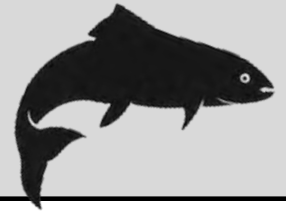


BIG BAR LANDSLIDE UPDATE

JANUARY 8, 2021

 Response Webpage

 BC River Forecast



WORK ONSITE PROGRESSES AS RIVER LEVELS DECLINE



LEFT: Two excavators drilling and breaking up large boulders into rip rap material for use along the access route.

RIGHT: An excavator removing existing rip rap material from West Beach during a night shift operation.

Construction is progressing on a number of fronts at the Big Bar landslide site as Kiewit crews and contractors work into the night to get ahead.

This past week saw the blasting, excavation and separation of rock required for the permanent fishway foundation.

Crews also blasted and stockpiled base material for future road upgrades being overseen by the Province of British Columbia. These improvements are vital for the 2021 “trap and transport” program, co-led by Indigenous partners.

Work on rock fall mitigation continues following a delay due to high winds and freezing weather. Crews removed scaling debris caught in the protection canopy and assembled rolls of metal mesh that will be airlifted into place to blanket the cliff face. Another team scanned the main cliff face with LiDAR to measure differential movement and slope stability.

Surveyors were also on site, reviewing private land boundaries and the park boundary.

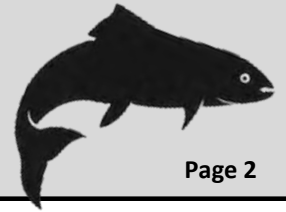
UPDATE CONTINUES ON PAGE 2

BIG BAR LANDSLIDE UPDATE

JANUARY 8, 2021

 Response Webpage

 BC River Forecast



Page 2

WORK ONSITE PROGRESSES AS RIVER LEVELS DECLINE (CONT'D)



TOP: Larger boulders were blasted and broken up into manageable rip rap material for placement.

BOTTOM LEFT: Rip rap material being loaded onto haul trucks to extend and improve the temporary road beds.

BOTTOM RIGHT: Rip rap material being placed to build a temporary embankment on West Beach.

UPDATE CONTINUES ON PAGE 3

BIG BAR LANDSLIDE UPDATE

JANUARY 8, 2021

 Response Webpage

 BC River Forecast



Page 3

120,000 EARLY STUART SOCKEYE FRY PONDED IN DECEMBER 2020

On December 21, DFO fisheries technicians “ponded” approximately 120,000 of the 2020 brood year Early Stuart sockeye fry at the Inch Creek Hatchery.

Technicians moved the fry from incubation trays to larger rearing tubs, where they will continue to grow in the coming months. In late spring, half will be released into their natal streams as fed fry; the other half will be released as fall fry.

The brood collection of Early Stuart sockeye last year is a key step towards ensuring the long-term survival of vulnerable fish populations.



RIGHT: Early Stuart sockeye fry were transferred from an incubation tray to a basin.



BOTTOM LEFT: A sample of the fry were weighed and counted to calculate the required amount of feed.

BOTTOM CENTRE: The fry were then transferred to an outdoor rearing tub until ready for release later in 2021.

BOTTOM RIGHT: Water flows in the tubs were lowered for the young fry but will be increased as the fish grow and require greater levels of dissolved oxygen.

UPDATE CONTINUES ON PAGE 4

BIG BAR LANDSLIDE UPDATE

JANUARY 8, 2021



Response Webpage



BC River Forecast



Page 4

PLANNING UNDERWAY FOR 2021 BIG BAR EMERGENCY CONSERVATION ENHANCEMENT OPERATIONS

In preparation for the 2021 enhancement program, the response team conducted a thorough review of the 2019 and 2020 operations. Building on these previous efforts, the plans for the 2021 program are being refined in advance of the salmon migration season.

This year's program has four distinct components, each led by a dedicated task group:

- The **Enhancement Planning** team provides overall direction and coordination of operations;
- The **Enhancement Facilities** team reviews hatchery facilities to ensure they are able to support the 2021 program with or without further upgrades;
- The **Downstream Adult Brood Capture and Transportation** team designs the fish capture system, determines the location and transport mechanisms required to safely capture priority salmon stocks near Big Bar and transport them either for release above the slide site or to a hatchery facility; and,
- The **Natal Stream Capture** team identifies options for the collection of brood stock from those populations most impacted by the slide to augment enhancement efforts. Considerations in identifying the most at-risk stocks include biological concerns, conservation status and logistics, such as transportation and facility capacity.

Each task group consists of Indigenous technical experts from High Bar First Nation, Stswecem'c Xgat'tem First Nation, Takla First Nation, Nak'azdli Whut'en First Nations, Lheidli T'enneh First Nation, T̓silhqot'in Nation, the Secwepemc Fisheries Commission and the Upper Fraser Fisheries Conservation Alliance, plus DFO staff, many of whom have supported the landslide response since 2019. Their roles include monitoring and assessments, planning release strategies, managing fish health, organizing crews and overseeing equipment.

The emergency enhancement program remains a critical aspect of the Big Bar landslide response. It supports the conservation and recovery of impacted salmon populations, and each task group will play a key part within the overall strategy.



Canada