

SLIAMMON LAKE WEIR: OPERATIONS MANUAL

CONDENSED VERSION

FOR

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- DFO 33-16-9 SITE PLAN AND METALWORK
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1.0 OPERATION OF THE WEIR IN GENERAL

Water is added to or withdrawn from storage and the released downstream flows are controlled by the insertion or removal of stoplogs from the upstream fishway sill in concert with the downstream fishway sill. See the attached drawings for specific dimensions. See figure 1 for location.

2.0 STORING WATER AND RELEASING WATER

Beginning April 15th, water is stored in the Sliammon Lake by inserting stoplogs into all bays including the fishway and gradually increasing the lake level. It is important not to entirely shut off the flow into Sliammon Creek. The lake level can be increased gradually during relatively dry conditions or rather quickly in a couple of steps during a heavy rainfall or snowmelt. Once all stoplogs are in place, only the stoplogs within the fishway are to be adjusted. The adjustments are to maintain a head over the fishway weir of between 15 cm. (6 in.) and 23 cm. (9 in.). This is accomplished as follows -

- (a) When the head over the fishway weir drops to 15 cm. (6 in.), one 7.5 cm (3 in.) thick stoplog is to be removed from each fishway weir (upper and lower sills) thus increasing the head to 23 cm. (9 in.).
- (b) The lake level is allowed to lower until the head over the fishway weir again drops to 15 cm. (6 in.), this process is continued until all the available storage is utilized.

It will take about 9 days, more or less, between stoplog adjustments depending upon natural flows that are difficult to predict. Therefore, once weekly checks should be made to insure that the flows are adequate by making sure the head over the fishway weir is between 15 cm. (6 in.) and 23 cm. (9 in.). Whenever one stoplog is removed from the upper (upstream) fishway weir controlling the flow, one stoplog should be removed from the lower (downstream) fishway weir controlling the pool depth. Within the fishway, the upper weir should always have two more stoplogs than the lower weir to maintain a relative difference of 30 cm. (12 in.), see figure 2. The height of the stoplogs in the lower weir should never exceed the height of stoplogs in the upper weir. All stoplogs should be removed from all bays and the fishway by the first heavy rainfall near the end of September and stored for the winter.

3.0 DETERMINATION OF FLOW OVER THE WEIR

Flow over the weir can be determined, if desired, using the curves in figure 2. The head (H) in metres is determined by measuring the height of water above the top stoplog in the upstream fishway weir. If water is overflowing the entire structure from abutment to abutment then the head is determined by measuring the height of water above any regular bay uppermost stoplog, providing all bays are fully loaded.

Handwritten notes and symbols in the right margin, including 'D', 'SHA', 'K', 'D', 'L', 'D', 'ER', 'RL', 'EC', and 'TIO'.

FIGURE 21

RATING CURVE FOR SLIAMMON LAKE WEIR



