

in the Howse pass and the Columbia. Wood river and other tributaries of Canoe river, are glacier-fed torrents and, doubtless, contain many valuable powers; similarly with Goldstream, Downie, Carnes, Incomappleux, Illecillewæt and other streams that fall in below the "Big bend," although the same remark applies to the last named as to the Beaver.

The Kootenay has a total length of 400 miles, drains an area of 15,500 square miles and rises in the Rocky mountains about 20 miles south-east of Leancoil station on the Canadian Pacific. As, in the upper portion of its course, it flows in a great valley parallel to the upper Columbia, then crosses the ranges to get into the "Inter-montane" valley and then, follows this valley, it is probable that most of the large powers must be looked for where it crosses the ranges. The Simpson, Cross, Palliser, White, Bull, St Mary, Elk and other tributaries of the Kootenay, are large streams with heavy falls and rapids.

The Kootenay follows the "Inter-montane" valley southward into Montana, turns westward and then, northward into Canada, to empty itself into Kootenay lake, thence westward to its confluence with the Columbia. Between Kootenay lake and the Columbia it falls 350 feet in 25 miles, affording many valuable powers. The Slocan, Lardeau, Duncan and other tributaries of the lower Kootenay are large streams with considerable fall.

The Pend d'Oreille river falls into the Columbia near the International boundary. With the exception of about twelve miles near its mouth and the upper portion of the Flathead tributary, it lies wholly within the United States. It has a total drainage area of about 30,000 square miles. It has been gauged by the United States Reclamation Service just below the mouth of Priest river, the minimum flow recorded was 5,419 cubic feet per second, on February 3rd, 1905, the next lowest, 7,852 cubic feet per second, was taken on January 19th, of the same year. There are two power sites on this stream, near Waneta, B.C., which can be developed under heads of 75 and 50 feet, giving an estimated capacity of 65,000 and 45,000 H.P., respectively.

The Kettle, the Similkameen and their tributaries are also, affluents of the Columbia. While they contain numerous water power sites, the summer flow is considerably less than that of the glacier-fed streams.

Between the Skeena and the Fraser, no stream cuts across the Coast range. Consequently, in this area, all the rivers are short and steep, but on account of the very heavy precipitation on the west slope of the Coast range, they carry a heavy flow of water.

The Squamish empties into Howe Sound. It is 34 miles long and between Green lake and its mouth, a distance of 33 miles, falls 2,070 feet. Eight hundred feet of this fall occurs between Daisy lake and the mouth of the Minatch, a distance of nine miles, and 450 feet between the former and the "forks" of the Tcharkamish.

The Homathko river rises in the Coast range at an altitude of 3,530 feet and is 92 miles long. Between Waddington canyon, 29th mile from tide-water, and Murderers bar, 32nd mile, it falls 350 feet; between the junction with the west branch, 37th mile, and head of Great canyon, 40th mile, it falls 470 feet.

The Bellacoola river also rises in the Coast range and is about 60 miles long. Between the mouth of Driver river and Bentinck North arm, it falls 1,100 feet.