

GMSMON-8

Peace River Side Channel Response

Monitoring fish and habitat response to side channel enhancement

The Peace Water Use Plan Committee recommended a study to determine the effects of high river flow conditions as a result of spillway operations at Peace Canyon Dam (Dam) on downstream side channels. The study is to be triggered by spills leading to a total Dam discharge exceeding 2,500 cms or higher for two days or longer.



Questions We Wanted to Answer

 What effects do spills have on the physical state and fish habitat use of the Peace River side channel habitat?



Study Update

- A 2012 study determined that there were relatively minor changes in the fish community at the study site.
- The sediment analysis determined that high flows resulted in movement of fine river bed materials. Larger gravel and stone layers did not move.

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Lessons Learned

 Peace Canyon Dam flows less than 4,000 m³/s are unlikely to have sufficient energy to move cobble in the Peace River channel bed.



Key Findings and Next Steps

- It was recommended not to repeat this study unless flows from the Peace Canyon Dam exceed 4,000 m³/s for a period of weeks or more.
- Further work on this study has been suspended in acknowledgement of the ongoing development for the Site C hydroelectric project. Lessons learned will inform future monitoring studies undertaken by BC Hydro.