

of 1912, but the steadily increasing demand for electrical energy made it quite evident that still further extensions were necessary in order to keep abreast of the demand. The installation of the second unit marked the ultimate capacity of the initial development, and it was therefore necessary, before making further additions to the power house, to increase the storage capacity of the system, enlarge the flume, and install about two miles of pressure pipe line between the forebay reservoir and the power house. The storage increase was obtained by the construction of the Jordan River Dam, which was started in the summer of 1912, and in the spring of 1913, the construction of the addition to the power house was started. The flume and pipe line construction followed soon after, and the work was completed in October, 1914.

JORDAN RIVER.

The Jordan River flows into the Strait of Juan de Fuca at a point 37 miles west of Victoria. The direction of flow is roughly from north to south, but the actual course of the stream is very tortuous. It is a typical mountain stream flowing in a deep and precipitous valley, and the fall is rapid from the source to the mouth. The source of the main river is in Jordan Meadows, which lie about midway between the east and west coasts of the Island, and at an elevation of about 1,700 feet above sea level. Several large creeks join the river within the upper ten miles of its course, the principal ones being Bear Creek, Wye Creek and Alligator Creek. The total drainage area is about 75 square miles, the greater part of which lies at an elevation of over 1,200 feet above sea level, and this entire area is covered by a growth of heavy timber.

Hydrography.—The precipitation is heavy, probably averaging about 90 inches per year over the whole watershed. During the winter months there is a heavy fall of snow varying from 4 to 11 feet in depth in the higher parts, and this snow, protected by the heavy timber and underbrush, often remains on the ground until well on in June or July, thus forming a splendid natural reservoir.

In spite of the heavy rainfall and the snow, the river has a wide variation of flow between the summer and winter months. One flood of over 12,000 cu. ft. per sec. has been recorded at the point of diversion, and the river falls each summer until the average minimum flow does not exceed 25 cu. ft. per sec., and the lowest recorded flow at the diversion point was only 9 cu. ft. per sec.