

INCIDENT NAME

Big Bar Landslide

INCIDENT LOCATION

North of Big Bar on the Fraser River

DATE PREPARED

July 20, 2019

Fisheries and Oceans

Pêches et Océans



UPDATES

- An off-channel holding pond is being constructed to assist in the process of transferring fish to a safe area upstream of the slide location. Once constructed, the fish will swim into the created channel, through a fish weir and into the holding pond dug into the sand bar. A fish weir is a one-way gate-like structure that allows the fish to swim through in order to reach the pond, but prevents the fish from swimming back out. From the pond, fish will be transferred with nets into aluminum fish transfer tanks. Two types of aluminum fish transfer tanks will be used having carrying capacities of 780 L to 2700 L in size. These tanks will then be attached via tether lines to helicopters to move the fish above the landslide location. This operation is intended to safely transfer the salmon beyond the partial blockage as quickly as possible. The holding tank is equipped with an oxygen diffuser in order to reduce stress on the fish while in transport. This is one of many options that experts are implementing with the aim of helping the fish bypass the partial blockage.
- Personnel are continuing seining operations, as shown in figure one, to corral fish in order to tag them. Tagging, shown in figure two, allows the Environmental Unit to determine the success rate of the fish as they progress upstream towards their final spawning destination.
- Scaling crews on the face of the slide are continuing to remove rock and debris. This is an important step in providing safe working conditions and preventing a future landslide from occurring. Scalers have engaged a blasting specialist to remove a larger piece of overhanging rock from the slide face. For more information regarding blasting operations, please refer to the July 19, 2019, update.
- The temperature in the Fraser River has been trending downward, which is beneficial for the health of the fish. In addition, the flood water flows which saw water levels rise significantly commencing July 5th are also subsiding. This has resulted in reduced debris being carried downstream and better overall water quality.



Figure 1. Seining fish for tagging purposes.



Figure 2. Fish being tagged.



Figure 3. Construction of off-channel holding pond.