

To: Electoral Area Services Committee

Date: 2018-02-15

From: Dawn Smith, Planner II

File No: 6785-20-250

**Subject: Update - FVRD GeoHazard Management Program**

## RECOMMENDATION

THAT the Fraser Valley Regional District Board endorse the updated FVRD-EGBC (Engineers and Geoscientists of British Columbia) GeoHazard Assurance Statement and Hazard Acceptability Thresholds for Development Approvals policy.

### STRATEGIC AREA(S) OF FOCUS

Support Environmental Stewardship  
 Provide Responsive & Effective Public Services  
 Support Healthy & Sustainable Community  
 Foster a Strong & Diverse Economy

### PRIORITIES

Priority #3 Flood Protection & Management

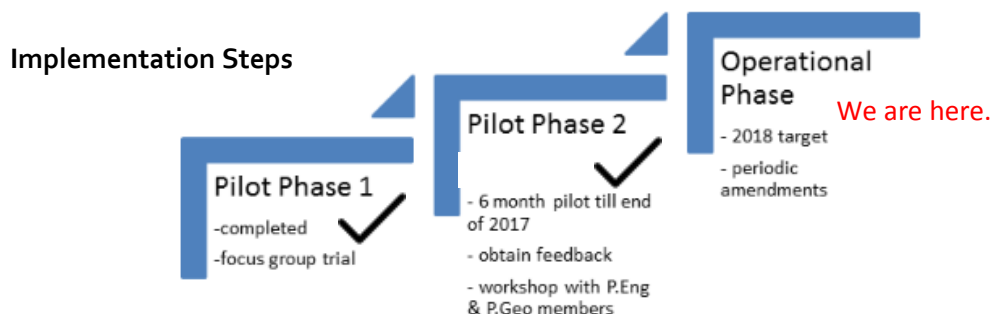
## BACKGROUND

In 2016, the FVRD identified improvements to both the; (1) geohazard assessment reporting process, and (2) secondary study program, as a Planning Department work priority. These two priority updates were completed in early 2017. This memo provides an update on the implementation and refinement of these geohazard management policies, specifically the; FVRD- EGBC (Engineers and Geoscientists of British Columbia) GeoHazard Assurance Statement; and, the FVRD Hazard Acceptability Thresholds for Development Approvals.

## DISCUSSION

### FVRD- EGBC (Engineers and Geoscientists of British Columbia) GeoHazard Assurance Statement

The hazard assessment reporting process was developed in partnership with the EGBC (Engineers and Geoscientists of British Columbia). The result was a new professional reliance model - the FVRD-EGBC GeoHazard Assurance Statement. This harmonized process was implemented for a trial period to ensure any operational deficiencies or issues were identified and corrected. This trial period has now completed and several refinements were identified.



Over the past 8 months, the Regional District has received approximately ten assurance statement submissions. Overall the new process is working well, and improvements have reduced the back and forth, clarified technical expectations and simplified the process. However, refinements were identified from the trial period. Feedback from FVRD staff and qualified professionals (i.e. engineers and geoscientists) identified several improvements including:

- format to clarify mandatory and optional areas of the statement;
- remind QP's of requirement (still new for many) - communicate (i.e. email, mailout, etc);
- host a workshop – how to and Q&A session for QP's; and
- accessibility of the FVRD GeoHazard website.

To address these issues, FVRD staff will be working on a 2018 update of the FVRD-EGBC GeoHazard Assurance Statement, followed by a refreshed website, and outreach program to engineers and geoscientists reminding QP's of the new assurance requirement and an upcoming workshop.

### Hazard Acceptability Thresholds for Development Approvals


The FVRD Hazard Acceptability Thresholds for Development Approvals is a key FVRD policy document to guide development approval decisions and land use planning in hazardous areas. It was first adopted by the FVRD Board in 1997.

A refresh of the Hazard Acceptability Thresholds for Development Approvals policy document was completed in 2017 in order to co-ordinate with FVRD branding and brochures. It now uses simplified language and infographics. The result is a version which is easier to read, half the length and retains important policy guidance for development approvals in hazardous areas.

An additional update was recently identified to clarify the development approval response for the very low risk major catastrophic landslide category. The current policy of less than <1:10,000 sets out an unrealistic and infinite threshold for major catastrophic landslide, which creates a situation where no level of risk is acceptable.

The proposed update clarifies that major catastrophic landslide risk of less than <1:10,000 is acceptable for rezoning and major development. This is consistent with Provincial policy for Natural Hazard Risk policy. The update will avoid situations where the site might have a very low (i.e. 1:60,000) probability of a major catastrophic landslide, but under current policy would be un-approvable for rezoning.

### Policy Extract from Hazard Acceptability Thresholds for Development



**Major Catastrophic Landslide**

Larger scale landslides are likewise caused by the de-stabilization of slopes that result in the movement of earth and debris downwards. However, massive landslides pose a destructive and life-threatening risk to those living below the slide area. Of the surficial hazards, large landslides are the least common, the least predictable, and the most destructive.

1:200

1:200-1:500

1:500-1:1,000

1:1,000-1:10,000

<1:10,000

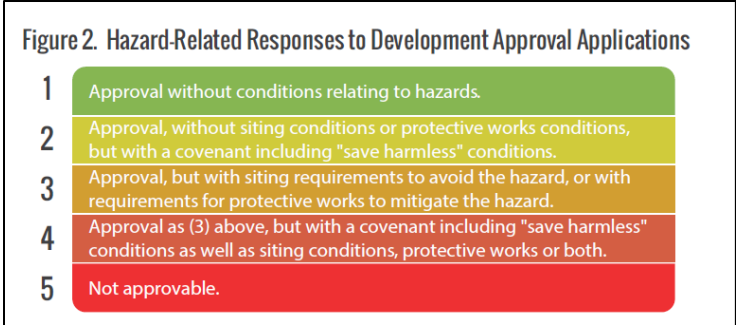
Table 8

	1:200	1:200-1:500	1:500-1:1,000	1:1,000-1:10,000	<1:10,000
Minor Repair (< 25%)	5	2	1	1	1
Major Repair (> 25%)	5	5	2	1	1
Reconstruction	5	5	5	1	1
Extension	5	5	5	1	1
New Building	5	5	5	1	1
Subdivision (infill/extend)	5	5	5	5	1
Rezoning (for new community)	5	5	5	5	5

**Proposed amendment:**

- From: 5
- Proposed: 1

**Policy Extract from Hazard Acceptability Thresholds for Development**



**COST**

Included in Electoral Area Planning work program.

**CONCLUSION**

Improvements to two key policy documents of the FVRD geohazard management program; (1) FVRD-EGBC GeoHazard Assurance Statement; and, (2) FVRD Hazard Acceptability Thresholds for Development Approvals have been identified for 2018. These improvements will clarify FVRD expectations for; rezoning approval in major catastrophic landslide areas; and, assurance reporting requirements for geohazard reports. The FVRD geohazard management policies are key considerations in the development approval process, and are an ongoing area of focus to ensure community safety, clarity, technical relevance, and program delivery improvements.

**COMMENTS BY:**

**Graham Daneluz, Deputy Director of Planning and Development**

Reviewed and supported

**Margaret Thornton, Director of Planning & Development**

Reviewed and supported

**Mike Veenbaas, Director of Financial Services**

No further financial comments.

**Paul Gipps, Chief Administrative Officer**

Unavailable for comment