#### McCrae landslides

# Board of Inquiry (BOI) request for input by July 29, 2025 Regulatory Framework

In response to the BOI request dated 15 July 2025 requesting submissions on

"...the adequacy of the regulatory framework in relation to the prevention and management of landslides and landslips in Victoria".

The directly impacted residents of the January 2025 landslides, as represented by the McCrae Evacuated Residents Group (MERG) submit the following.

(Please note that the MERG has not conducted extensive research on existing legislation and is more focused on the regulatory gaps and weaknesses identified following both the 2022 and 2025 landslides).

#### **Prevention measures**

# 1. Understanding the Natural environment

i. Geomorphology and natural features

Areas of land subject to development should require an assessment of geomorphology and natural features. This assessment could be appended to Environmental Impact Assessments or other existing planning for development protocols. A register of the natural features for the area should be established.

ii. Water sources and natural flow paths

With specific reference to landslide risks and water management, the proposed natural feature register would identify any existing natural water flow paths (surface and subsurface) that must be considered in relation to any proposed development.

# 2. Managing Anthropogenic impact

Using the natural feature register, a risk assessment of the area would be undertaken to assess the risks to human occupation associated with the natural features, the overarching principle being to develop and live in harmony with the natural environment with as little interference as possible.

A risk management register would use the 'overarching principles' as the primary approach for mitigating risks, for example, adopted risk mitigations would start with

seeking to not interfere with natural water flow paths as far as practicable, and the identification of exclusion ('no go') areas.

A framework would now be in place to undertake human development via a risk assessment and management process, with a baseline understanding of the natural features and the 'overarching principles' that should be adhered to or only deviated from under exceptional circumstances with rigorous analysis.

# i. Risk Assessment and Management

# a. Lead Authority

A Lead Authority should be appointed, and resourced with qualified risk management experts, to have the responsibility for developing the natural feature register and for managing the integrated risks associated with human development in the area.

## b. Stakeholder Authorities

The Lead Authority would have the responsibility to identify other Stakeholder Authorities who could have an impact on the management of risks in the area (for example, water authorities, utility and service companies).

# c. Regulatory framework and legislation

The Lead Authority would establish an engagement protocol with the stakeholder authorities and implement governance protocols (including decision making and executive authority). This responsibility would be enshrined in legislation.

## ii. Planning and development

# a. Overlays

The lead Authority (most likely the local Council) would use existing legislation to put in place fit-for-purpose controls over land development, for example, by the use of overlays.

#### b. Surveillance

The lead Authority would establish a fit-for-purpose surveillance protocol to ensure Stakeholder Authorities and landowners maintain compliance with the established risk mitigations and overlay provisions.

## iii. <u>Utilities and Infrastructure management</u>

# 1. design standards

Design standards should address the defined risks associated with utilities in the area, for example, specifying factors of safety, the number and location of isolation valves in water bearing infrastructure, remote monitoring and alarms for unusual water flow detection and response, and the physical layout of infrastructure with regards to the natural feature register (ie: keeping water bearing utilities away from erosion sensitive locations).

#### 2. construction and materials

A higher standard for construction and materials specification would apply to higher risk areas, (for example, utilities installed within or crossing natural water flow paths).

#### 3. Maintenance

An higher standard of maintenance would be required for utilities that pose a potential risk of landslides as identified in the risk assessment and management process.

# 4. Integrated impact of multiple utilities

The Lead Authority would have responsibility to maintain a 'big picture' understanding of how multiple utilities and increased development including higher density occupation and new technologies impact the assessment of landslide risk and potential mitigation measures. For example, additional services installation or the refurbishment of aging infrastructure may increase the risk of water entering areas that could increase the risk of a landslide.

## 3. Leading indicators

The lead Authority would maintain a register of leading indicators that would identify an increase in risk (eg: rising groundwater, major leaks, earthquakes, lessons learned from landslide events) and develop an emerging risk register to 'keep an eye on' how developments and learnings from incidents (local and more broadly) may impact the risk register and require mitigations to be implemented.

## 4. Best practices

The lead Authority should reference existing disaster and emergency management plans for other types of events (eg: bushfire management and response) and adopt, with as much commonality as possible, the approaches and standards that have stood the test of time and are generally well understood by the community

#### Management measures

# 1. Lead responsibility

The Lead Authority should establish procedures for responding to landslides that fall into 3 general categories:

i. Landslide impacting a single property only

Landslides in this category may be adequately covered by existing legislation.

ii. Landslide impacting multiple properties

Landslides in this category require the Lead Authority to <u>immediately</u> undertake actions to protect the health and safety of landowners and property, and implement solutions (interim and longer term, as appropriate), as it is not practical to expect individual landowners to address these events as they are not trained, resourced, authorized or capable of managing such events.

Cost recovery for remediation can be pursued under existing legislation if liability can be determined.

iii. Landslide with the potential to impact multiple properties

Landslides that fall into this category would typically follow the approach of (b) above, with the added requirement for the Lead Authority to implement remediation measures to protect 3<sup>rd</sup> parties against the newly identified landslide risk.

# 2. Emergency preparedness

The Lead Authority should have an Emergency Response and Management plan that addresses the specific risk scenarios identified in the risk register. The plan would require drills and exercises to be conducted on a regular basis (at least once per year) to test the effectiveness of the response, especially the interfaces with other agencies, for example, SES, Police, the community and utility companies.

Lessons learned from exercises and drills should be formally documented and be integrated into the governance and compliance responsibility of the Lead Authority.