What is the Big Bar landslide?

On June 23, Fisheries and Oceans Canada (DFO) was notified of a landslide near Big Bar that created a blockage and a five metre waterfall in a section of the Fraser River. Reviewing historic satellite imagery confirmed the event took place sometime in late October/early November, at a time when this isolated part of the river would not have been actively monitored. Based on the magnitude of the obstruction, salmon migrating upstream were impeded from naturally proceeding beyond this point.

A Unified Command Incident Management Team was established in Lillooet, on June 29. This Unified Command structure is an innovative government-to-government-to-government collaboration between federal, provincial, and First Nation governments. Operations are led by Incident Commanders from DFO, Forests Lands Natural Resource Operations and Rural Development, and the Fraser River Aboriginal Fisheries Secretariat. Incident Command is guided by a Joint Executive Steering Committee (JESC), which also has federal, provincial, and First Nation representation. This committee provides strategic direction and approvals for the incident management team. A First Nations Leadership Panel has also been formed to provide guidance to the JESC and makes decisions via consensus.

What is the Unified Command Incident Management Team doing?

Monitoring
- Hydroacoustic monitoring is being used to track the migration of salmon and to monitor how many fish have successfully migrated past the Big Bar slide location.
- Fisheries scientists have also used radio tags to provide additional information on chinook and sockeye salmon to migrate through the Big Bar slide area.

Establishing Natural Fish Passage
- Engineers, geologists and scaling personnel performed controlled blasts and are manipulating boulders on the edge of the river to create natural fish passage. The goal is to allow salmon to avoid the strong currents and bypass the obstruction to continue their migration.
- On September 1, natural passage was partly restored, with more than 30,000 fish swimming past the landslide in a single day. Work to maintain and improve the passage is ongoing.

Transporting Fish
- More than 60,000 salmon were captured using beach seining at multiple sites as well as a fishwheel. Fish were then transferred to oxygenated holding tanks and relocated upstream, past the obstruction, via helicopter.
- 177 sockeye were transported to a rearing facility at the Cultus Lake Salmon Lab (Chilliwack) to preserve some portion of this year’s class for the Early Stuart population, until we have increased certainty that natural migration can continue.