

If your property lies within a regulated area, there are by-laws and legislation that may affect you directly. Ontario Regulation 166/06 restricts and may prohibit the placement of fill within a regulated area, the construction and renovation of structures within a floodplain (an area vulnerable to flooding) and the alteration of a watercourse. If your property is in a regulated area, you must apply for a Development, Interference with Wetlands and Alterations to a Shorelines and Watercourses permit from TRCA to do any of the following:

- Construction, reconstruction or erection of a building or structure
- Any change to a building or structure that has the effect of changing its use, size or increases number of dwelling units
- Temporary or permanent placing, dumping or removal of any material

WHAT YOU NEED TO KNOW ABOUT TREE REMOVALS

Circumstances in which a landowner may wish to remove a tree from their property:

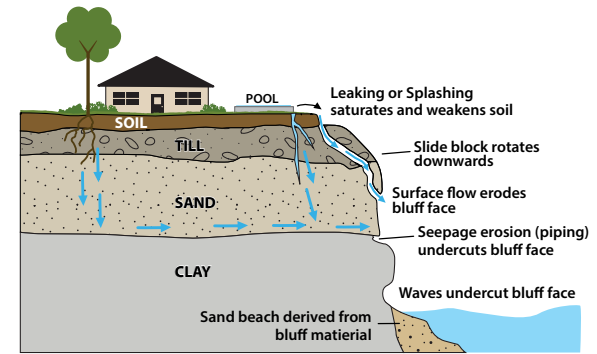
- Aesthetic reasons
- Construction or expansion of a building or structure which requires the removal of a tree
- The tree is dead, diseased or leaning and is now a safety concern

Consult your local municipality prior to any tree removals to ensure the appropriate removal practices are taken, and necessary permits are acquired. In order to protect and preserve urban forests, many municipalities have implemented By-Laws which provide guidance regarding tree removals.



WHAT IS EROSION?

Erosion is the process of soil movement primarily by water or wind. Water erosion is the result of water coming into contact with soil and moving it to a different location. The main types of water based erosion are raindrop, surface runoff, bank and shore. Wind erosion can occur in any area where the soil is not compacted or is finely grained such as silt. The three main ways that wind can move soil are saltation, creep and suspension.



TORONTO AND REGION CONSERVATION AUTHORITY (TRCA) POLICIES AND REGULATIONS TO ASSIST PROPERTY OWNERS

The Ontario Regulation 166/06, which is administered by TRCA, was established under the Conservation Authorities Act to prevent development that could be damaged by floods or erosion, and to protect the public. Your land may be regulated if it meets any of the following criteria:

- There is a stream flowing through or adjacent to your property
- Your property backs onto a river valley or ravine
- Your property backs onto a river valley, ravine, wetland or floodplain.

For more information on erosion and TRCA's Erosion Risk Management Program visit:
<https://trca.ca/conservation/erosion-risk-management/>
contact: erosionmonitoring@trca.ca
or 416-661-6600 ext. 5535

WHAT YOU SHOULD KNOW AS A RAVINE OR BLUFF PROPERTY OWNER



HOW YOU CAN HELP PREVENT BLUFF OR RAVINE EROSION

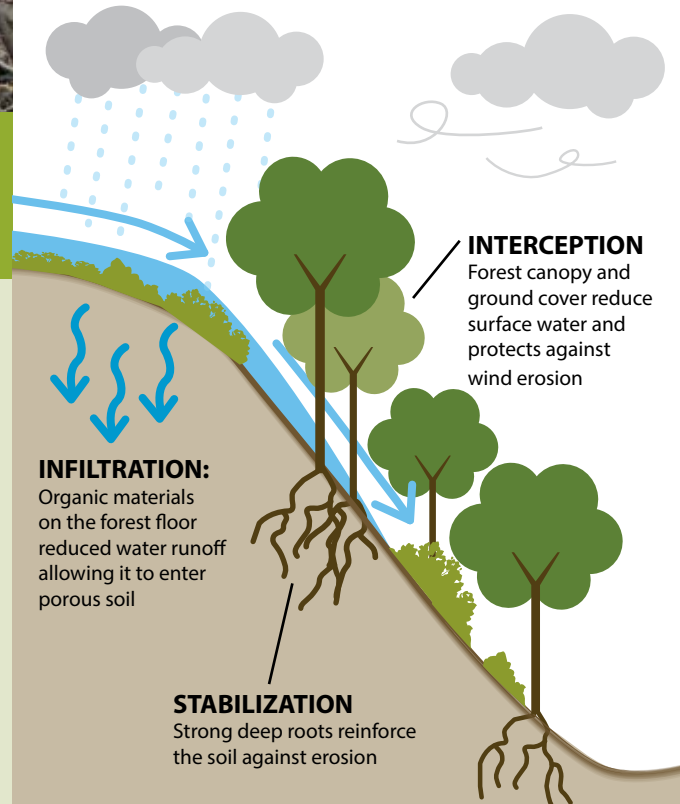


Keep Yard Waste off Bluffs and Ravine Slopes

- Yard waste and garbage smothers underlying vegetation and adds weight to the upper portion of a slope, which can cause slope failure and damage to established vegetation below
- Alternatives to dumping include composting yard waste, leaving lawn clippings on the lawn or putting yard waste to the curb for garbage pick-up
- Not only is dumping fill material on the bluffs or ravines damaging, doing so without an Authority permit is also against the law. Fines and prosecution under the Conservation Authorities Act can occur as a result

Encourage Vegetation Growth and Leave Stumps in Place

- The root systems from vegetation helps to hold soils together. A native vegetative buffer along the top of the bluff or valley slope is encouraged
- Disturbance of soils such as modifications to the bluff or ravine for access can lead to land sliding and accelerated erosion
- It is best to avoid removal of tree stumps near a shoreline bluff or ravine slope as their root systems help to bind and stabilize the soil. If a tree dies or requires removal, cut the trunk of the tree above the base, leaving the roots intact



Disclaimer: This Guide contains general information and is not meant to be specific to any particular house, property or area. TRCA will not be responsible or liable for any loss incurred as a result of any individual relying on information contained in this document. Property owners are advised to retain the services of a qualified professional to determine any action that may be required on their properties.

Divert Water Runoff

- Excessive groundwater and surface water runoff are leading causes of ravine and bluff erosion
- Automatic lawn sprinklers can aggravate over saturation of the ground, which can contribute to erosion. Turn on sprinklers only when the soil is dry
- A leaking pool can create damage to the underlying soil, so repair leaks as soon as possible



Before



After

Properly Drain Runoff from Roofs and Pools

- Runoff from roofs that drain over the edge of a ravine or bluff can create gullies. Downspouts are recommended to be directed away from the property's foundation onto a splash pad to prevent erosion
- Runoff from swimming pools should be drained through a hose leading to the street.
- When draining to the bottom of the slope, the outflow should be directed to a layer of large stones so that the force of the flow does not wash away the soil
- Green Infrastructure alternatives such as rain barrels and rain gardens can help minimize runoff at its source, catching it where it falls

Stabilizing Your Slope

- It is recommended that a geotechnical engineer be hired to design any form of slope stabilization or terracing
- Improper installation can result in overloading of the slope crest and increases the risk of slope instability
- Remember to obtain the required permits from TRCA prior to undertaking any work in these regulated areas