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REPORT ON THE FISH LADDER AND NATURAL FISHWAYS
AT SKUTZ FALLS, COWICHAN RIVER

August 1937.

The fish ladder around Skutz Falls, Cowichan river, was constructed in the summer of 1931 but in the opinion of local fishery officers it has never given satisfactory results. The inefficiency of the ladder is mainly due to its location which is such that the water at the entrance of the ladder enters the river at right angles to the swiftest current making it exceedingly difficult for fish to make the first turn. (Figure 1 and plan) Moreover, at all times but extreme low water, the volume of water coming over the ladder is so great that few fish can possibly make the ascent.. As a result, in past seasons it has been observed that large numbers of salmon and other fish have attempted with little success to surmount the falls by struggling up small overflow streams entering the river below the falls and fish ladder, and it was suggested that these natural fishways be improved to allow the easy passage of fish. Accordingly, on July 16/37 arrangements were made with Mr. A. Gordon, Superintendent of the Lake Cowichan Forestry Camp, to make use of the services of a work gang of 5 boys with all necessary tools, during the period of July 19 - 22 inclusive.

Two natural side streams over the rock were selected for improvement. The larger stream flowed by way of an unobstructed channel through two large rock pools but entered the river in a thin sheet of water which was almost impassable to fish. The

smaller stream was shorter and more precipitous but lacked resting pools and carried water only at flood time. By the use of rock pick-axes and dynamite both passages were cleared and improved, the larger stream, by removal of rock and deepening of the channel to confine the water to one course, the smaller stream by lowering the intake level and providing resting pools at two points along its course. Steps in the construction work are shown in figures 2 and 3 and views of the completed fishways are shown in figures 4 and 5.

Thus, at the present time, four routes are now open for the ascent of fish :- a) by way of the falls which is passable only at ~~the~~ time of high water (fig. 6), b) by way of the fish ladder which, in its present state, is passable only at time of low water (fig. 7), c) by way of the minor fishway which is passable only during high water, and d) by way of the major fishway which is probably passable at all times. The arrangement of these various passage-ways is shown in the accompanying plan.

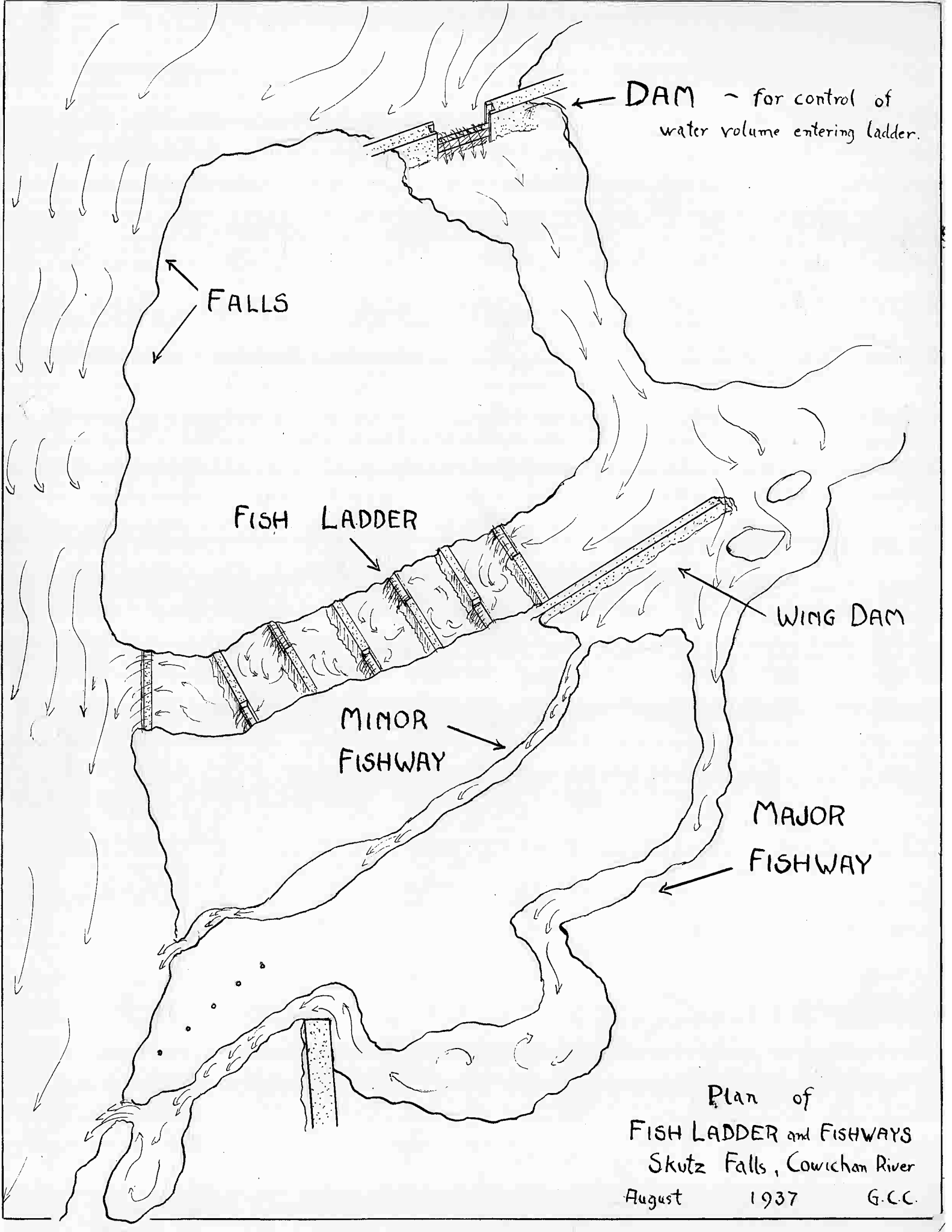
Although the fish ladder is in an unfavourable position, its efficiency can be much improved if steps are taken to control the amount of water flowing over it. The following is therefore recommended :-

a) that timbers be provided to fit the slotted gate-way in the dam above the fish ladder.

b) that some person, preferably a Fishery Guardian, be made responsible for the regulation of water flow through the gate-way by the insertion or removal of the timbers.

c) that a timber be inserted in the upper-most step of the ladder to reduce the flow of water over the ladder and at the same time to deflect more water over the adjacent fishways.

August 14/37
G.S. Leard



DAM - for control of water volume entering ladder.

FALLS

FISH LADDER

WING DAM

MINOR FISHWAY

MAJOR FISHWAY

Plan of
FISH LADDER and FISHWAYS
Skutz Falls, Cowichan River
August 1937 G.C.C.



Figure 1. Skutz falls and fish ladder at medium water, July 4, 1937.



Figure 2. Construction work on minor fishway.



Figure 3. Construction work on major fishway.



Figure 4. Looking down major fishway .



Figure 5. Looking down the minor fishway.

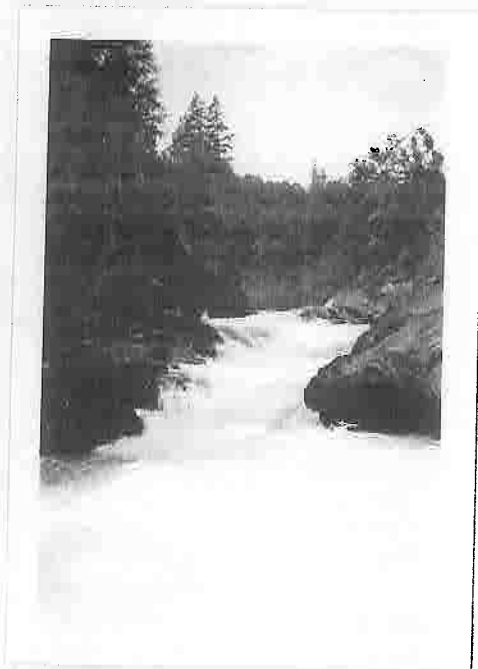


Figure 6. Skutz falls at low water.
July 20, 1937.



Figure 7. Fish ladder at low water.
July 20, 1937.