

Does CVRD have any jurisdiction to control tree cutting on private land that results in greater surface runoff and potential worsening of downslope instability or erosion?

Q8

CVRD cannot regulate tree cutting on land assessed as private managed forest land. It can adopt a bylaw that regulates tree cutting on other land if the land is subject to a natural hazard, but not for the purpose of protecting other land (such as land downslope) from a natural hazard affecting that land.

CVRD can designate development permit areas within which land alteration including tree cutting requires a development permit, but tree cutting that is required to engage in a use permitted by the relevant zoning bylaw cannot be prohibited. Whether or not there is a relevant bylaw, this type of tree cutting could constitute a private nuisance for which an affected owner could sue the owner responsible.

Who has jurisdiction to deal with alterations made to natural watercourses when those alterations may cause flooding of private land or exacerbate a landslide hazard?

Q9

Changes to natural watercourses require approval from the provincial Ministry of Forests under the *Water Sustainability Act*.

Will development permits for a landslide development permit area include a requirement to construct on-site drainage works?

Q11

The particular conditions that will be established for a development permit will depend on the results of the engineer's investigation and the recommendations they make. This type of condition is a possibility.

How does a development permit area reduce the risk of injury or damage in a landslide hazard area?

Q10

The purpose of this type of development permit area is to ensure that development that is permitted by the applicable zoning regulations is carried out safely, considering both injury to persons and damage to property. Mainly, this is achieved by requiring investigation of the development site by a professional engineer who is qualified in the relevant type of hazard, and requiring the development to be carried out in accordance with that person's recommendations. For example, a recommendation might deal with the siting of a building or the way its foundation is constructed. If stormwater management practices of upland owners can confidently be expected to continue indefinitely, the engineer may take that into account in the investigation of a landslide hazard. Rarely, the investigation may conclude that a site is simply too dangerous to develop.

Can property in such a development permit area qualify for insurance?

Q12

Potential insurers make their own business decisions about whether to insure a particular property. The existence of a natural hazard, whether or not it has led to the designation of a development permit area, could affect an insurer's decision or the amount of the premium charged. Natural hazard assessments prepared for the CVRD are public documents that prospective purchasers, realtors and insurance agents are all entitled to access.

**Cowichan Valley Regional District
Land Use Services**
175 Ingram Street, Duncan, BC V9L 1N8

Ministry of Transportation & Infrastructure
2100 Labieux Rd, Nanaimo, BC V9T 6E9



CVRD

and the



Ministry of
Transportation
and Infrastructure

DRAINAGE Q&A LANDSLIDE PRONE AREAS

The Cowichan Valley Regional District and the Ministry of Transportation receive questions from the public regarding responsibility for drainage.

This brochure provides answers to commonly received questions

Are landslide hazards in the CVRD caused or worsened by uncontrolled drainage of stormwater?

Q1

Yes. For example, in Saltair Stantec Consulting Inc. advised that "uncontrolled stormwater discharge onto the coastal bluff below the intersection of Stuart Road and Seaview Crescent and at Bazan Road Beach Access was observed and is likely contributing to localized slope instability and future property maintenance issues."

MOTI is the authority over road drainage and road infrastructure under the *Transportation Act*. The Provincial Approving Officer who sits within MOTI as a separate Statutory Decision Maker rules on subdivision applications in rural areas who may require a stormwater management plan and suitable on-site stormwater management as a condition of subdivision.

Further, climate change is producing more frequent heavy rainfall events on southern Vancouver Island.

Who's responsible for managing drainage from upland private property onto lower properties that may be subject to a landslide or subsidence hazard?

Q2

The common law permits naturally-occurring surface volumes of stormwater to drain naturally to lower properties and the upland owner is not obliged to prevent it to protect the lower properties, including lower properties that are known to be susceptible to landslide or subsidence. The upland owner cannot collect the flow of water into a channel crossing a downstream property without an easement or other form of permission.

The lower owner may, under common law but subject to any local bylaw, erect a barrier against surface water from an upland property, but not to the detriment of any other owner. MOTI is the authority over road drainage and road infrastructure under the *Transportation Act*. The Provincial Approving Officer who sits within MOTI as a separate Statutory Decision Maker rules on subdivision applications in rural areas who may require a stormwater management plan and suitable on-site stormwater management as a condition of subdivision.

Who's responsible where the upland property is public property, specifically a park or highway?

Q3

The same principle applies—water may drain naturally from the park or highway onto lower properties. If a highway is provided with ditches to collect the water, it cannot then be discharged onto lower property without an easement, right of way or some other form of legal permission. Highway drainage is usually arranged to provide a continuous network of ditches discharging eventually to a natural watercourse that's in public ownership, to a public drainage easement, right of way or to a natural outfall location.

What can an owner do if their land is being flooded or made unstable by water flowing from upslope land?

Q4

The obligation to accept naturally-occurring volumes of water from upslope land is one of the duties of ownership, similar to the duty to provide lateral support to the adjacent land. Subject to any applicable local bylaws, an owner may construct works to intercept and channel the water to protect their own land, provided that they are then able to discharge it from their land without causing a nuisance to any other owner and without trespassing on other land.

What is a stormwater management plan?

Q5

Stormwater management plans (SMP) are prepared by professional engineers to manage stormwater runoff in specific portions of watersheds and minimize the potential for damage from overland flooding. They may include recommendations for on-site retention and management of stormwater, regulation of impermeable surfaces, and provision of public works to collect and dispose of stormwater into a natural watercourse. An SMP is usually required when a large land development is being approved, and it is becoming common for SMPs to be prepared for existing developed areas, as well. In preparing SMPs, engineers make assumptions about future development in the watershed and the amount of precipitation that will have to be managed during the period covered by the plan.

What role does MOTI have in managing stormwater?

Q6

MOTI is responsible for managing drainage from highways outside the boundaries of municipalities. MOTI's road maintenance contractor is responsible for the day-to-day maintenance of these drainage works in the CVRD and ensuring that they perform their function in draining the highways as required under the Highway Maintenance Agreement specifications. MOTI does not provide, in rural areas, the drainage service benefiting private land that is provided within municipal boundaries by the local government.

What role does CVRD have?

Q7

Unlike municipalities, which own their highways, regional districts do not construct and operate public drainage infrastructure unless owners have petitioned for the creation of a drainage service area to be financed entirely by the benefiting owners, and the Regional Board has agreed to create a drainage service. Several such services presently exist in the CVRD, including new infrastructure built for new developments. These services are paid for via special parcel taxes levied on benefiting properties. CVRD staff or contractors perform any required maintenance work.