







## Pilot Enhancement Strategy for Early Stuart Sockeye at Big Bar Landslide

Since the Big Bar landslide Unified Command response was activated our primary focus has been directed to re-establishing full fish passage. While work has been ongoing to safely secure the site, multiple strategies to support this goal have been assessed and implemented. Some of these concurrent actions are to manipulate the slide site itself, while others are to transport fish above the slide.

Many of the Early Stuart Sockeye have arrived at the site of the landslide, and additional sockeye runs will start arriving soon. This creates a brief window of opportunity to confidently collect the Early Stuart before they are mingling with significant numbers of other sockeye stocks.

As part of a pilot program, we are working towards a target of transporting up to two hundred Early Stuart Sockeye to a rearing facility at the Cultus Lake Salmon Lab, in Chilliwack. The purpose of this pilot strategy is to preserve some portion of this year class for the Early Stuart population, until we have increased certainty that natural migration can continue.

On arrival, the salmon will undergo DNA analysis to confirm their stock origin and then be transferred to holding tanks with cool, calm water until mature.

The pilot project has the potential to yield up to 300,000 eggs which will then be incubated to produce salmon fry. Options are being explored and could range from fry being released back to the Stuart Lake system as part of stock enhancement, or raised to maturity to contribute to future generations of this population.

The Big Bar Landslide Incident Command would like to acknowledge the contribution of a member of the Yinka Dene who proposed this salmon enhancement strategy for this Early Stuart Sockeye run that are currently affected by the Big Bar landslide, and for the decisions made by the First Nations Leadership Panel to endorse this project. The response to the Big Bar Landslide is a collaboration between the Federal and Provincial governments and First Nations.

## **Quick Facts:**

- Early Stuart Sockeye are one of the salmon stocks of concern in the Fraser River system.
- Each female salmon carries approximately 3,600 eggs.
- The transport trucks will be filled with cold, oxygenated water and transport will occur at night to reduce the stress on the salmon.
- Early Stuart Salmon migrate to the Stuart Lake system near Fort St. James, British Columbia.
- A number of factors can affect the success of salmon migration including water temperatures and river flow.

## **Contact Information**

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