Fish Monitoring at the Big Bar Landslide



Fisheries and Ocean

Hydroacoustic Monitoring

Hydroacoustic monitoring is being used to track the migration of adult salmon through the Big Bar slide area. Fisheries scientists use this equipment to track adult fish passing through a specific location through acoustic sound vibrations. The purpose of this tracking system is to monitor how many fish are successful in their migration past the Big Bar slide location. The hydroacoustic monitoring stations located at Churn Creek and the Big Bar Ferry have been operating since July 12. As a result of the flood waters, the acoustic monitors were removed for a brief period of time, but are now both back in the river and operational. Results of the hydro acoustic monitoring has varied due to the high sediment levels and debris in the Fraser River occurring as a result of the recent high water levels.



Hydroacoustic radio tower on the shores of the Fraser River.

Radio Tag Monitoring

In addition to the Hydroacoustic Monitoring, fisheries scientists are also using radio tags to provide additional information on the ability of chinook and sockeye salmon to migrate though the Big Bar slide area. To support radio tagging, fish are first captured through various means including the use of dip nets, seining and angling. Once captured, radio tags are attached to the dorsal fin of the fish. Tagged fish are then released back into the river to resume their upstream migration. The radio tags then emit a signal that is then received by a shore-based receiver located upstream of the Big Bar slide area. Resulting data, collected by the receiver, will then be reviewed and analysed by the fisheries scientists to calculate how many fish are naturally able to migrate through the Big Bar slide area.

Off-Chanel Holding Pond

A pond is being built downstream of the landslide area with a stream, leading the fish to the created pond. This setup will direct fish into the calm waters of the pond where the fish will be collected and moved beyond the partial blockage. The purpose of this operation is to displace the fish further upstream in a safe spot, away from the landslide, where they will be able to continue their migration and spawning journey.



Crew preparing to start seining by boat.



Radio tagging station near Big Bar Ferry.

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