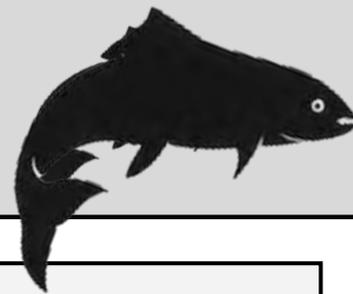


BIG BAR LANDSLIDE UPDATE

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ONGOING ONSITE OPERATIONS



PICTURED: A side view of the fishway and the Whooshh Passage Portal™, with tubes running at the top of the photo.

This week marked two key milestones on the Big Bar landslide response efforts:

1. As of June 21, the Whooshh Passage Portal™ is operational.

The prime contractor, Peter Kiewit Sons ULC, completed work this past weekend on the installation of the remaining Whooshh™ system components. All tubes were fed through to the termination hanger, and the system underwent extensive testing over the week. No fish have been transported through the system to date as few have arrived at the site. This two-tube system will be replaced with a higher capacity six-tube system in July.

2. On June 21, the initial salmon – a male and a female chinook – were captured within the concrete fish ladder.

Both salmon were then transported by truck to the French Bar Creek holding facility for radio tagging and DNA sampling. They will be kept there until genetic sampler suits determine if they should serve as broodstock, providing eggs and milt for fertilization, or released to continue their migration. To ensure fish health, modifications are being made to improve flow conditions and manage sediment accumulation in the concrete fish ladder.

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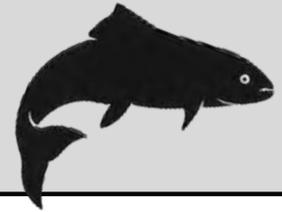
FISH MONITORING UPDATE

To date, approximately 50 fish, all chinook, have been radio tagged.

The Churn Creek sonar station, located 40 km upstream of the slide site, has detected seven fish thus far. Preliminary data suggests they likely migrated naturally past the slide site around June 14 when water levels dropped to 4,000 cms. The current Fraser River flow rate at the Big Bar ferry is approximately 6,070 cms.

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WHAT IS A FISH WHEEL AND HOW DOES IT WORK?



PICTURED: The fish wheel was floated into position this week downstream of the slide site, on the left side of the river.

Emulating the traditional First Nations fishing method of dip-netting, fish wheels are effective in various water levels and conditions due to their mobility and adjustability. While the “nature-like” fishway and the Whooshh Passage Portal™ remain the primary methods to transport salmon over the slide, this supplementary technology will support tagging activities and, if required, collect fish for ‘truck and transport’.

With mechanics similar to a watermill, the fish wheel is a selective harvest mechanism outfitted with framed baskets to trap, carry and direct fish into live holding tanks. The flow of natural river water through the holding tanks maintains a constant oxygen supply for the salmon. This device can be also be designed and modified based on the location it will be operating.

A First Nations crew was onsite last week to assemble the device. Over the weekend, the unit was posi-

tioned to float on pontoons and is now operational. Fish will be caught in the baskets and carried to bins where a team of First Nations and DFO fisheries technicians will swiftly radio tag each one before release back into the Fraser River. This technology will also allow the team to collect high priority chinook for ‘truck and transport’ to the French Bar Creek holding facility. The team will refine the fish wheel throughout the summer to ensure its effective operation.

BIG BAR LANDSLIDE RESPONSE IMAGES

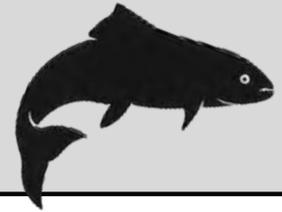
Images of the work underway at the slide site can now be viewed under the “Big Bar Landslide 2020” photo album on the Government of BC’s [Flickr channel](#). Check back often as we will update the album regularly. Images from last year’s response efforts can be found under the [“Big Bar Landslide 2019” album](#).

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RECOGNIZING OUR FIRST NATIONS PARTNERS – TODAY AND EVERY DAY

June 21 is National Indigenous Peoples Day. Recognition of this day is especially significant when reflecting on the work over the last year on the Big Bar landslide because of the important contributions of First Nations.

Since the initial reporting of the slide on June 23, 2019, the response effort has shared an intimate and interdependent relationship with the region's First Nations communities. The landslide occurred on the traditional territories of High Bar First Nation (HBFN), Stswecem'c Xgat'tem First Nation (SXFN) and St'at'imc Nation. These First Nations, as well as many others, have been involved from the outset with the slide response and remain an integral part of the planning, operations, communications and decision-making processes today.

Direct First Nations involvement on the response continues through: the **Joint Executive Steering Committee (JESC)**; the **First Nations Leadership Panel (FNLP)**, which guides the First Nations JESC representatives; and, the **Upper Fraser Fisheries Conservation Alliance (UFFCA)**, which provides oversight and support to a series of initiatives occurring in the Upper Fraser in response to slide.



PICTURED: Northern Secwepemc Tribal Council fisheries staff, along with a Swift Water Rescue crew worked to install the picket weir for the off-channel holding pond in 2019.

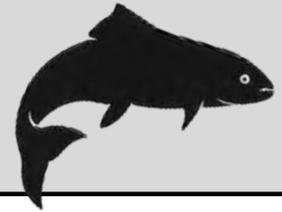
In addition, the **Fraser Salmon Management Council (FSMC)** manages and administers First Nations contracts and engagement support funds, provides oversight of the project team and communications, and leads the First Nations engagement group.

In the field, **St'at'imc Eco-Resources** is the First Nations liaison and project coordinator for fisheries associated activities. **Splitrock Environmental** provides technicians and developed an environmental monitoring plan. **HBFN** leads the archaeological work and other activities with **SXFN**, which also provides safety and security services upstream for the sonar monitoring activities. Both Nations remain key participants in the work underway and are members of the JESC.

The Big Bar Landslide Response team would like to thank the numerous First Nations fish technicians, firefighters, scientists, safety officers, contractors, administrators, project managers, project directors, executives and leaders who contributed to the response effort over the last year. As work proceeds to restore sustainable, full passage at the slide site, we look forward to continuing this collaboration with our First Nations partners and the Government of British Columbia.

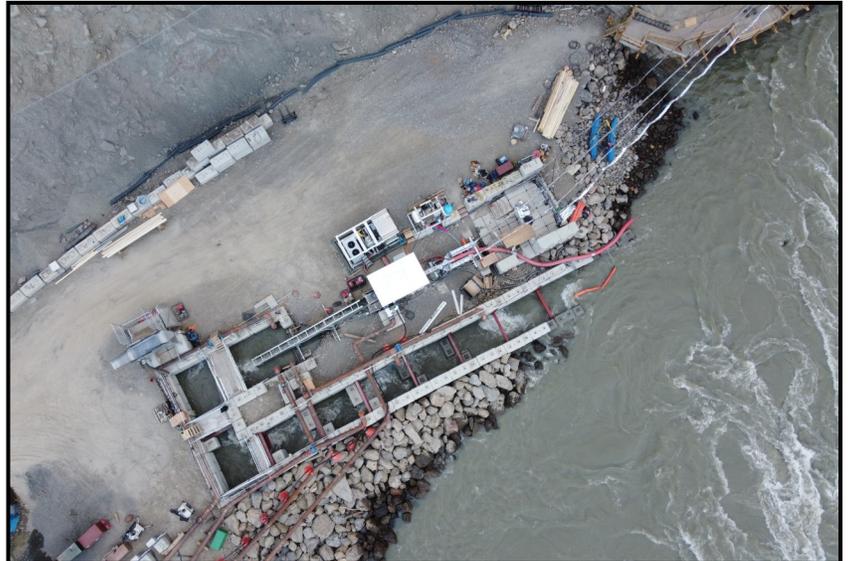
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TOP LEFT: The tubes for the Whooshh Passage Portal™ are suspended above the working platform on secure hangers attached to the canyon wall.

TOP RIGHT: An overhead shot of the concrete fish ladder and the Whooshh Passage Portal™, which was completed this week.

BOTTOM: A side profile of the fish wheel.