

At 125 miles from salt water, the canyon is reached. At this point the river flows through a fissure in a barrier of basaltic rock, which intersects its course.

The canyon proper is about five-eighths of a mile long and about 100 feet wide, with perpendicular walls from 60 to 80 feet high. The current through it is swift, and the water rough, but with a fairly large boat the only risk in running through it would be from contact with the sides, in which case one would be certain to come to grief. The passage through is made in from three to four minutes. About half way through the canyon there is a basin of about one-eighth of a mile in length and the same in width.

Below the canyon the river assumes its original character, the banks being low, sandy and gravelly flats. The river is shallow and rapid, with a few scattered boulders, which do not appear above the water, but are too high to allow of boats passing safely over them.

The canyon and its rapids are altogether two and three-quarter miles long. The last rapid, which is three-eighths of a mile in length, is a bad one, and we had to portage everything round it, and let our boat down with ropes from the shore. This rapid is called by the miners the "White Horse," from the fact that nearly all the water is white with foam. Several parties have run through the rapid on rafts, and one or two in boats, but few want to repeat the trip.

The total fall from the head of the canyon to the foot of the "White Horse" rapid, is thirty-two feet (deduced from the angles of elevations of each station from the preceding or succeeding one.)

At 142½ miles from the head of the inlet, the Tahkheena River flows into the Lewis from the south-west; at the junction it appears nearly as large a river as the Lewis.

The water of the Tahkheena is quite muddy, and it changes the color of the water in the Lewis for some distance below its entrance.

Looking up the valley of the Tahkheena from its mouth, many snow-covered mountains are seen; but in the immediate vicinity of the main river the surrounding hills and ridges are principally gravel and sand, covered with small poplar and spruce.

One hundred and fifty-five and a-half miles brings us to Lake Lebarge, which is 31½ miles long, and ranges from about two to four and a-half miles in width.

The general character of the river valley, from the canyon to Lake Lebarge, is hilly; the hills close to the river consisting mostly of sand and gravel bluffs, with rocks and mountains in the distance.

The easterly shore of Lake Lebarge is generally rocky and steep, in many cases we might say mountainous. The hills on the westerly shore are lower and are better timbered, and the rocks are of a more shaly nature.

The junction of Newberry River (Hoot-alingua of rivers) which flows from the south-east, and the Lewis, is reached at 219½ miles from tide water.

From the foot of Lake Lebarge to this point the Lewis is narrow and swift, in many places amounting almost to rapids; the valley is narrow with high rocky hills on both sides.

The water of the Newberry is a dark brown, while that of the Lewis is blue; half a mile below the junction two-thirds of the water of the combined streams is brown, and at a mile it is all brown, and hardly distinguishable from the water of the Newberry.

Thirty-four miles below the mouth of the Newberry and 253½ miles from salt water, the Big Salmon River enters the Lewis from the east. This river is about 100 yards wide and is shallow at the mouth, its size would not seem to indicate any great length. Looking up the valley of the Big Salmon a distant view is had of many mountain peaks covered with snow, the presence of which at this season of the year is proof of considerable altitude.

The Little Salmon River enters the Lewis from the north-east 36½ miles below the mouth of the Big Salmon; it is about 60 yards wide at its mouth and the water is shallow with very little current.