

Forest Practices & Fish Habitat Webinar, February 23, 2021

Additional Questions & Responses

Have you ever looked at the Sumas River for possible fish habitat?

The FPB has not previously examined fish habitat in the Sumas River as it is mostly outside of the Crown forest land base. You may want to search the Ecological Reports Catalogue for available information <https://a100.gov.bc.ca/pub/acat/public/welcome.do>

How often do provincial cutbacks and forestry roads get assessed and managed for erosion and sediment? Are there long-term standards in place?

The Forest and Range Evaluation Program undertakes some regular assessment of the risk to water quality from stream crossings. Learn more by clicking the link:

<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/integrated-resource-monitoring/forest-range-evaluation-program/frep-monitoring-protocols/water-quality>

Are you aware of the landslide that recently occurred in the mid-Chilliwack river, resulting in heavy clay sediment deposits initially, and to a lesser degree thereafter? How do we action something like this when our salmon alevin are present and our winter steelhead are just ramping up? Do you know if any action is or can be taken to mitigate loss on a slide such as this?

This was a natural slide to the best of my knowledge. Thank You.

The hyporheic zone encompassing historic stream meandering with established pathways of subsurface water flow has been found important filtering for water quality. Has the hyporheic zone been recognized for planning?

The Forest and Range Practices Act does not include specific requirements around planning for the protection of the hyporheic zone. However, it is likely that the zone has been well considered in stream restoration projects. You can read much more about the zone in chapter 13 of the Land Management Handbook 66:

<https://www.for.gov.bc.ca/hfd/pubs/docs/lmh/Lmh66.htm>

Has there ever been considered to develop small-scale watershed resource regions that link activities within a watershed (pseudo-government) linkage to support oversight of cumulative effects and fish passage/usage and long term effectiveness (biodiversity & resiliency)?

There are lots of different proposals regarding renewed “watershed governance” in BC. This is outside the FPB mandate but if you are interested take a look at

<https://poliswaterproject.org/polis-research-publication/blueprint-watershed-governance-british-columbia/>

The Memekay was Low risk on all factors but came out Moderate on Channel condition. Any ideas why?

Yes. Forest harvesting in the Memekay watershed dates back almost 100 years and it is likely that the extensive history of forest harvesting has impacted the channels. This issue is discussed on page 16 of the Board's report <https://www.bcfpb.ca/wp-content/uploads/2020/05/SIR52-Fish-Habitat-Conservation-Part2.pdf>

Could merchantable timber left in the bush be used as erosion control by placing on slopes to slow above surface water and sediment?

Absolutely – this is a tried-and-true method of slowing surface water velocity, thereby reducing the forces of soil erosion. However, there is no need to use merchantable timber to do this. There is plenty of non-merchantable timber available after harvesting.

Were any of these watersheds affected by the (2017/18 wildfires and, if so, what was noticed as the scale and impact of sedimentation resulting from this disturbance?

Yes, most watersheds had a history of wildlife. The Owen watershed had the most recent significant wildfire and we suspect that the channel condition (rated as moderate) was a direct result of the fire. Areas affected by wildfire lose the ability (in the short term) to retain snowfall during the snowmelt period, often resulting in larger peak flow events leading to channel erosion.

With climate change and increased fire and flood risk, how will this alter upper watersheds, stability and aquatic ecology?

Overall climate change risks will increase the risks of flooding. Exactly how much depend very much on the region as each area has different predicted impacts from climate change.

See the Preliminary Strategic Climate Risk Assessment for more detail:

<https://www2.gov.bc.ca/gov/content/environment/climate-change/adaptation/risk-assessment>

Just wondering if Derek Tripp felt whether things have changed substantially over the past two decades (post-Code)?

The investigation team talked about this. In our view, over the past 25 years, significant improvements have been made in fish passage and protecting riparian areas. But we also felt that there has been a decline in the protection of fish habitat related to roads.

With salmon species facing increased pressures throughout their life cycles, and many populations in B.C. listed as at risk federally, what is the FPB's stance on the creation of a provincial species at risk act and legislation in B.C.?

Species at risk management and legislation is outside our mandate. However, we are currently working on a report that examines how well the Forest and Range Practices Act addresses species at risk management, using Northern Goshawk as a case study. Stay tuned!

Assessments often are done at the cutting permit and cut block level and practices appear to be good and have little effect on the streams immediately involved. However, most major damage is often happening in the mainstem where the cumulative effects result in streams blowing out on a regular basis. How are you assessing the negative cumulative effects of the equivalent clear-cut area being much too high in many of the tributaries thus causing major damage to fish habitat in the lower watershed?

The tool most commonly used in B.C. for assessing overall changes to the hydrograph, and impact on watersheds as a whole, is the Watershed Assessment. Where conducted, these do look at the risk of change to the hydrograph and potential channel risks, as well as other risks.

Currently, these are most commonly applied in community watersheds and are only occasionally used in other types of watersheds.

Also, the province is now starting to complete cumulative effects assessments for water, across some parts of B.C. The recently completed Kettle River Watershed CE assessment is a good example.

https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/cumulative-effects/kootenay-boundary-region/kb_watershed_kettle_river_jan2021.pdf

How are Licensees held responsible over time once they either leave or go broke?

The obligation to maintain roads is legally binding until the road is transferred to another licensee or the road is deactivated. If a licensee goes bankrupt the liabilities usually revert to the province.

Is the government providing extra funding to Forest Districts to address ongoing issues of resource roads and non-status roads? It appears that unless funding is provided the proposed repair or maintenance works can not be done.

See the recent report by BC's Auditor General for an assessment of the management of Forest Service Roads.

<https://www.bcauditor.com/pubs/2021/management-forest-service-roads>

Road maintenance is key to managing sediment - there does not appear to be any monitoring of road maintenance going – who is charged with ensuring road maintenance is properly carried out?

The licensee first must periodically inspect roads and bridges. Also, the Ministry does some inspections through District engineering staff and Compliance and Enforcement Branch. However, it is not clear how often those inspections occur or if they are effective.

Do you have a report on culverts in the Horsefly River Watershed? Could I get a copy, please?

All available assessments – including a fish passage for the Horsefly – can be found by searching the Ecological Reports Catalogue. <https://a100.gov.bc.ca/pub/acat/public/welcome.do> Just enter the word “Horsefly” in the search box.

Is full remediation of damaged sites part of the restitution process, or can a licensee weigh the cost of a ticket with the cheapest practices and not have to deal with proper remediation?

Generally, if a licensee is found to have violated FRPA, they must pay the cost of fixing the damage, as well as a penalty.

Has the FREP report from 2008-2017 saying that about 81% of culvert structures in B.C. represented a barrier to fish passage largely been the driving factor for moving towards the use of bridge structures in forestry, or what sort of changes in FRPA might happen with this finding?

There were numerous reports over a decade documenting culverts that created barriers to fish passage. It appears that many licensees have concluded the most effective and reliable way to ensure fish passage is to build a bridge.

How does your Board deal with the Professional Reliance model where we have company employees (professionals) approving plans and actions that may cause impacts to fish and wildlife?

If we find a situation where we believe a resource professional acted improperly, we report that to the appropriate association (Foresters, Biologists, Engineers). Those associations are responsible for assessing if the actions were appropriate or not.

We are experiencing sediment and now have no natural spawning. There is a road sediment issue doing more damage to non-timber values than timber values by many times. When will a solution be implemented to mitigate this with no watershed planning and monitoring data to this active ongoing issue? We monitor and are waiting for a spawning bed rehab initiative but are waiting for survivable water quality for trout stocks.

For local issues, the best action is to talk to the licensee and the local Ministry office.

Do you share your findings with DFO, so that they can be alerted to an area that may have too much sediment in the water?

Because all our reports are made available publicly. DFO and other agencies such as the Compliance and Enforcement Branch have access to our results and can decide if further action is needed.

I need to know if these guidelines are specific to forestry land or do they extend to private land that we have so much of on Vancouver Island?

There is a different set of standards for privately managed forest land; see:

<https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/private-managed-forest-land>

Any standardized pre- and post-watershed assessment monitoring designs other than FHAP you would suggest?

Numerous post-harvesting monitoring designs have been used. Not aware of any standardized approach for assessing watersheds pre- and post-disturbance.

Any problems noted with stream classifications?

Generally speaking, the system of classifying streams has stood the test of time and the Board does not find that many instances where forest licensees have misclassified streams – but it does happen. One of the challenges in the classification system is deciding when a watercourse meets the criteria of being a stream.

If you have any questions, please reach out to Kevin Kriese from the BC Forest Practices Board at kevin.kriese@bcfpb.ca.