FISH HABITAT ENHANCEMENT PROJECT

Peace River channel contouring and side channel enhancement

Water levels in the Peace River fluctuate and this can periodically cause some areas to become dewatered.

In order to support fish and fish habitat, BC Hydro will be undertaking work to enhance fish habitat in select areas of the Peace River near the Site C dam site. Work is anticipated to start in spring 2018.

This map illustrates the fish habitat enhancement areas in relation to the dam site and the community of Old Fort.

This fish habitat enhancement is described in the Site C **Fisheries and Aquatic Habitat Management Plan** and meets conditions of the Site C project's Environmental Assessment Certificate and federal decision statement.

The planned fish habitat enhancement work will occur in side channels of the Peace River between the dam site and Old Fort, and the gravel bars in the main channel of the Peace River will be contoured (reshaped) in the same area. All necessary permits and authorizations will be obtained before the work commences.

The proposed method for this work is to use 'cut and fill' excavation in shallow water habitats that are at risk of being dewatered. Shallow habitats will be excavated to below the water elevation that occurs at low flows, and this material will be used to fill or 'smooth out' shallow habitats that are at risk of dewatering near shore. Riprap has been specified for placement on channel slopes in some areas and on the shore in some areas to prevent further bank erosion. Please see the Old Fort cross section on page two for a graphic of the cut and fill and shoreline protection methods.

Anticipated timeline

Works on the south bank: spring 2018 to 2019

Works on the north bank: 2019 to 2020

What to expect

- This fish habitat enhancement will involve the use of excavators, bulldozers and dump trucks working within and adjacent to the Peace River and side channels. Crews and equipment will access these locations using temporary access routes from the Site C dam site.
- Fish enhancement work will occur on the Peace River shoreline in front of several properties in Old Fort.
- Increased levels of noise, dust and light may be experienced in the vicinity of Old Fort.

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- There may be temporary impacts to private property access to the river during shoreline and in-river construction activities. Property owners will be notified of any access restrictions.
- Once the works are complete, the increased water depths are expected to facilitate boating access in the Peace River and side channel areas activities.

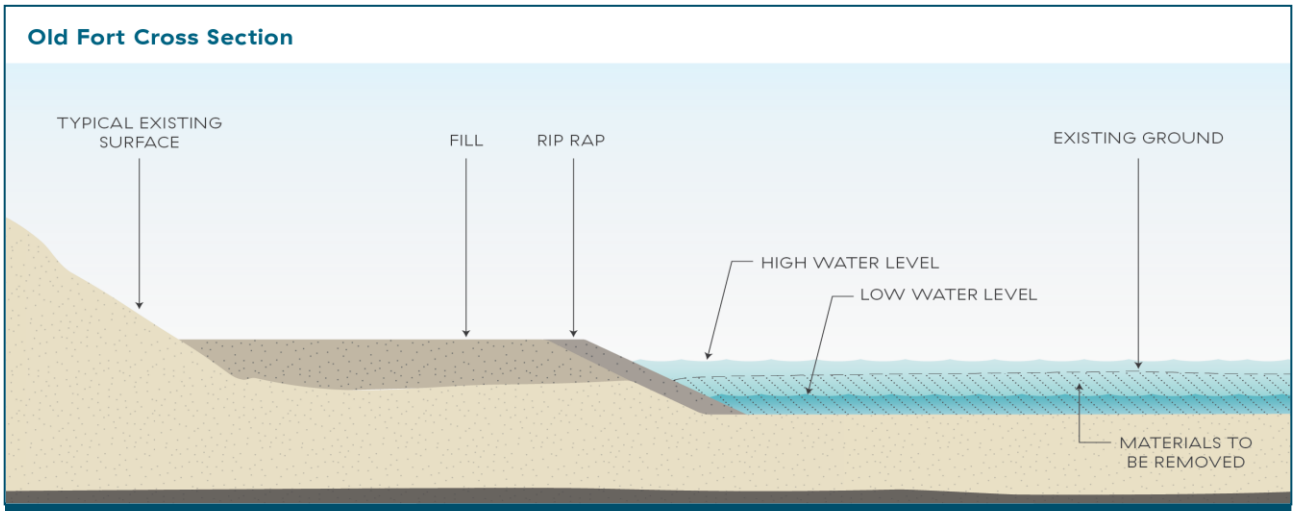
Supporting fish and fish habitat

The main channel and side channel areas included in this enhancement project are currently used for rearing and feeding by several fish species, including mountain whitefish, bull trout, Arctic grayling, rainbow trout and walleye. Side channels provide refuge during high river flows and provide a unique habitat that is different to the main channel of the Peace River. The side channels are, however, at risk of becoming dewatered when river levels fluctuate, which can affect fish species that inhabit the side channels.

The objectives of the fish habitat enhancement project are to:

- Increase the amount of permanently wetted habitat for fish, as well as algae and aquatic invertebrates that provide a food source for fish.
- Reduce the extent of dewatering in shallow habitats.
- Maintain wetted channel areas by enhancing side-channel connectivity with the main channel of the Peace River.
- Provide a diversity of fish habitat in the side channels by placing boulders and woody debris that will support various life stages of fish.

Fish use of the enhanced areas will be monitored and is expected to increase after this work is completed.



Old Fort cross section: This cross section shows the high and low water levels, a typical scenario of fish enhancement material fill and removal and shoreline protection.