Fraser Valley Regional District

STAFF REPORT

To: Electoral Area Services Committee **Date:** 2025-05-15
From: Katelyn Hipwell, Manager of Planning **File:** 1855-30

Subject: Update on DRIF Grant and Award of Contract for Boston Bar Landslide Hazard Assessment

Reviewed by: Graham Daneluz, Director of Planning & Development | Emergency Management
Kelly Lownsbrough, Director of Corporate Services & CFO
Jennifer Kinneman, Chief Administrative Officer

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize a sole-sourced agreement for services for $345,434.00 + GST with BGC Engineering Inc. for the Boston Bar landslide hazard assessment and development of a risk management framework for catastrophic landslides.

BACKGROUND

In January 2025, the FVRD Board directed staff to submit a proposal for a funding application to the Disaster Resilience and Innovation Fund (DRIF) program for the purposes of conducting a landslide hazard assessment of the Boston Bar Landslide and development of a risk management framework for rapid landslides. In March 2025, the FVRD was awarded the DRIF grant and a shared cost arrangement (SCA) was signed on March 31, 2025. Per the agreement, FVRD cannot make any public statements or communications about the financial contribution with respect to the SCA or FVRD's participation in the DRIF program until the Province has made a statement. The timeline for this announcement and when FVRD can announce the project is unknown. All project activities must be completed by June 30, 2026.

DISCUSSION

Summary of Proposed Work Plan

As a requirement of the full proposal submission to the DRIF program, staff submitted a project work plan and detailed cost estimate (Appendix A). The intent of this project is to assess the recently identified Boston Bar landslide hazard and the potential consequences to the existing community, identify potential risk management actions, and review the FVRD's current hazard acceptability thresholds for major catastrophic landslides to understand if changes are required to existing risk

management policy. The following project activities contribute to understanding disaster risk and disaster risk reduction for the Boston Bar landslide:

- Field assessment of the landslide hazards, including helicopter overflights
- Refinement of the regional inventory of large rapid landslide hazards, including estimations of extents, volumes, and runout distances
- Acquisition and processing of satellite data to understand recent landslide movement
- Hazard assessment of the Boston Bar landslide complex (including rockfall, rockslide, and rock avalanche hazards)
- Estimation of the runout extents of credible landslide scenarios
- Identification of community assets and infrastructure exposed to credible landslide scenarios
- Summary of potential risk management options for the landslide, including:
    - An order-of-magnitude cost estimate
    - Applications and limitations of each option
    - Identification of potential grant funding mechanisms
- Presentation of the hazard assessment and potential risk management options to FVRD, Boston Bar residents, and Indigenous Governing Bodies
- Summary of pros and cons of existing policy and recommendations for policy amendment
- Checklist of emergency management actions for appropriate response if a major catastrophic landslide shows signs of accelerated movement and/or imminent hazard
- Guidance for development approvals

Landslide Hazard Assessment

The previously undocumented Boston Bar landslide hazard was identified by BGC Engineering Inc. (BGC) through LIDAR interpretation that was being conducted as part of ongoing geohazard assessment work for Indigenous Communities and FVRD in the Fraser Canyon. FVRD worked closely with BGC to define a project scope that aligned with FVRD objectives and develop a work plan and detailed cost estimate for the project activities to facilitate FVRD's proposal submission to the DRIF program.

BGC is uniquely positioned to undertake this project given their familiarity with the workplan and project scope as well as extensive direct experience working with FVRD's risk management framework, particularly as it relates to catastrophic landslide hazards. BGC has the demonstrated in-house expertise and capacity necessary to conduct a geohazard assessment of this scale within the timelines required to meet the terms of the Shared Cost Agreement and align the assessment of the landslide hazard with ongoing land use planning initiatives in the study area (Fraser Canyon Complete Community Study and the forthcoming Official Community Plan update).

Staff recommend that the FVRD Bard authorize a sole-source contract with BGC Engineering Inc. for $345,434.00 to conduct this work.

COST

This project is funded through the Disaster Resilience & Innovation Fund program. FVRD has received a grant totalling $345,434.00 which is aligned with the detailed cost estimate of the project. Overall management of the grant will be undertaken by FVRD staff.

CONCLUSION

FVRD was made aware of a previously undocumented landslide hazard feature in Boston Bar in Fall 2024. The preliminary identification of the Boston Bar landslide complex has generated significant interest and concern from community members, local Indigenous Communities and the media.

Currently, the frequency and extent of the hazard are unknown, however, given the scale of the landslide feature, the potential consequences are severe. The scale and scope of the technical assessment required to adequately assess this hazard feature necessitates an expertise in catastrophic landslide hazards and an understanding of FVRD's existing risk management framework.

The outcomes of this hazard assessment may have significant impacts on land use and development considerations for the community of Boston Bar. There is a public interest in expediting further assessment of this geohazard feature to align with an ongoing Complete Communities Study and forthcoming Official Community Plan update.

FVRD has received a grant through the Disaster Resilience and Innovation Fund program for the full costs of conducting the landslide hazard assessment.