

LIVING NEAR STEEP SLOPES



Signs to Watch For

- Springs, seeps or saturated ground in areas that have not typically been wet before
- New cracks or unusual bulges in the ground
- Soil moving away from foundations
- Ancillary structure such as decks and patios tilting and/or moving relative to the main house
- Tilting or cracking of concrete floors and foundations
- Leaning telephone poles, trees, retaining walls or fences
- Rapid increase in water levels, possibly associated with increased turbidity or muddiness in water

IN AN EMERGENCY SITUATION CONTACT: 911

FOR MORE INFORMATION:

www.surrey.ca/steepslopes

Planning & Development Department

(building permits or land development applications)

604-591-4184

Engineering Department

(Engineering service requests)

604-591-4152



Understanding the Risks of Ravine or Bluff Slopes

It is important as a property owner to realize that the stability of the slope on your property can be affected by a number of factors. Your property care decisions at the top of a slope can influence the neighbours you have beside you as well as those at the bottom of the slope.

Slope failures and landslides typically occur after an extended period of heavy rainfall when the slope becomes saturated with water causing the soil structure on the slope to become weakened.



DISCLAIMER

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There are several actions that property owners can take to help reduce the risk of slope failures and landslides. These include:

- Comply with the City's procedures land development guidelines and By-laws. These measures have been put in place to help protect your property.
- Divert water away from any bluff or ravine slope edges and avoid water ponding near slopes. This includes storm runoff water from your roof drainage. Water flow on a slope can increase the potential for soil erosion and this can affect soil stability. Design your property and landscaping so that water sheds away from steep slopes.
- Avoid placing fill (including yard waste, excavated materials, sand and soil) at the crests of steep slope or along pre-existing drainage channels. Place ancillary structures (sheds, pools, decks, patios, etc.) as far from the ravine or bluff slopes as possible.
- Regularly inspect plumbing, irrigation pipes, drains, gutters, downspouts, pools and ponds for any signs of leakage.
- Refer to the City's Tree Protection By-law and consult with a professional arborist when pruning or limbing trees as improper tree care can damage the tree and make it more susceptible to breakage.
- Maintain vegetation on slopes as bare or exposed soils can increase the risk for slope instability. In addition, any removal of vegetation on slopes can also decrease slope stability. Native trees and shrubs originating from this region's coastal climate are the best choices to plant as they are suited to the weather in this area.
- If you have any concerns about your slope or are considering constructing a retaining wall on your property seek the advice of a Professional Engineer or Professional Geoscientist. Advice on hiring a Professional Engineer or Professional Geoscientist can be found at www.apeg.bc.ca