



Hazard risks must be reviewed as part of the building permit process

For proposed development of lands within floodplains and other potentially hazardous areas, the SLRD building inspector may require the owner of the land to provide a site specific geotechnical report as per s.56 of the *Community Charter*. This geotechnical report must be based on the various relevant studies that are available.

Recently, the Pemberton Valley Dyking District (PVDD) was awarded funding from the Province of BC through Emergency Management BC (EMBC) in order to prepare the *Lillooet River Floodplain Mapping Report*. The study was prepared by Northwest Hydraulic Consultants Ltd. and was finalized in November, 2018. Accurate floodplain mapping is essential to managing flood preparedness in the Pemberton Valley.

The Report's findings provide insights into the increased flood hazard while sharing new tools and recommendations to support flood management in the Pemberton Valley. The updated flood modelling shows that peak discharge flows correlating to the 50-, 100-, and 200- year floods are higher than previously understood, and, as a result, current dyke infrastructure does not offer the level of protection as was previously deemed necessary.

Sedimentation from the 2010 Mount Meager landslide and changes in the timing of flood events (floods are more likely to occur after rain-on-snow events in the fall, rather than at spring freshet) all contribute to the increased flood risk in the Pemberton Valley. Climate change is also expected to increase the peak flow rate over the next 80 years.

Other recent studies also identify possible landslide and associated flood risks to the communities below the north face of Mount Currie and debris flows in the Mount Meager and Lillooet River valley areas as far south as the head of Lillooet Lake, as well as landslide hazards in the Seton Valley area and flood risk to the Upper Squamish Valley. Please see below for a list of some of the hazard studies:

All site specific geotechnical reports will require careful review of the relevant hazard reports regarding flooding and debris flows. All applications for building permits, including site specific geotechnical reports must include and identify references to the relevant hazard studies.

There are numerous flooding, debris flow and terrain stability reports in the SLRD:

- Terrain, Terrain Constraints to Residential Development, Hazards, and Aggregate Resources - Gold Bridge - Bralorne (Electoral Area A)
- Seton Portage Area Integrated Hydrogeomorphic Risk Assessment (Electoral Area B)
- Lillooet River Floodplain Mapping Report (Electoral Area C)
- Catiline Creek Debris-Flow Hazard and Risk Assessment (Electoral Area C)
- Mount Currie Landslide Risk Assessment (Electoral Area C)
- Georisk: Assessment of Management of Risk of Engineered Systems and Geohazards (Mount Meager Volcano) (Electoral Area C)
- Terrain Stability Analysis of the Mt. Currie-D'Arcy Corridor (Electoral Area C)
- Upper Squamish River Flood Hazard Mapping and Risk Assessment (Electoral Area D)

Click below to read the full reports:

<https://www.slrd.bc.ca/services/emergency-management/local-hazard-warnings>

<https://www.slrd.bc.ca/services/emergency-management/hazards-slrd/natural/landslides-debris-flows/terrain-stability>