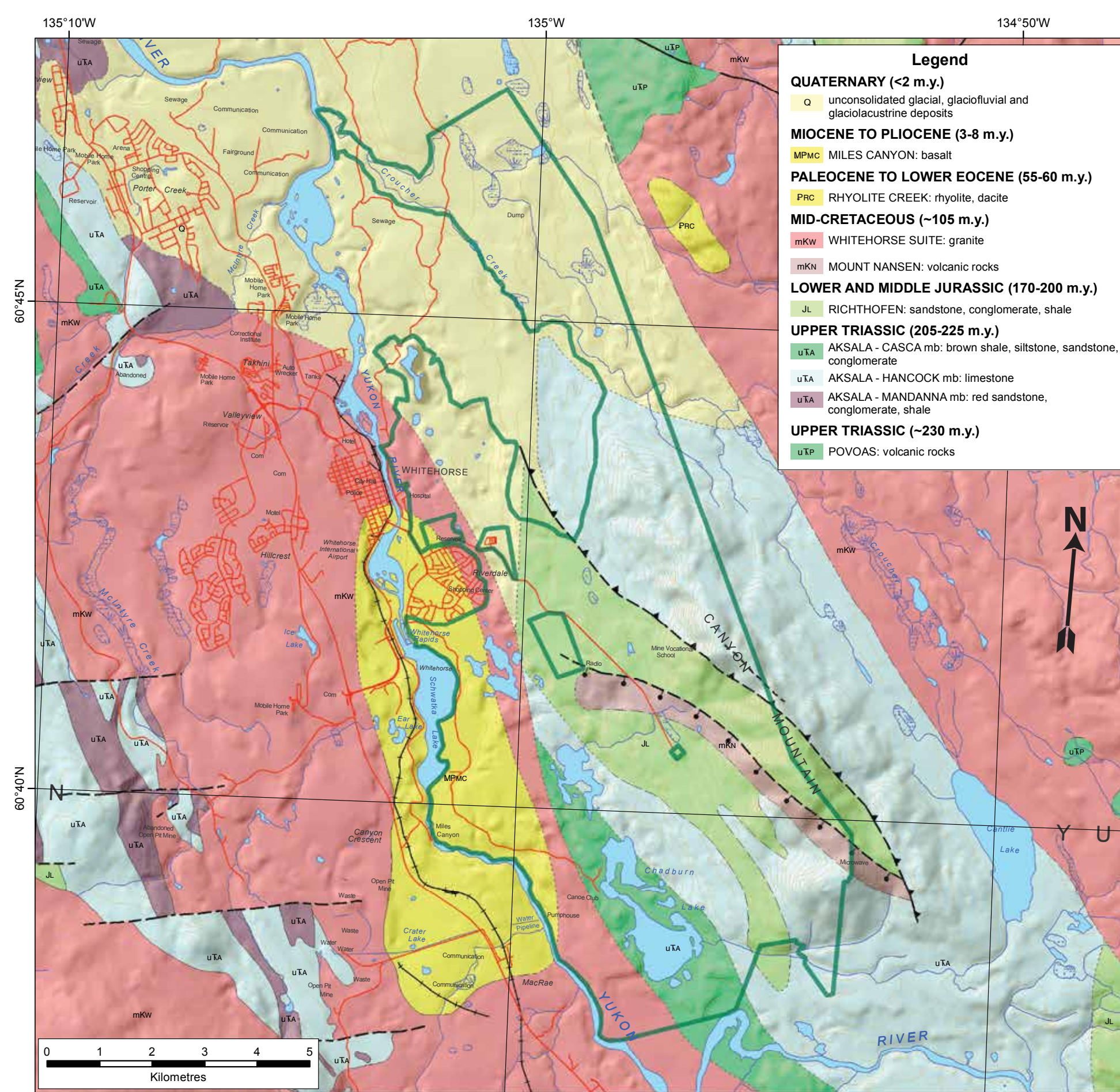


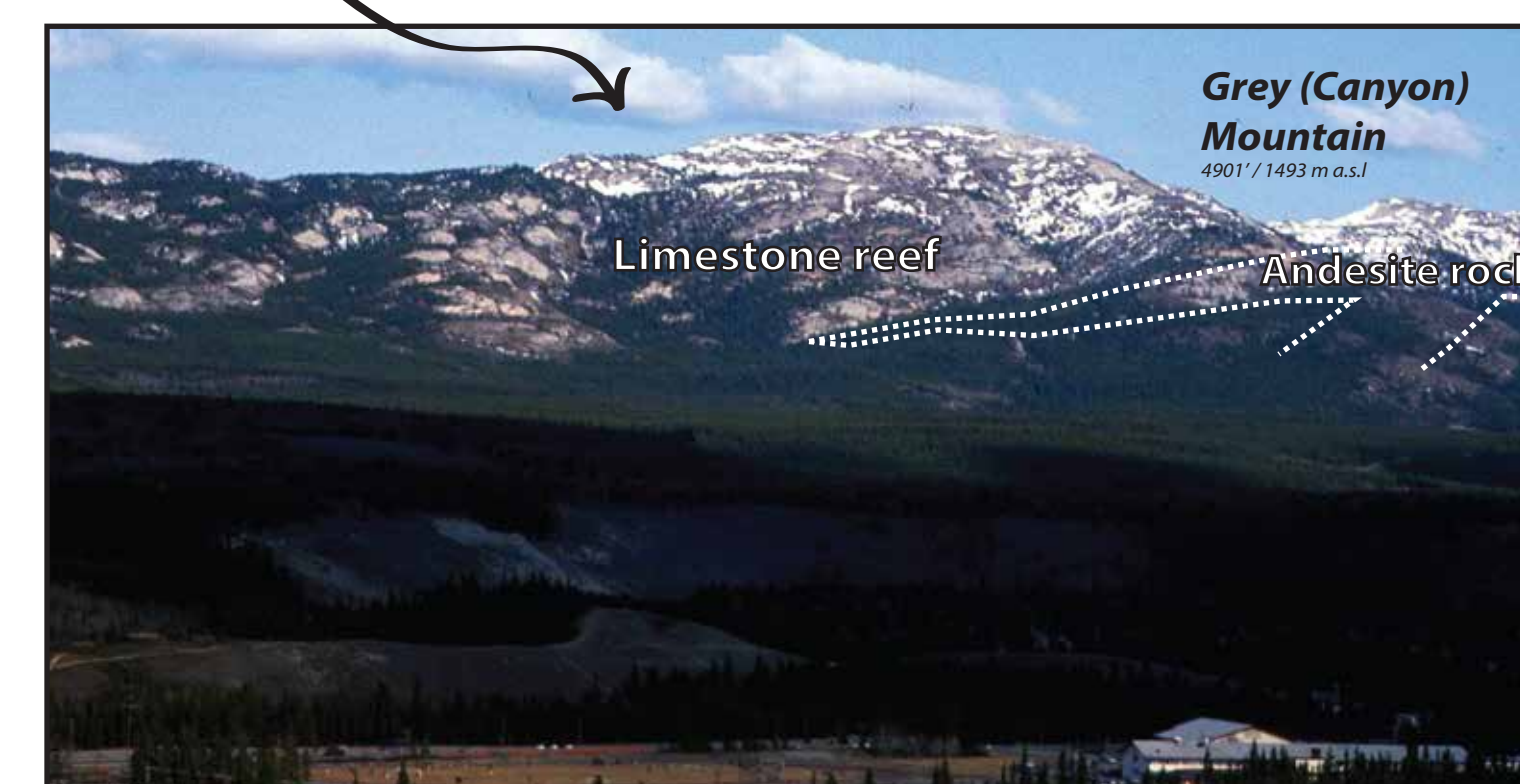
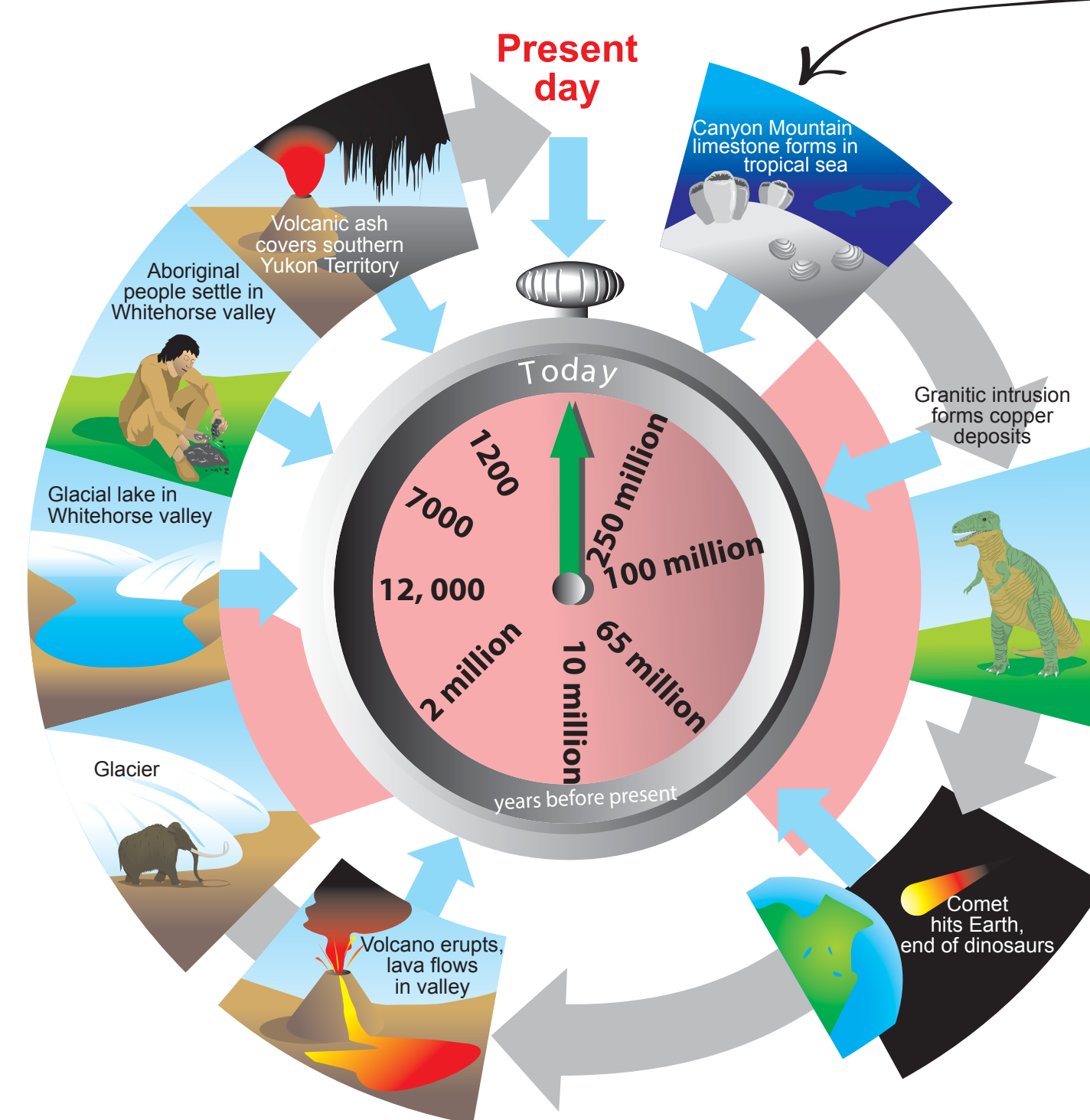
Chadburn Lake area geology - ancient reef carved by glaciers

Bedrock Geology



Grey Mountain and the Chadburn Lake area is underlain limestone, volcanic rocks and sandstone. An ancient shoreline of a glacial lake (about 14,000 years ago) can be seen on the side of Grey Mountain, about 213 m / 700 ft higher than downtown Whitehorse.

On top of an ancient reef

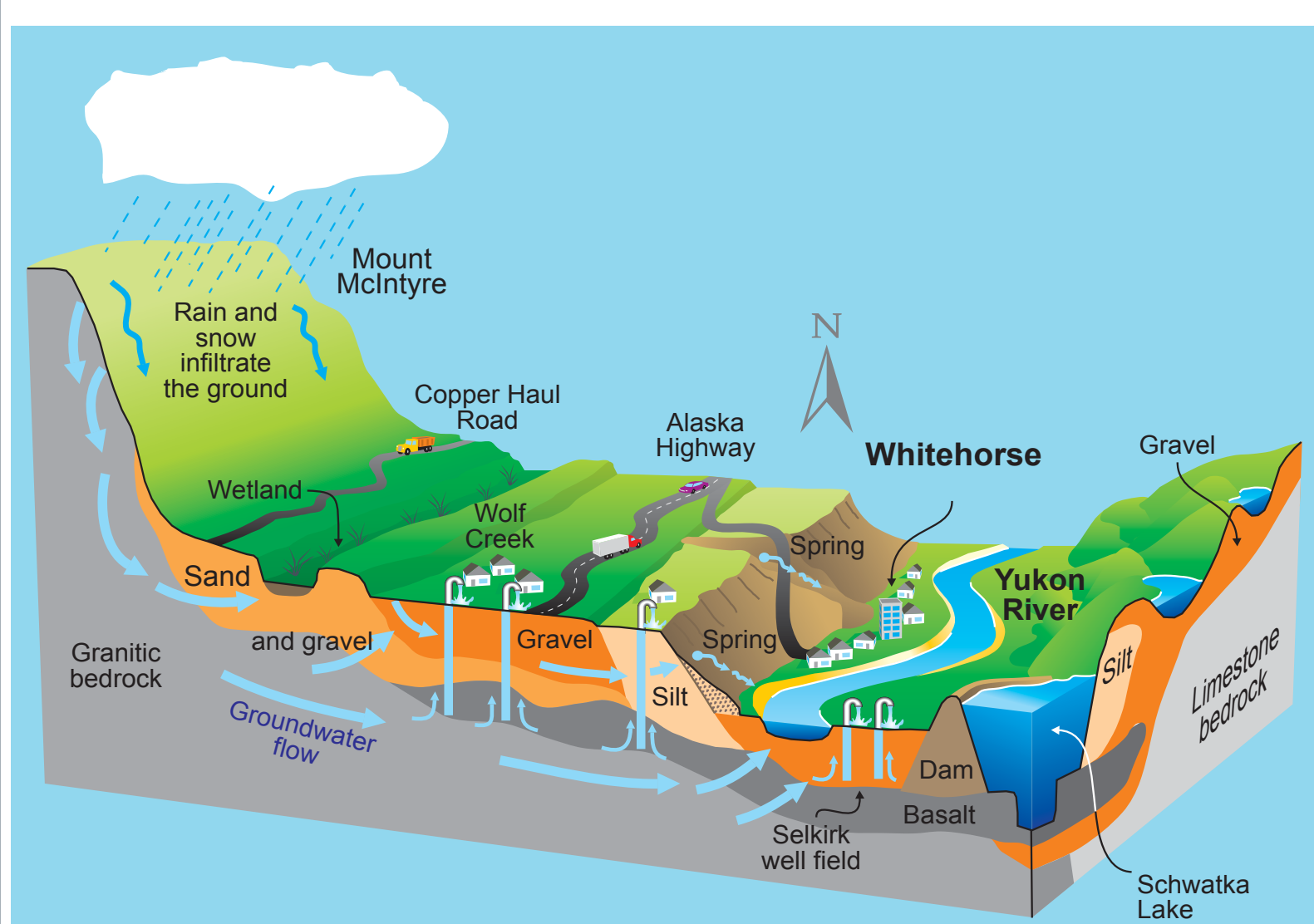


Most of the mountain is light grey limestone which precipitated about 220 million years ago in a warm shallow sea near island volcanoes. The coral and shelly fossils found here are unusual because large reefs were rare during this interval of the Triassic period.

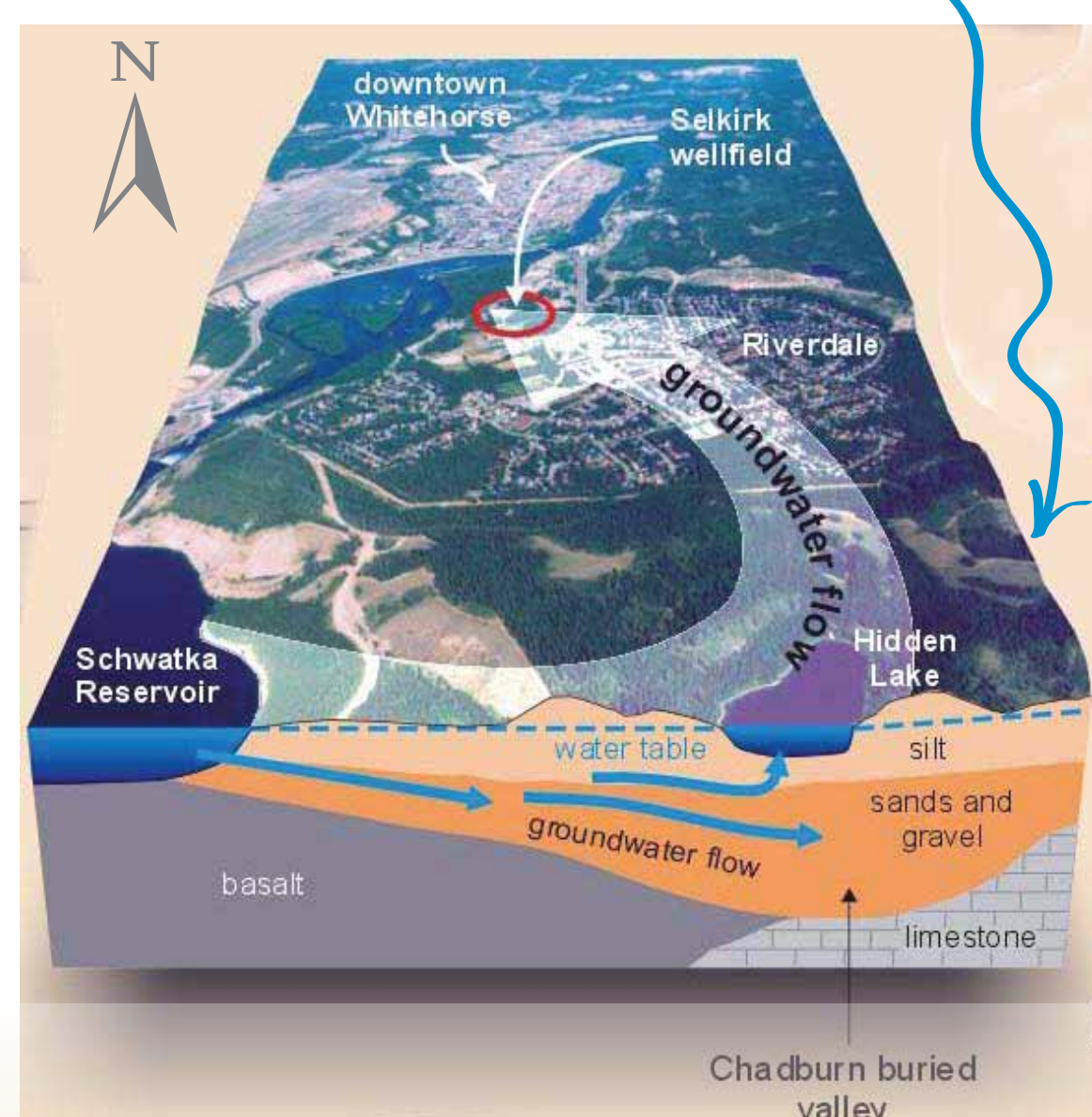
Brown bands of andesite rock - lava flows or intrusions are exposed in the limestone and typically have rusty, pyrite-rich margins.

The Chadburn Lake area lies in hilly, rocky terrain at the western foot of Grey Mountain (historically called Canyon Mountain by down-river travellers as it signalled the approach to Miles Canyon, a major hazard).

Whitehorse groundwater



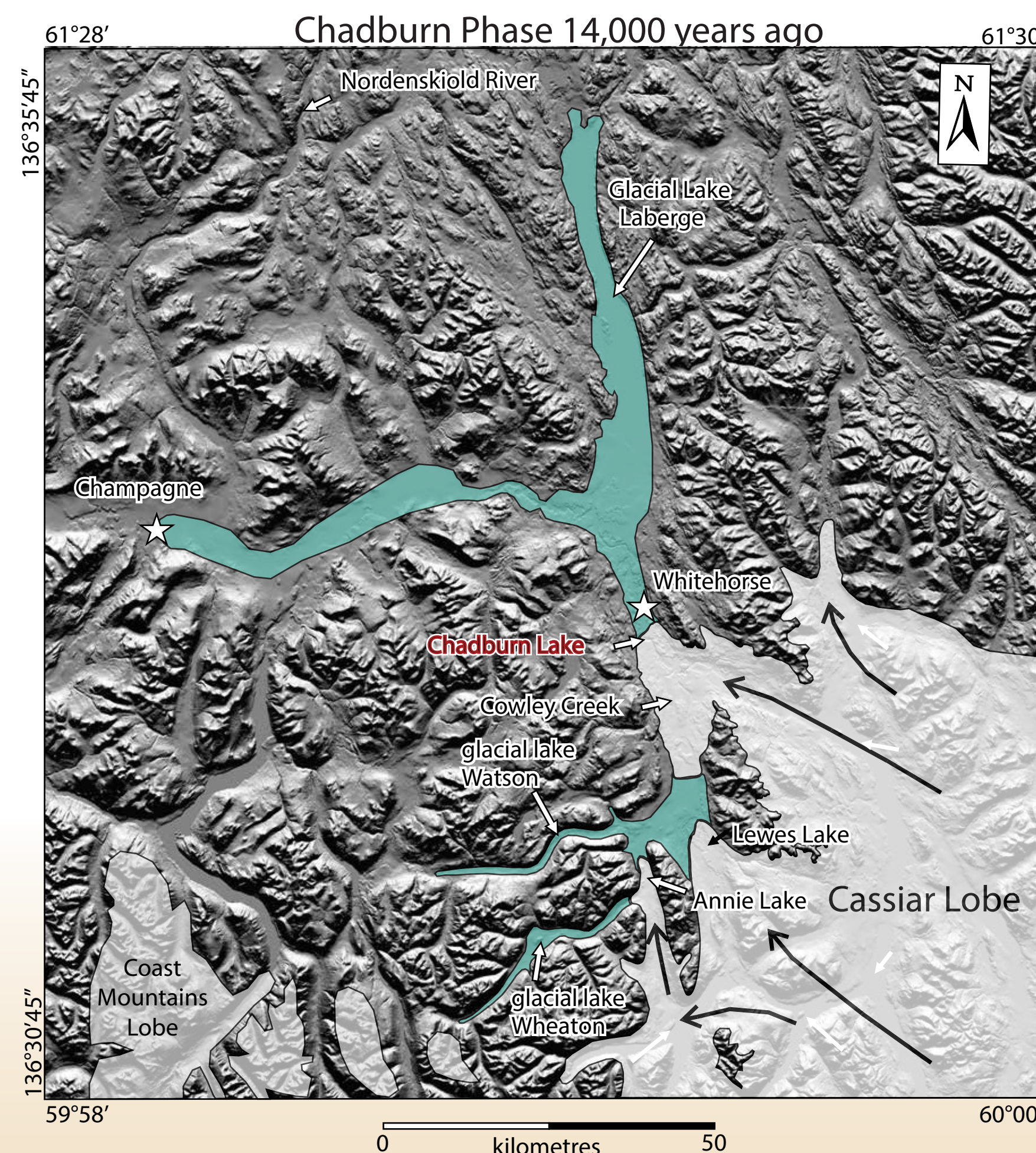
Snowmelt from the Grey Mountain



Whitehorse, like most cities, obtains its water from underground by pumping. Gravel and fractured, permeable rock are the best aquifers (water rich formations). The groundwater storage is recharged by rain and snowmelt at higher elevations.

The municipal water supply is the Selkirk aquifer (well field), south of Riverdale subdivision, at the foot of the access road to Grey Mountain.

Influence of the last Ice Age



Chadburn Lake area consists of rolling hills and depressions formed during the last ice age. This moraine landform developed 14,000 years ago when the ice sheet temporarily paused in this location (Chadburn phase). This pause in the recession resulted in the accumulation of thick sand and gravel deposits. Ice blocks were also buried, which later melted and formed 'kettle' depressions. Similar landforms are present near Lewes Lake and also formed during the Chadburn phase.

