

Making Victoria Fire Ready - Managing erosion and landslip risk

Native vegetation in Victoria

Native vegetation is important to many Victorians and under planning laws a permit is required to remove, destroy or lop native vegetation. However, there are exemptions which allow residents to clear native vegetation as part of the normal use and maintenance of their properties, including preparing for bushfire.

Native vegetation is not just valued as habitat for native animals and its natural heritage, but also plays an important role in reducing erosion and stabilising soil to minimise the risk of landslip.

If you are thinking about removing native vegetation, particularly trees, from your property it is important to be aware of the associated risks of landslip and erosion.

What is erosion?

Erosion occurs when soil is lost through rain, wind or the repeated movement of people, animals or vehicles. It can happen slowly over a number of years, or quickly during a storm or other extreme weather events.

In dry periods erosion can cause dust problems. During and after significant rainfall events, erosion can lead to blocked drains, damaged pumps and damaged stream systems by clouding the water and smothering habitat. Erosion results in the loss of valuable topsoil, reduces soil fertility and makes it difficult for grass or other vegetation to regrow.

What is a landslip?

A landslip can occur when the ground is not strong enough to support its own weight, causing a slope to collapse. This slippage can result in significant damage to buildings and a risk to life – both on and below the landslip area.

A landslip is most likely to happen after long periods of heavy rain when the ground is soft and at its heaviest; geology, soil type, and topography are also contributing factors.

Vegetation helps to reduce the risk of landslips by drawing moisture out of the ground, and the roots of plants, particularly trees hold the ground together. The loss of forest cover has a

destabilising effect on the soil, when extensive root systems that bind the soil have largely gone and excess water formerly used by trees now remains in the soil. Poor drainage is also an important contributing factor.

When trees are removed, the remaining roots left in the ground will still help hold the ground together for the short term, but in the long-term, these roots will rot away and leave gaps in the soil that make it very weak. In some areas, removing vegetation is a major cause of landslips.

Is my property at risk of landslips?

Landslips occur most frequently on slopes above 25 degrees, but can also happen on much gentler slopes, especially on older existing ones.

Is there a history of landslips in my area?

The risk of landslips happening in your area depends not only on the slope of the land and whether or not there are trees, but also on the structure of the soils and rocks below the surface. If there have been landslips around your area in the past this may be a sign your area is also at risk.

Is there an Erosion Management Overlay on my property?

Some local councils have identified areas which are prone to erosion or landslip in their planning schemes through the use of the Erosion Management Overlay. Contact your local council to see if an Erosion Management Overlay applies to your land.

What can I do to reduce the risk of erosion and landslips?

You can reduce the risk of erosion and landslips by keeping some vegetation cover – such as grass - and cutting back where necessary instead of removing all the vegetation.

If you are in an area with a risk of landslips you should consider an alternative to tree removal, such as pruning. If it is not practical to maintain the trees, it is recommended you hire a suitably qualified geotechnical engineer to advise you on whether this would increase the risk of landslips. You should also consider appropriate replacement planting.

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