

A Report on the Cowlitz River Hydrographic Survey

Made by the United States Engineers, September, 1908.

ABOUT the twentieth of September, 1908, it was decided, as the river was then at its lowest stage, to make a survey of the Cowlitz. The party which had been working on the Columbia River bars was ordered to proceed at once with the work.

The object of this survey was to obtain enough information so that an accurate map of the river could be made, and also to get an estimate as to the probable cost of dredging and maintaining a six foot channel, at low tide, from the mouth of the river to a point near Castle Rock, Washington.

The party consisted of the engineer in charge, F. C. Schubert; R. E. Hickson, instrument man; a recorder; plotter; leadsmen, two rodmen; a boat puller; deckhand and a cook. The full crew lived on the U. S. Quarter-boat No. 1, which was built to accommodate about ten men, having state rooms, sitting room, dining rooms and kitchen.

This boat is without power of its own and had to be towed from place to place; a gasoline launch, "The Dolly," being used for this purpose. Besides the launch and Quarterboat, three row-boats were taken in tow; two to be used while working and one to be left with the Quarter-boat. The instruments used on this work were a transit, level, stadia rods, steel tape, range poles and plumb-bobs.

Owing to the swiftness and shallowness of the stream, the "Dolly" was able to take the quarters only about half way up to Castle Rock. The boat was anchored here, and two of the small boats taken overland on a wagon to a point above Castle Rock, where the work was begun.

The first thing to be done was to run a traverse line over the Northern Pacific railway track to be used as a check on the river survey. When this was done, work was started on the river. A rod-man, recorder, leadsmen and boat-puller were put in the larger of the row-boats, and on the bank the instrument-man, chief of