Questions and Answers

Landslip / Landslide

December 2025

Contents

Purpose

This Q&A sheet gives answers to frequently asked questions about landslips in Tasmania. There is an accompanying fact sheet that gives further detail on planning and building controls for landslip.

1. What is a landslip / landslide?

A landslip / landslide involves the downslope movement of a mass of rock, earth, soil, or debris (mix of rock, soil, and other material).

2. Why are there two different terms?

A landslip is also called a landslide and includes diverse types of movement such as rock falls and debris flows. In Tasmania, the terms landslip and landslide are used interchangeably.

In scientific and engineering documents, landslide is the preferred term.

In planning and building control systems, landslip is the preferred term due to the legacy of the regulation, as shown in the *Mineral Resources and Development Act 1995* and the *Building Act 2016*.

3. When is a landslip / landslide hazardous?

Landslide becomes a hazard when it interacts with land use and development. The land use planning system and building controls aim to manage the risks that may arise from new uses or development.

4. What causes a landslip / landslide?

A landslide typically requires the presence of susceptible land and at least one of the following:

- A triggering event such as a rainfall event or earthquake
- A contributing condition that reduces stability, such as a slope undercutting by water, or rising groundwater
- A development or management activity that has destabilised the land

There are many ways a development and management activities can destabilise land, including:

- unretained cuts and fills
- tree removal
- adding too much weight to the top of a slope
- an increase in the water table from a concentration of runoff or stormwater
- inappropriate onsite wastewater treatment
- leaking service pipes or storage containers
- unlined dams.

5. What types of landslides are common in Tasmania?

The four most common types of landslides in Tasmania are earth slides, soil creep, rockfall, and debris flow. Other types including rock topples, deep-seated rock slides, and debris slides may occur in specific locations.

6. Where do landslides occur in Tasmania?

Landslides can occur in almost any region of Tasmania because of the state's mostly hilly to mountainous terrain. Flat sites cannot produce landslides. Gentle slopes can, depending on what they are made from. Landslips are most likely to occur in some particular settings, including:

- steep mountain slopes
- weak sediments in coastal areas, and
- where the underlying geology and groundwater produces springs.

To find out more about the mapping of different landslides, Mineral Resources Tasmania (MRT) gives an overview of its mapping programme here.

7. How do I find out if my land is vulnerable to landslide hazard?

The Tasmanian Government uses the RiskReady platform on the TasAlert website to provide property-specific hazard reports. TasAlert is able to provide information on bushfires, coastal inundation, coastal erosion, flood, and landslide.

8. What are the landslide hazard bands?

The landslide hazard bands are part of the Landslide Planning Map, which is a statewide overlay that determines where landslide hazard must be considered in development assessments. The hazard bands divide land into five categories that set the regulatory requirements for land use planning and building control to reduce the impact of landslides on new development.

Table 1 summarises the hazard bands in the Landslide Hazard Code.

Hazard band	**Description**
High	The site is within a proclaimed Landslip A area. Land is subject to legislated controls for all use and development.
Medium-active	The area has known recent or active landslips. Controls are necessary for all use and development.
Medium	The area has mapped landslip features, or is within a landslip susceptibility zone, or has legislated controls (declared Landslip B area) to limit disturbance to adjacent unstable areas. Controls are necessary for all use and development.

Low	There are no mapped landslips in this area, but it may be susceptible. Most use and development does not require special consideration but some specific controls are necessary.
Acceptable	A landslip is a rare event in this area based on current understanding of the hazard, but it may occur in some exceptional conditions. Development and use are not subject to specific landslip controls.

9. What is a Declared or Proclaimed Landslip A and B area?

MRT declares Landslip A and B Areas under the Mineral Resources Development Act 1995 (MRDA 1995). The declared Landslip Areas were designed to restrict building and other activities on unstable land through legislation in the Building Act 2016 and preceding Acts. In these declared areas the Minister for Building Control was often required to approve any works on the site. The declared landslips A and B areas have been incorporated into the Landslip Hazard Planning Bands, with the endorsement of works being devolved to the Planning Authority or General Manager of a Council.

Although there are almost 10,000 known landslips in Tasmania, there are only ten declared areas, which is a tiny fraction of the land that may be considered unstable for the purpose of planning and building controls. The declared areas include:

- Beach Road – Legana
- Hone Road – Rosetta
- Beauty Point
- Lowana Road – Strahan
- Boat Harbour
- Panorama Heights - East Devonport
- Casuarina Crescent - Berriedale
- Parnella - St Helens
- Freshwater Point – Legana
- Windermere

The Declared Landslip A and B areas are shown on the land titles held in the Central Plan Register of the Department of Natural Resources and Environment Tasmania.

10. Does having a landslide hazard band mapped on my property mean there will be a landslide?

Land within the Acceptable landslip hazard planning band does not require additional regulation beyond normal processes.

The Low and Medium landslide hazard bands does not necessarily mean a landslide has occurred or will occur.

They indicate that the land is susceptible to landslide if future development is undertaken without consideration of landslide and a triggering event occurs.

A Medium-Active or High landslide hazard band indicates that a landslide has been active in the past ~200 years and will require management. In both cases, a Landslide Hazard Report undertaken by a suitably qualified geotechnical practitioner will consider:

1. how the proposed use, development, or works can achieve and maintain a tolerable level (see questions 18) of risk from landslip and,
2. that the development or works will not cause or contribute to a landslip on the site or an adjacent site.

11. Who developed the landslide hazard bands?

The Department of Premier and Cabinet led the development of the Landslide Planning Map and hazard bands through a jointly funded project between the Commonwealth Government and the Tasmanian Government. The project ran from 2011 through to 2016 and involved collaboration with MRT, State agencies and industry bodies.

The project was undertaken to improve the mitigation of natural hazards through the coordination of hazard science, land use planning and building systems, and to reduce the risk of natural hazards to the Tasmanian community. The project considered landslides, coastal inundation and coastal erosion, with the Tasmania Fire Service and State Emergency Service implementing the project's outcomes for fire and riverine flooding.

12. How are landslides managed in Tasmania?

Tasmania coordinates the regulation of landslide hazard areas between the planning system (Tasmanian Planning Commission, State Planning Office, Local Planning Authorities) and the building system (Consumer, Building and Occupational Services, Building Surveyors, and Municipal Councils). MRT supports the regulation of landslides through its geoscientific hazard mapping programme.

The Landslip Fact Sheet outlines how the controls in the two systems work together.

13. What is Mineral Resources Tasmania's role in the management of landslide?

Mineral Resources Tasmania (MRT) is the lead scientific advisory agency in Tasmania for landslide and geohazards. MRT's role includes:

- Regional mapping
- Maintaining the state's landslide inventory
- Administering Declared Landslip Areas under the *Mineral Resources Development Act 1995*

MRT also provides technical support through advisory materials on how the Australian Geomechanics Society *Guidelines for Landslide Risk Management* can be applied in Tasmania. MRT does not provide peer review or landslide management services.

14. What is the role of the planning system?

The planning system controls which land uses and developments are permitted.

Tasmania's Resource Management and Planning System (RMPS) has an overall goal to promote sustainable development. This includes a "…planning framework which fully considers the land capability." (*Land Use Planning and Approvals Act 1993,* Schedule 1, Part 2 (i)).

This is achieved through the Landslip Hazard Code in the State Planning Provisions (SPPs). This code contains provisions that control use and development within hazard bands (see Question 8).

The Local Provisions Schedule maps (LPS) show the hazard bands for each municipal area. You can find your LPS by visiting the Tasmanian Planning Commission website or contact your local council directly.

15. What is the role of the building system?

Once the land use and/or development has been approved, the building system guides the construction of buildings, and requirements for their safety.

The *Building Act 2016* and *Building Regulations 2016* provide for the regulation of Landslip A and B areas declared under the *Mineral Resources and Development Act 1995*. The Act and Regulations enable both the National Construction Code in Tasmania and require that specific issues, including natural hazard regulations, are coordinated with the planning system through the use of Director's Determinations.

Director's Determination Landslip Hazard Areas sets out the requirements that the Building Surveyor and Building Authority must consider as part of a building approval process. The purpose of the controls is to ensure that the building and associated works will not fail due to a landslip, cause or contribute to landslip occurring.

The building and plumbing requirements can be accessed through www.planbuild.tas.gov.au, or through your local council.

16. Does the assessment differ between the planning and building approvals?

The Landslip Hazard Report undertaken in either the planning or building system requires preparation according to the AGS (2007) Guidelines. In planning, the focus is on ensuring the use or form of development can achieve a tolerable risk, while in building the focus is on the building can achieve a tolerable risk for its intended design life.

An overview of the planning and building requirements are provided in the fact sheet.

17. What is a Landslip Hazard Report?

A Landslip Hazard Report is required in both the State Planning Provisions and the Directors' Determination for Landslip. The Landslip Hazard Report must be prepared by a suitably qualified geotechnical practitioner and demonstrate:

1. how the proposed use, development, or works can achieve and maintain a tolerable level of risk from landslip and,
2. that the development or works will not cause or contribute to a landslip on the site or adjacent site.

Mineral Resources Tasmania has developed guidance to support the writing of the Landslip Hazard Report with the Building for Landslide: Guidance for Geotechnical Reporting in Tasmania (2017)[1]

18. What is a tolerable level of risk from landslide?

Tolerable risk in the planning and building systems means that strategies have been put in place as part of the design and construction for a Use, Development or Works that lower the risk of a landslip occurring because of the of the Use, Development or Works.

In this context of Use, Development, and Works should demonstrate that they will not cause or contribute to a landslip occurring by ensuring:

- that the land is not destabilised through unretained cuts and fills on the slope, removal of large trees, or the adding of too much weight to the top of a slope,
- that the water table is not increased due to the concentration of runoff or stormwater, onsite wastewater treatment, broken service pipes, leaking water (or liquid) storage, of the removal of large trees, the presence of dams or water storage.

At the site-specific level, the Australian Geomechanics Society (AGS) Landslide Management Framework (2007) has been adopted. This framework provides guidance on the characterisation and description of landslide hazard and risk, including the following thresholds for the risk to life:

1. Existing slope/ existing development 10-4/ annum (equivalent to a likelihood of death of 1 in 1,000 years)
2. New constructed slope/ new development/ existing landslide 10-5/ annum (equivalent to a likelihood of death of 1 in 10,000 years)

19. Who are ‘suitably qualified geotechnical practitioners’?

The State Planning Provisions and Director’s Determination allow for a practitioner who is:

- a person holding a building services license issued under the Occupational Licensing Act 2005 in the class of engineer-civil;
- a geotechnical engineer licenced as an engineer - civil acting within their area of competence or
- an engineering geologist acting within their area of competence.

The requirements for the above are set out by Consumer, Building and Occupational Services (CBOS) in their determination for the Occupational Licensing (Building Services Work) Determination. The determination considers a Suitably Qualified Geotechnical practitioner to be an Engineer - (Civil, Structural, Geotechnical, Environmental Engineering) who is able to undertake unrestricted civil engineering design within the individual's area of competence.

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[1] This guidance is derived from the 2007 Guidelines published by the Australian Geomechanics Society, including:

- Australian Geomechanics Society, 2007a “Guideline for landslide susceptibility, hazard and risk zoning for land use planning”, Australian Geomechanics 42(1): 13-36.
- Australian Geomechanics Society, 2007b “Commentary on guideline for landslide susceptibility, hazard and risk zoning for land use planning” Australian Geomechanics 42(1): 37-62.

20. What can I do to reduce the risk or likelihood of a landslide occurring on my property?

The Australian Geomechanics Society (AGS) recommends that a landowner get the advice of a geotechnical practitioner about what to do to manage the risk from landslides.

The AGS has also developed the *The Australian Geoguides for Slope Management and Maintenance* as generic background information on how you can manage your slope to reduce the risk and likelihood of a landslide occurring.

21. Can I buy insurance for landslide?

The Tasmanian Government's Insurance Checkup tools give you an overview of insurance for natural disasters.

While insurance companies do not (as a general rule) offer insurance for landslide, you should always check with your insurance company to see if they offer landslide insurance.

22. Do the significant works provisions in the landslide code apply in the approval preparation of the Forest Practices Plan?

Forestry operations are exempt from consideration in the planning system with the Land Use Planning Approvals Act s11(3) saying:

(3) Nothing in a planning scheme or the Tasmanian Planning Scheme affects –

(a) forestry operations conducted on land declared as a private timber reserve under the Forest Practices Act 1985 ; or

Under s11(1):

forestry operations includes the processes and works connected with –

(a) the establishment of forests; and

(b) the growing of timber; and

(c) the harvesting of timber; and

(d) land clearing, land preparation, burning off, road construction, and associated quarry works, conducted in relation to an activity specified in paragraph (a) , (b) or (c) ;

23. More information

More information on landslides can be found at:

- Resilience and Recovery, Department of Premier and Cabinet has information about the Mitigation of natural hazards through land use planning project.
- Mineral Resources Tasmania (MRT) has a wide range of information on their website including
    - General information about landslides

    - Declared Landslip areas
    - Updated mapping
- PlanBuild is the government's online portal and includes information about hazards.
- The State Emergency Service has information about how to recognise a landslide.
- Review of the Landslide Planning Map
- The Australian Geomechanics Society (AGS) is the peak professional body in Australia for landslip and geomechanics. In 2007 the AGS developed Landslide Risk Management Guidelines for Australia, which is the technical basis for the assessment of landslide risk. Their 2007 guidelines include the following documents:
    - Australian Geomechanics Society. (2007a). Guideline for landslide susceptibility, hazard and risk zoning for land use planning. Australian Geomechanics, 42(1), March 2007.
    - Australian Geomechanics Society. (2007b). Commentary on guideline for landslide susceptibility, hazard and risk zoning for land use planning. Australian Geomechanics, 42(1), March 2007.
    - Australian Geomechanics Society. (2007c). Practice note guidelines for landslide risk management. Australian Geomechanics, 42(1), March 2007.
    - Australian Geomechanics Society. (2007d). Commentary on practice note guidelines for landslide risk management. Australian Geomechanics, 42(1), March 2007.
    - Australian Geomechanics Society. (2007e). Australian GeoGuides for slope management and maintenance. Australian Geomechanics, 42(1), March 2007.