

COLUMBIA SHUSWAP REGIONAL DISTRICT

555 Harbourfront Drive NE, PO Box 978, Salmon Arm, BC V1E 4P1 T: 250-832-8194 | F: 250-832-3375 | TF: 1-888-248-2773 | www.csrd.bc.ca

June 28, 2024



Re: Post Wildfire Debris Flow Hazards - Resident Safety

Columbia Shuswap Regional District (CSRD) has disclosed information that relates to you in compliance with the requirements of section 25 of the Freedom of Information and Protection of Privacy Act ("Act"), which requires a public body to disclose, without delay, information:

- (a) about a risk of significant harm to the environment or to the health or safety of the public or a group of people, or
- (b) the disclosure of which is, for any other reason, clearly in the public interest.

On June 11, 2024, BGC Engineering Inc. released a Post-Wildfire Flood, Debris Flood, and Debris Flow Risk Assessment to the CSRD. This final report can be found on the CSRD website at www.csrd.bc.ca.

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Wildfires, especially those of the size and scale of the Bush Creek East Wildfire, change the soil, vegetation, watercourses, and other natural features of the area. This can significantly increase the risk of landslides, flooding, rockfall and erosion.

We are writing today to advise you that your property/properties fall(s) within a geotechnical hazard area as identified in the recent report conducted by BGC Engineering Inc. As your property is/properties are situated in an area that is susceptible to steep creek hazards (which include debris flow and debris flood), rockfall, earth and debris landslide, washout of culverts or bank erosion, there are potential risks associated with your property/properties.

The assessment conducted by BGC Engineering Inc. is intended to help identify the risk of damage or injury to your property and its occupants, as well as to protect the public interest and the environment. The report is not intended to replace a site specific detailed post-wildfire risk assessment.

As the owner of the property, you are responsible for the maintenance and safety of your property and we advise you to consult with a qualified geotechnical engineer for further analysis, as well as before undertaking any construction, alteration, or improvement on your property that may affect the stability or performance of the soil and rock.

The CSRD is committed to providing you with the information you need as you start your efforts to ensure your property is safe. Please let us know if you have any questions and we will work to provide answers to you as soon as possible.

The decision to disclose this information was made by Derek Sutherland, General Manager, Community and Protective Services.

Should you have any questions about the disclosure of this information, please contact Tom Hansen, Emergency Program Coordinator, (250) 833-5910 or <a href="mailto:theatengeside

Yours truly,

COLUMBIA SHUSWAP REGIONAL DISTRICT

Per:

Derek Sutherland

General Manager, Community and Protective Services,

cc: Office of the Information and Privacy Commissioner

AREA 40B - BLUE RISK 1:100,000 OR LESS

Table S-1 Hazard zone definitions.

Post- Wildfire Hazard Zone	Description	Potential Damages	Estimated annual life loss risk level ¹
Red	Deep (> 1 m) and fast-moving (>2 m/s) debris flows are expected to reach buildings.	Building damage may cause fatalities.	Risk may exceed 1:1,000
Orange	Deep and fast-moving debris flows are expected to occur but are not expected to reach buildings unless volumes or inundation areas are greater than assessed.	In the unlikely event of inundation, building damage may cause fatalities	Risk is likely between 1:1,000 and 1:10,000
Yellow	Floods and debris floods (including sediment and water) may reach buildings.	Building damage is unlikely to cause fatalities; economic damage is likely.	Risk is likely between 1:10,000 and 1:100,000
Blue	Buildings are unlikely to be affected by sedimentation or flooding unless volumes or inundation areas are greater than assessed.	In the unlikely event of inundation, building damage is unlikely to cause fatalities; economic damage is possible.	Risk is approximately 1:100,000 or less

Note:

 BGC estimated risk assuming wood-framed building structures. In other jurisdictions in Canada, an annual life loss risk of 1:10,000 or less from natural hazards is considered tolerable for existing development.

In total, BGC assessed 73 watersheds susceptible to post-wildfire debris-flow, debris-flood, and flood hazards as follows:

- Red Zones: 25 watersheds have alluvial fans classified as red hazard zones where
 post-wildfire debris flows could generate life safety risks to individuals in buildings. Of
 these, 11 watersheds with downstream red hazard zones have existing buildings where
 life loss risk is estimated to exceed levels considered tolerable in other Canadian
 jurisdictions by a factor of 10 or more.
- Orange Zones: 17 watersheds have alluvial fans classified as orange hazard zones. In these areas, BGC estimated life-loss risk levels from post-wildfire debris flows are similar to, or slightly above, risks considered tolerable in other jurisdictions in Canada.
- Yellow Zones: 25 watersheds have downstream yellow hazard zones. In these areas, BGC expects the primary risk to be economic damages to buildings and infrastructure (roads, culverts, etc.). Life loss risk is estimated to be within levels considered tolerable in other Canadian jurisdictions.
- Blue Zones: 10 watersheds have downstream blue hazard zones. In these areas, BGC estimated life-loss risk to be within levels considered broadly acceptable in other.

BGC Engineering i