

History of Wilson Creek

Slocan Lake Research Centre, 2021

Glacial Geology:

The Wilson Creek valley shape is a reflection of the glacial history of this area. The lower part of the valley from Slocan Lake to approximately Beaver Lake on Fitzstubbbs Creek is a narrow vee-shaped valley indicating little glacial movement during Pleistocene times. From Beaver Lake west to the height of lake between Big Wilson Lake and the Arrow Lakes Valley at Nakusp the valley is U-shaped indicative of glacial movement and scouring. Because of these features the probable movement of the glacial ice was from Beaver Lake over the height of lake to join the main ice flow down the Arrow Lakes Valley. Ice flow was probably stagnant in all the other tributaries.

The bottom of the glaciated valley will have a significant amount of unsorted glacial till, gravel and sand deposits and soil. There are also some hanging benches and lakes created by the rotting ice after the ice movement ceased.

Hydrology:

Wilson Creek carries water from a watershed of 58,413 hectares. This area is made up of Wilson Creek itself (18,366 ha.); its tributaries; Burkitt Creek (6,285 ha.); Keene Creek (4,696 ha.); Dennis Creek (2,038 ha.) and Fitzstubbbs Creek (15,721 Ha) and its tributaries Hambling Creek (2,307 ha.) and Bremner Creek (9,000 ha.). This area comprises 33.6% of the total watershed area that contributes water to Slocan Lake. For comparison the next largest area is drained by Carpenter Creek which is 11.9% of the watershed area that supplies water to Slocan Lake.

Since most of the drainage area is steep and rocky there is little aquifer storage in the un-glaciated valleys. The Fitzstubbbs Valley, as mentioned above, is U-shaped and the location of the only lakes drained by Wilson Creek. These are Wilson Lake, right at the head of Fitzstubbbs and Little Wilson Lake and Beaver Lake further south-east down Fitzstubbbs Creek. Because of the large amount of glacial material in the Fitzstubbbs Valley one can expect to find significant groundwater volumes. This valley is also the location of significant wetland areas.

A water flow measurement used to be located near the mouth of Wilson Creek. It was managed by a government agency. There may be historical water flow data from that site.

Water Quality:

Zinc concentrations were measured in Wilson Creek during June and July 1972.

Water sampling of Wilson Creek has been occurring since 2009. Measurements of conductivity, turbidity and pH have been recorded.

A temperature data logger has been deployed in Wilson Creek since Sept 2009 and hourly temperature data has been recorded.

CABIN Data:

Benthic invertebrate sampling was done by Slocan River Streamkeepers in September in 2009, 2010 and 2011. The data has been filed in the CABIN databank. Analysis of the data, using the CABIN data analysis program, indicates that Wilson has a normal status compared to the usual streams of its category.

Land Disposition:

Approximately one third of the Wilson Creek watershed falls within Goat Range Provincial Park. This is most of the area upstream of Wilson Falls.

Nearly all of the land area in the Wilson watershed is Crown land. The nearly all of the privately owned land is near the mouth of Wilson Creek, below Dennis Creek on the east side of Wilson and a strip of land on the west side that runs about 6 kilometers north to the old garbage dump. There is also one isolated block of private land just south-west of the junction of Fitzstubbbs with Wilson. I believe it to be about 1 mile square.