

AMENDMENT C225 - EROSION MANAGEMENT OVERLAY MAPPING SEEKING AUTHORISATION TO COMMENCE EXHIBITION

Report Author: Executive Officer Strategic Planning
Responsible Officer: Director Planning & Sustainable Futures
Ward(s) affected: (All Wards);

The author(s) of this report and the Responsible Officer consider that the report complies with the overarching governance principles and supporting principles set out in the Local Government Act 2020.

CONFIDENTIALITY

This item is to be considered at a Council meeting that is open to the public.

SUMMARY

The Yarra Ranges municipality has a history of landslip risk, with a number of identified landslip sites including Warburton and Montrose. Recent weather patterns, including increased rainfall and large storms, have heightened the risk of landslips over the past three years.

Council implements several measures to manage and mitigate the risk of landslip by working with Emergency Services to prepare for and respond to risk through municipal emergency risk assessments. Additionally, Council conducts regular inspections and maintenance of critical systems, including roads, stormwater, water supply, power, gas, and telecommunications. These steps help minimize potential impacts, alongside the proactive mitigation of risk through planning scheme overlays.

With the June 2021 storm causing significant tree loss and property damage, there was a need to review current planning provisions and address the increasing likelihood of landslip risk in the Yarra Ranges municipality.

Council received grant funding of \$300,000 under the National Emergency Management Agency's Preparing Australian Communities (PAC) Program – Local to engage a geotechnical consultant to undertake a comprehensive review of landslip risks. This has recommended updating the EMO mapping to inform a proposed planning scheme amendment.

Previous mapping of landslide risk was based on hand drawn maps which then informed the first version of the Erosion Management Overlay in the 1990s. The recent utilisation of advanced three-dimensional mapping technology, named Light Detection and Ranging (LiDAR), has more accurately identified historic landslips and landslip-prone areas in Yarra Ranges.

Council is required to review and update the Planning Scheme to ensure it is current and responds to new information and changes in circumstances. Updating

the Erosion Management Overlay (EMO) in the Yarra Ranges Planning Scheme is now needed to reflect this more accurate mapping and Council records of actual landslide events. This is proposed through Planning Scheme Amendment (C225) and will result in both adding and removing properties from the Overlay (a net increase of 1,987 properties added) while also proposing an additional Schedule specific to areas with higher risk of debris flow.

Concurrently it is proposed that the views of the Minister for Planning are sought on applying the EMO to new properties on an interim basis to ensure new and accurate mapping is included in the planning scheme and considered as part of planning applications, whilst Amendment C225 is exhibited.

The amendment proposes to introduce the EMO planning control to some properties that do not currently have it, which may be viewed with concern by these property owners. To assist with understanding the implications it is proposed that fact sheets be prepared when the amendment is exhibited to provide further information on the proposed changes for residents.

Emergency management arrangements are also being reviewed and updated to include specific protocols for landslip events, ensuring appropriate response and effective coordination among emergency services. Targeted community resilience activities have been delivered and will continue to support and inform residents about landslip risks, prevention and preparedness, as well as the impact of rainfall thresholds on landslip likelihood on private property.

RECOMMENDATION

That Council

- 1. Requests the Minister for Planning to authorise the preparation and exhibition of Amendment C225 to amend the current Erosion Management Overlay Mapping (EMO) and apply new EMO mapping as shown in Attachment 4.***
- 2. Requests the Minister for Planning to consider preparing, adopting and approving a separate amendment for the new EMO mapping on an interim basis while Amendment C225 is exhibited.***
- 3. Support writing to Minister for Planning to introduce the new controls in a more expeditious manner by requesting a Ministerial Amendment under section 20(4) of the Planning and Environment Act 1987.***
- 4. Subject to the Minister's authorisation, exhibit Amendment C225 to the Yarra Ranges Planning Scheme in accordance with the Planning and Environment Act 1987.***
- 5. That Council receive a further report considering submissions following the exhibition of Amendment C225.***

RELATED COUNCIL DECISIONS

Ordinary Council meeting of 9 May 2023 – Council resolved to request the Minister for Planning to authorise the preparation and exhibition of Amendment C217.

Ordinary Council meeting of 12 September 2023 – Council resolved to request the Minister for Planning to appoint an Independent Planning Panel to consider unresolved submissions.

Ordinary Council meeting of 12 December 2023 – Council resolved to adopt the amendment with changes and submit Amendment C217 to the Minister for Planning for approval. The Minister subsequently approved the Amendment on 1 March 2024.

DISCUSSION

Purpose and Background

Purpose

The purpose of this report is to discuss a request to the Minister for Planning to authorise the preparation and exhibition of Amendment C225 to the Yarra Ranges Planning Scheme.

Background

According to the 2024 Climate Council *Too Close to Home Report*, Yarra Ranges is the second most impacted municipality in the Country for declared events, and with that comes challenges for land use and development, particularly in the Dandenong Ranges. These areas are complex, as is reflected in the Yarra Ranges Planning Scheme, with several land management Overlays for flooding, bushfire and erosion. The Dandenong Ranges have significant legacy issues as a result of historic small land subdivisions in areas that have now been identified as high risk and inappropriate settlement pattern for the location. There are also dwellings in many locations without access to Council drainage or sewer connections which are important risk mitigation measures. Whilst landslides present a significant risk, landslides are more localised and pose a lesser risk than bushfires.

Previous mapping of landslide risk was based on hand drawn maps which then informed the first version of the Erosion Management Overlay in the 1990s. Recent utilisation of advanced three-dimensional mapping technology, named Light Detection and Ranging (LiDAR), has more accurately identified landslip-prone areas in Yarra Ranges.

A new geotechnical assessment was commissioned as a result of the June 2021 storm, which resulted in an estimated loss of more than 25,000 trees. Tree root zones have a binding and stabilising effect on soils while soaking up excess water in the soil, and low-level vegetation and ground covers assist in slowing the velocity of water flows, inhibiting erosion. This substantial loss of trees has exposed some areas to greater risk of landslide. The work undertaken is twofold: firstly, it helps identify where Council may need to undertake further work, i.e. maintaining Council assets; and secondly, where the community may need to be

informed of good practices for development and property maintenance for managing landslide risk.

Erosion Management Overlay

The purpose of the Erosion Management Overlay (Clause 44.01 of the Yarra Ranges Planning Scheme) and schedule is to protect areas prone to erosion, landslip and other land degradation by minimising land disturbance and inappropriate development (refer to Attachment 2).

The EMO currently applies to 111.95 km² of the total 2,468.16 km² of land in Yarra Ranges. There are more properties in Yarra Ranges affected by the EMO than in other municipalities in Victoria.

Landslide management was first implemented by the former Shire of Lillydale in the early 1990's through changes to the planning scheme in response to property destruction caused by landslides through the 1980's and early 1990's. This forerunner to the current Yarra Ranges EMO was implemented in 2001 and was based on historic mapping undertaken using topographic information available at the time, mostly hand drawn 1960's contour plans by Melbourne Metropolitan Board of Works (MMBW) and through viewing aerial photography.

In December 2009, Amendment C40 to the Yarra Ranges Planning Scheme replaced the schedule to the EMO introduced in 2001, by including an updated landslip risk assessment process which enabled the consideration of development on land with serious risk characteristics. The objectives, decision guidelines, exemptions and information requirements were also updated to include more detail. One of the key changes was that geotechnical assessments submitted with a planning application had to be prepared by practitioners with a specified level of experience and expertise. Since the EMO Schedule was introduced in 2001, and further updated in 2009, there have been advances in the accuracy and methodology of landslide risk assessment in Australia. Notably the development of the Australian Geomechanics Society guidelines (AGS 2007) and technology developments, particularly high-resolution 3D scanning of topography (LiDAR).

It is imperative that Yarra Ranges, as one of the most significant EMO areas in Victoria, updates the overlay mapping to align with these improvements. There is also an obligation under the *Planning and Environment Act* 1987 to keep planning controls up to date, which at the moment are not based on the latest information.

The EMO generally does not prohibit changes to a site or buildings, rather it requires a planning application process whereby landslip can be considered and responded to appropriately. Typically, the applicant will be required to obtain a geotechnical assessment prepared by a suitably qualified geotechnical practitioner. The geotechnical assessment assesses the risk and provides recommendations for appropriate measures to be put in place for the proposed building or works. This reduces the potential for future landslip and keeps residents and neighbours safe.

Storm Event June 2021 and Preparing Australian Communities (PAC) Funding

The storm event of June 2021 damaged and destroyed many dwellings in Yarra Ranges. Many of the affected properties were in the Dandenong Ranges and its foothills. It was identified at that time that there was a need to review and update landslip and debris flow risks in Yarra Ranges, especially in light of the increased landslip risks arising from significant loss of trees which offer a degree of stabilising to the soil and removal of water. According to information collated by Council's Rebuilding Support Service (RSS), the storms were destructive and caused 71 properties to be uninhabitable and a further 51 properties were damaged but still habitable. A number of storm damaged dwellings needed to be demolished and rebuilt, with the majority of these located within the EMO which required reconstruction to a higher safer standard.

Council requested financial assistance for a number of matters arising from the storms including the need to bring forward a review of the EMO due to changed land conditions and significant loss of trees. Council received \$300,000 in grant funding under the National Emergency Management Agency's *Preparing Australian Communities (PAC) Program – Local* to undertake a comprehensive review of landslip risks in Yarra Ranges. Council engaged an expert geotechnical consultant to review and advise on changes required to the mapping and provisions of the EMO in the Yarra Ranges Planning Scheme. The report titled *Strategy for EMO Amendment and Resilience* (March 2023) also considered the potential impacts of climate change on landslip susceptibility and how this can be factored into decision-making.

Council received advice from the Department of Transport and Planning (DTP) to proceed with a two-stage process for making changes to the EMO provisions and associated mapping in the planning scheme (i.e. two planning scheme amendments). A two-stage amendment process had the benefit of prioritising and fast-tracking changes for properties affected by the EMO schedule, which were a priority, particularly those seriously affected by landslide and storm related damage which received extensive media coverage.

Accordingly, the report titled *Strategy for EMO Amendment and Resilience* (March 2023) was split into two reports to align with the technical focus for the separate planning scheme amendments. These reports are *Basis for Schedule Amendment, May 2023*, which was previously included in the Council report for the now-Gazetted Amendment C217, and *Basis for Mapping Amendment, April 2025* (Attachment 1), which is the basis for the current proposed Amendment C225. The reports provide a holistic review of the EMO in Yarra Ranges.

Amendment C217

The purpose of the first planning scheme amendment (C217) was to implement the recommendations of the report *Basis for Schedule Amendment* (May 2023). It made changes to the provisions of the Schedule to the EMO, including changes to the exemptions and application requirements for proposed developments and the addition of an incorporated document. Importantly, the amendment updated the tolerable risk criteria from Low to Medium in particular circumstances, to bring the risk provisions in the Planning Scheme into line with

contemporary guidance provided in the *Australian Geomechanics Society Practice Note Guidelines for Landslide Risk Management* (AGS 2007).

Amendment C217 to the Yarra Ranges Planning Scheme was approved by the Minister for Planning on 1 March 2024.

Council officers are now seeking to proceed with the subsequent planning scheme amendment (C225) to update the EMO mapping based on the recommendations of the second report *Basis for Mapping Amendment, April 2025*.

Issues

Recent landslides in Yarra Ranges

There have been several impactful landslides in Yarra Ranges, demonstrating this is a very live issue with significant community impacts:

- Monbulk Road, Belgrave: Major impact while reconstruction works carried out, severing access between Monbulk and Belgrave.
- Warburton Highway, Warburton: Significant risk to Warburton community with major services rendered inaccessible during reconstruction works, including emergency services, and protracted impacts to traffic.
- Private property, Tremont: Resulted in the destruction of a house which fortunately was not occupied, and substantial live debris runout extending downslope by about 70 metres onto Mt Dandenong Tourist Road. Once again, fortunately no vehicles or people were impacted by the debris flow. Refer to Figure 1 below.
- Mount Dandenong Tourist Road, Sassafras: The investigations of this live disruption continue to raise further concerns in a highly visited corridor with potential high economic impacts. Continued reduced traffic flows while reconstruction works are planned.

Figure 1: Mount Dandenong Tourist Road, Tremont



Figure 2: Mount Dandenong Tourist Road – down slope, Tremont



Council's geotechnical consultant has advised that the changing weather patterns due to climate change may alter the landslide risk in Yarra Ranges. Whilst climate change forecasts suggest that overall rainfall is likely to decrease, there could be an increase in extreme weather events, such as storms with high intensity rainfall. Another outcome of changing weather patterns is more frequent bushfires, which consequently reduce vegetation cover and damage infrastructure such as timber retaining walls or PVC drainpipes. This can increase the possibility of landslides during subsequent rain events.

Recent Landslide in McCrae

A significant landslide occurred at McCrae in the Mornington Peninsula Shire on 14th January 2025. The landslide caused injury to a person, and the loss of one house and the evacuation of around 20 others. A number of these residents have not yet been able to return to their homes. This general location is not currently within an Erosion Management Overlay.

More information is available on the Mornington Peninsula Shire website via this link: <https://www.mornpen.vic.gov.au/Your-Property/Fire-Emergency/Emergency-Management-Information/McCrae-landslide>.

On 4th of February 2025, the State Government announced a Board of Inquiry would be established to investigate the landslide and identify measures to prevent similar incidences occurring in the future. The final report is expected to be delivered in the next couple of months. More information on the Inquiry is available via this link: <https://www.mccraeinquiry.vic.gov.au/>.

Basis for Mapping Amendment Report - Findings and Recommendations

The report *Basis for Mapping Amendment, April 2025* (Attachment 1) was prepared by qualified geotechnical consultants that have significant experience in advising on landslip matters in Yarra Ranges and across Australia.

Through an assessment of the major geology and geomorphology types in Yarra Ranges, various criteria were applied to land to review risk including:

- slope angle,
- underlying geology, and
- presence of an existing landslide.

High resolution LiDAR topographic information was also used to better identify previous landslides. This review found:

- New evidence of previous landslides has required updates to the inventory of sites for Yarra Ranges, which has been expanded from 167 mapped landslides to more than 1,100.
- That the existing criteria used to define land susceptible to landslide is reasonable and does provide a reasonable indication of land prone to landslide.
- That areas identified through the LiDAR mapping with medium to high landslide susceptibility be included in the EMO.
- That parts of Montrose included in the current EMO on the basis of being susceptible to debris flow along with other areas identified as susceptible to debris flow are included within the EMO.
- The current administration of the EMO appears to be largely effective, and it is recommended that current practices continue.

Table 1 identifies the number of properties affected by the updated EMO mapping. Attachment 4 shows the proposed EMO mapping across the municipality. More detailed mapping will be available when the amendment is authorised by the Minister for Planning for public exhibition. Affected property owners will be notified when the amendment is placed on public exhibition.

Table 1: Number of properties affected by the updated EMO mapping (excluding debris flow)

Source	Current EMO	Proposed EMO
Total approximate area affected (km2)	112	136
Total approximate number of properties (allotments) affected	11,447	13,434
Total number of properties (allotments) for which removal from EMO recommended	N/a	1,185 removed
Total number of properties (allotments) for which addition of EMO recommended	N/a	3,172 added
Net change in the number of properties (allotments) affected	N/a	1,987 added

The increase to the area affected by the EMO is largely due to areas affected by landslides that had not previously been mapped.

Due to the refinement in the EMO mapping there will be updates to how the EMO applies to properties already in the EMO. For example, the extent to which the overlay applies to a property in the EMO may either be increased, decreased or remain relatively the same.

The report identifies there are various types of landslides that occur in Yarra Ranges and historically have been broadly classified as “landslides” or “debris flows”. The characteristics of these are described as follows:

- “Landslide refers to the rotational or translational movement of soil down a slope whereby it slides along a plane. The mass of displaced soil may remain intact or somewhat disaggregate.
- A “debris flow” refers to the live flow of wet soil and debris downslope, usually channelled along a gully where the debris can travel long distances, and in some cases causing impact significantly remote from the initiation area.

The existing EMO mapping includes areas in Montrose which are susceptible to debris flow runout based on a 1991 study that only considered the Montrose area. The study identified these areas of Montrose as having a ‘medium’ or ‘high’ debris flow susceptibility.

A 2017 University of Melbourne statewide debris flow study, in conjunction with the LiDAR mapping, have identified other areas with debris flow susceptibility which are now also recommended for inclusion in the EMO.

Newly identified channels susceptible to debris flows have been identified in areas south of Warburton and to the east and south of The Basin, as well as more areas on Mount Dandenong and Montrose. These areas have a nominal 20 metres either side (40 metre total width) as being potentially susceptible

The location where a debris flow starts, or debris initiation areas, were mapped using a similar method to landslides, using the digital terrain information. The debris flow initiation areas have been included in the landslide susceptibility areas,

as the hazard to people and property would be similar to a landslide i.e. generally related to ground subsidence from below. Therefore, the report recommends that these areas to be included in the EMO mapping.

The runout paths, where people or property could be impacted by material travelling down from upslope, has also been included in the debris flow susceptibility map. These areas have a higher risk to property and life.

Table 2 below provides a summary of proposed mapping changes for debris flow.

Attachment 4 shows the proposed EMO mapping across the municipality. More detailed mapping will be available when the amendment is authorised by the Minister for Planning for public exhibition.

Table 2: Number of properties affected by the proposed EMO mapping for debris flow susceptibility areas (Proposed EMO – Schedule 2)

Source	Current EMO*	Proposed EMO*
Total approximate area affected (km2)	0.5	1.1
Total approximate number of properties (allotments) affected	293	498

** Does not include debris flow source areas, which are treated as landslide areas, and does not include land owned by government department or agencies.*

The report advises that whilst the areas identified as susceptible to debris flow and landslide can be combined into the one schedule under the EMO, there may be benefit of introducing separate planning controls for each hazard type due to debris flow hazards carrying higher risk to life than the more gradual landslide hazards. These benefits include the following:

- Debris flows involve the rapid flow of material downslope and typically present a significant risk to life. Landslides within Yarra Ranges more often involve slower movement which presents a risk to property, but less of a risk to life. As such, differentiating the two will prevent properties not susceptible to debris flow from being held to the higher risk requirements. This could be achieved by applying separate planning controls and management to debris flow properties.
- Debris flows can travel large distances from their source, which can stretch to several kilometres. A property may be on flat ground with no indication within the proximity of the property that it might be susceptible to impact from debris flow. Where a property is susceptible to debris flow, assessment of the risk the debris flow might present to the property may need to take in areas remote from the site. Currently the geotechnical practitioner who undertakes the assessment is informed only that the EMO applies, and not why the EMO applies in a particular area. A separate schedule for debris flow susceptibility areas could reduce the occurrence of these oversights and assist to attain appropriate outcomes from the assessment, including appropriate risk mitigation measures.

Amendment C225

Amendment C225 proposes to make the following changes to the Yarra Ranges Planning Scheme:

- Renumber the current Schedule to Clause 44.01 Erosion Management Overlay to Schedule 1.
- Amend Schedule 1 to correct grammatical errors and introduce a new planning permit exemption for repair and maintenance works to existing assets by public authorities or utility service providers.
- Introduce Schedule 2 to Clause 44.01 Erosion Management Overlay.
- Amend Planning Scheme Maps to delete the Erosion Management Overlay from various properties where it is no longer required, make changes to existing EMO mapping and introduce the Erosion Management Overlay to new properties based on the findings of the report *Basis for Mapping Amendment, April 2025*.
- Amend the Planning Scheme Maps to introduce Schedule 1 to the Erosion Management Overlay to the applicable properties.
- Amend the Planning Scheme Maps to introduce Schedule 2 to the Erosion Management Overlay to the applicable properties.
- Amend the Schedule to Clause 72.03 What does this Planning Scheme consist of to amend the EMO maps comprised in the planning scheme.
- Amend the Schedule to Clause 72.04 Documents Incorporated in the Planning Scheme with an updated Incorporated Document titled *Requirements for a Geotechnical Assessment, Landslide Risk Assessment or Landslide Hazard Assessment prepared in support of a planning permit application under the Erosion Management Overlay* (Yarra Ranges Shire Council, 2025).
- Amend the Schedule to Clause 72.08 Background Documents to include *Erosion Management Overlay - Basis for Mapping Amendment, April 2025* as a background document in the Planning Scheme.

In order to commence the amendment process, Council must seek authorisation from the Minister for Planning to prepare and exhibit the amendment.

Schedule 2 – Debris Flow

Currently there is one schedule to the EMO in the Yarra Ranges Planning Scheme which does not distinguish the level of risk on a property until an expert geotechnical report is commissioned as part of a planning application. The proposal to include two separate schedules to the EMO will differentiate the level of risk and be transparent for prospective purchasers.

The purpose of Schedule 2 to the EMO is to clearly identify the presence of debris flow risk upfront, providing more accurate information about the type of hazard for landowners, prospective landowners, geotechnical practitioners, Council and decision makers.

The current Schedule to the EMO would be re-numbered Schedule 1 and give reassurance of a more manageable risk level.

Some properties may have both schedules applied if both hazards, debris flow and landslide, have been identified and mapped accordingly.

The planning permit exemptions for Schedule 1 and Schedule 2 are proposed to be more tailored to the type of risk present. For example, under the current Schedule to the EMO, a planning permit is required to remove, destroy or lop vegetation (unless an exemption applies) as this can lead to an increased amount of water in the ground and remove the stabilising effects of roots in areas prone to landslip.

However, a planning permit would not be required to remove, destroy or lop vegetation in the proposed Schedule 2, as the debris flow risk typically originates outside the property.

A draft copy of Schedule 2 is provided at Attachment 2. If Schedule 2 is introduced, the current incorporated document in the planning scheme (*Requirements for a Geotechnical Assessment, Landslide Risk Assessment or Landslide Hazard Assessment prepared in support of a planning permit application under the Erosion Management Overlay*) would require some minor updates to reference considerations specifically relating to debris flow. There would be only one incorporated document, but it would be referenced in each of the schedules to the EMO.

Schedule 2 may create concern from affected landowners as it clearly identifies the presence of higher risk on their property, could limit their ability to develop or rebuild, and may negatively impact property value. However, Council has an obligation under the *Planning and Environment Act 1987* to accurately identify hazards through planning scheme controls.

This is similar to when new flood modelling occurs and properties are identified as being within an area at risk of flooding and the Land Subject to Inundation Overlay is applied, or a Bushfire Management Overlay is applied to properties where there is a bushfire risk. If a property in the Bushfire Management Overlay has been assessed by a qualified bushfire consultant or CFA to be in a similar higher risk category of 'Flame Zone', the risk is too significant for a dwelling to be built or rebuilt if it were destroyed.

Proposed Schedule 2 more clearly identifies the type of hazard, i.e. debris flow or landslide, that applies to the land. This provides greater transparency and provides more accurate information about the type of hazard for landowners, and prospective property buyers, geotechnical practitioners, Council and decision makers. In addition, two schedules enable planning permit exemptions to be tailored specifically to the type of hazard that applies.

Schedule 2 does not introduce any greater risk, as geotechnical practitioners are already required to check whether a property is subject to a debris flow and assess risk to life and property.

However, it should be noted the introduction of new mapped areas of debris flow susceptibility (beyond areas that have already been identified to be subject to this type of hazard) potentially increases the number of properties that cannot be developed if a tolerable risk to human life and property cannot be achieved.

Planning Scheme Amendment pathways

Ministerial Amendment

The urgency for undertaking the EMO mapping amendment has been heightened by the significant landslide at McCrae as discussed above. Council's geotechnical consultant has provided written advice that emphasises the importance of introducing new mapping as efficiently as possible (Attachment 1).

The most efficient and expeditious pathway for a planning scheme amendment to be approved is through an amendment undertaken by the Minister for Planning (ministerial amendment) under section 20(4) of the *Planning and Environment Act* 1987. A ministerial amendment can be prepared and approved without public notice, meaning community have no opportunity to make a submission. However, Council would still provide thorough community information on its website to assist with understanding the amendment and landslide more generally.

Council officers have contacted the Department of Transport and Planning (DTP) to determine whether a ministerial amendment could be supported based on reasons of urgency. Council officers believe the amendment would meet the criteria for undertaking a ministerial amendment (as set out in the Ministerial Powers of Intervention in Planning and Heritage Matters, General Practice Note, Department of Sustainability and Environment, November 2004). To date representatives from DTP have indicated it is unlikely this approach would be supported, however officers recommend continuing to advocate for Ministerial intervention by writing to the Minister for Planning seeking support for a ministerial amendment.

Using the Ministerial amendment pathway would be consistent with previous similar amendments and has been used to apply the Bushfire Management Overlay (BMO) which, like the EMO, is a hazard overlay that has a purpose of protecting human life and ensuring development is only permitted where the risk to life and property can be reduced to an acceptable level.

There is an urgency for the mapping of the EMO to be updated, as there are no certainties about when the next significant rainfall event or landslide could occur, however given recent weather patterns and high instance of emergencies in Yarra Ranges it is reasonable to consider this likely and imminent. In the event that a landslide occurs that results in damage to property, injury or loss of life this may have significant implications if there is accurate mapping of the EMO which has not yet been introduced into the planning scheme.

The EMO ensures that development within areas susceptible to landslide achieves a tolerable risk level and are appropriately sited, designed and constructed to safeguard existing and future residents and neighbours.

Request for Interim Controls

If a Ministerial Amendment to introduce permanent controls is not supported by DTP, a request could be made to the Department for consideration of introducing an interim EMO on land where the overlay does not already apply, but it has been identified that an EMO is required. Seeking interim controls concurrently with an exhibited Amendment is not an uncommon practice.

This would enable the EMO to be introduced on an interim basis while the formal Council led planning scheme amendment is completed. Even the shortest and most straightforward planning scheme amendment process will take close to 12 months due to the consideration of submissions and the likely appointment of an independent planning panel.

If this approach is supported by DTP, it would once again require a Ministerial Amendment to introduce the interim EMO and minimise the risk of inappropriate development and earthworks occurring in areas where an EMO is required. (Request for interim controls are common amongst Councils when introducing new planning controls.) The request for an interim EMO could be included in the letter to the Minister for Planning that also requests an amendment under section 20(4) of the *Planning and Environment Act 1987* (Ministerial Amendment).

Council-led Amendment

A Council-led planning scheme amendment is a more consultative process and provides the community with an opportunity to be notified of the planning scheme amendment through a public exhibition period and provide feedback before it is implemented.

The community can make a submission if they support or have any concerns regarding the amendment. Given the scale of the proposed EMO mapping changes and number of impacted properties it is anticipated that there is likely to be a large number of submissions which would result in a lengthy Panel Hearing, with costs to be met by Council.

It would be strongly advised that any submitter presenting at a Panel Hearing engages a geotechnical engineer to present given that the amendment is of a technical nature. The LiDAR imaging shows clear evidence of historic landslides, and the incline is much more accurately assessed, rendering much of the basis of the decision to be empirical rather than subjective. As the amendment is based on technical considerations, it is unlikely that any submissions, unless prepared by a geotechnical consultant, will have an impact on the application of the EMO. This may mean community have unreasonably expended personal funds even though their efforts are unlikely to change the current expert assessment.

Regardless of the pathway used to progress Amendment C225, the amendment does provide an opportunity to educate the community, particularly residents

already in the EMO, as well as residents in the proposed EMO mapped areas, of the risks of landslides and what action they can take to reduce risk of landslide. Through the PAC funding, Council officers have prepared a factsheet that provides further information on landslides and how they can be prevented (refer to Attachment 3).

This 'Inform' approach to community would be relevant and useful to any of the amendment pathways.

Emergency Management

The EMO mapping supports broader emergency planning by:

- Enabling identification of high-risk corridors and assets requiring protection or upgrades.
- Supporting the targeting of educational materials, including tailored fact sheets for residents, contractors, and emergency responders.
- Facilitating risk-based prioritisation in infrastructure investment and capital works planning.
- Informing Municipal Emergency Management Planning Committee (MEMPC) strategies and integration into VICSES Community Emergency Risk Assessments (CERA).
- Enhancing internal preparedness through improved coordination between Emergency Management, Infrastructure Services, and Planning teams.

With the new mapping embedded in Council's GIS and emergency planning platforms, teams can better anticipate risk, reduce reliance on reactive responses, and build a more climate-resilient municipality.

The Emergency Management team have also prepared updated fact sheets that provide guidance on building community resilience to landslide hazards and have undertaken several sessions with the community.

Options considered

Option 1 – Write to the Minister for Planning consideration of a Ministerial Amendment under section 20(4) of the Planning and Environment Act 1987

The first option is to write to the Minister for Planning to seek application of the EMO mapping as a Ministerial amendment on the grounds of urgency and introducing an interim EMO on land where the overlay does not already apply as discussed under Ministerial Amendment above.

Option 2 - Seek authorisation to commence Amendment C225 and concurrently seek interim controls (Council-led amendment)

The second option is to seek authorisation from the Minister for Planning to commence Amendment C225 as a Council-led amendment and ask the Minister to also consider applying the proposed mapping changes on an interim basis whilst

Amendment C225 is exhibited as discussed under Request for Interim controls above.

Option 3 – Not proceeding with Amendment C225

The third option is to not proceed with Amendment C225 to introduce updated EMO mapping into the Planning Scheme. This poses a significant risk to Council, as there is potential for litigation and reputational damage if a landslide was to occur in an area identified in the April 2025 report and associated mapping as being susceptible to landslides.

Recommended option and justification

Option 1 and 2 are recommended.

A Ministerial Amendment could apply the EMO mapping in an expeditious manner as there have been numerous recent incidents that have highlighted potential impacts, and it is likely there will be continued substantial landslide incidents as storm and rain events continue to occur more frequently

It is recommended that in tandem with seeking the Minister's support to prepare a Ministerial amendment, Council also proceed with seeking authorisation for a Council led amendment and also seek interim controls.

FINANCIAL ANALYSIS

Council has received \$300,000 in grant funding under the National Emergency Management Australia (NEMA) *Preparing Australian Communities (PAC) Program – Local* which has been partly used to fund the EMO review by a geotechnical consultant and obtain the relevant LiDAR data and landslip fact sheets.

The costs associated with a Council led planning scheme amendment are covered by the recurring operational budget for Strategic Planning and a summary of likely costs is as follows:

• Mail to property owner/occupier (nom. 20,000)	\$35,000
• Advertisement in all Local newspapers	\$5,000
• Consultant attendance at information sessions	\$7,000-\$10,000
• DTP amendment fees	\$530.70
• Planning Panel fees (2 members, 4 days)	\$45,000
• Expert witness (geotechnical consultant)	\$15,000
Total	\$107,530.70 - \$110,530.70

If a ministerial amendment is supported by the DTP, the amendment costs would be vastly reduced and would only incur a fee (currently \$3,364) for the Minister to

consider the amendment request plus any discretionary community education support delivered by Council.

APPLICABLE PLANS AND POLICIES

This report contributes to the following strategic objective(s) in the Council Plan:

- Council Plan (2021-25): Quality Infrastructure and Liveable Places and Protected & Enhanced Natural Environment,
- Yarra Ranges Planning Scheme (Clause 02.03-3 Environmental risks and amenity and Clause 13.04-2S Erosion and Landslip), and
- Clause 44.01 Erosion Management Overlay the purpose of which is to protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.

RELEVANT LAW

The proposed planning scheme amendment would be prepared in accordance with the legislative requirements of the *Planning and Environment Act 1987*.

SUSTAINABILITY IMPLICATIONS

Economic Implications

The amendment may have some adverse economic effects to individual landowners such as perceived loss of house value, possible impact on insurability and costs associated with preparing expert reports and building work. While these concerns are noted they do not constitute a planning consideration which is focused on risk to life and property. Most insurance companies already do not cover landslide, and property values have not been demonstrated to be detrimentally impacted over the long term when equivalent planning controls have been applied.

Inclusion of a property within the EMO generally does not prohibit changes to that site or buildings, rather it requires a planning application process whereby landslip can be considered and responded to appropriately. In most cases an applicant would need to engage a geotechnical practitioner to conduct a geotechnical assessment and landslip risk assessment, unless deemed not required by Council (the responsible authority). Any proposed development or works would need to be engineered to reduce risk levels to within the tolerable limit.

In a small number of cases some properties may not be able to rebuild if the landslip risk is too great. Properties currently in the EMO which are also in a debris flow susceptibility area may not be able to rebuild due to the risk to human life and property. The introduction of Schedule 2 would not alter this, as geotechnical practitioners can already identify if a property is within a debris flow area and

assess whether or not the development can be undertaken at a tolerable risk to human life and property from debris flow.

Landslides across Yarra Ranges have caused damage to the road network, buildings and infrastructure, which results in a significant cost to undertake repairs, as well as having other indirect costs to the community. This can include full or partial road closures, which also has implications on emergency services and businesses.

It is considered that economic impacts on future development will be offset by protection of landslide and debris flow hazard areas by minimising land disturbance from inappropriate development for the protection of all of the community.

Social Implications

The proposed changes to the planning scheme will make it clear to residents and the community what the intended outcomes are for properties impacted by an EMO and identify whether it is within a landslip or debris flow susceptibility area, or both in some instances.

The historic debris flow event in Montrose has been well documented and in the past Council had publicly available information sheets to inform residents and the community. The information sheets (last provided to affected residents in early 2000 when the current EMO was introduced into the planning scheme) included background history of the Montrose debris. These will be updated and republished for community during this process.

The extent of the community's current awareness and knowledge of the landslide risks, debris flow and associated risks are unknown but is anticipated to be low. There is potential for residents within new mapped debris flow areas and existing EMO areas to be concerned about their ability to rebuild their dwelling if it was destroyed, for example by a fire. This is a current risk for residents in existing mapped areas.

Council has assessed and identified the risks to residents in the affected areas and carries both an obligation and associated liability to act on this knowledge. In the event that a landslide occurs and there is damage to property, injury or loss of life there would be significant potential for reputational damage and potential litigation if it is demonstrated Council had not acted in accordance with its findings and obligations.

Recent media coverage of the McCrae landslide has been a good indication of the extent of coverage if a similar incident were to occur in Yarra Ranges. The recent landslide and house destruction and loss in Tremont indicates future landslides are likely and should be planned for.

Conversely, it is also likely that the proposed new planning controls will be challenging for some residents and may attract negative reactions. This will be managed through clear and accessible information and communication explaining the need as well as the implications of not carrying out the works. It is

acknowledged this still may not alleviate the concerns of some community members.

Environmental Implications

The primary environmental implication of the proposed changes will be to further reduce the risk of landslip in the affected areas of Yarra Ranges in locations that currently lack planning controls. Applying Schedule 1 and 2 to the EMO to properties will more accurately identify the type of risk.

Council's geotechnical consultant has advised that the frequency of landslides has increased in the past five years. Climate change forecasts suggest that whilst rainfall totals in Victoria might reduce in response to climate change, whereas the magnitude and frequency of extreme weather and climate events is expected to increase. Accordingly landslide frequency is expected to increase in response to the predicted climate trends.

COMMUNITY ENGAGEMENT

Amendment C225

If Council supports the amendment proposal and resolves to seek authorisation from the Minister for Planning to prepare and exhibit an amendment, and the Minister grants authorisation, the amendment will be subject to standard notification requirements for planning scheme amendments as required under the *Planning and Environment Act 1987*, including:

- Notification in a local newspaper,
- Letters to affected landowners and occupiers and other key stakeholders in the community,
- Information available on Council's website and Council offices, and
- Direct notification to relevant government agencies and departments.

It is also proposed that additional consultation be undertaken for the amendment: This includes:

- A dedicated page on Shaping Yarra Ranges,
- Frequently Asked Questions,
- Face to face and online meeting opportunities with affected landowners and key stakeholders,
- Updated information on Council's website that already contains useful links, a map viewer of the proposed maps, videos and factsheets on landslip,
- Preparing other communication material that is concise and easy for the community to understand including the Fact Sheet at Attachments 3, and

- Social media and other media releases.

A further report would be prepared for Council to consider all submissions made during exhibition of the amendment.

Interim Amendment

If Council supports the application of an interim EMO, and the Minister supports this approach, the interim control will be introduced by a Ministerial Amendment under Section 20(4) of the *Planning and Environment Act 1987* and the Minister for Planning may exempt herself from the notice requirements of the Act and the amendment would be prepared, adopted and approved by the Minister without any public notice.

The effect of the exemption is that third parties will not receive notice of the interim amendment and will not have the opportunity to make a submission or be heard by an independent planning panel.

However, the exhibition of Amendment C225 to apply permanent controls to the properties will provide the opportunity for the community and affected parties to make submissions on the proposal.

Ministerial Amendment

If a ministerial amendment to apply permanent controls is supported by the DTP, the level of community engagement undertaken by Council would be significantly less and would likely not involve notification to landowners seeking their thoughts on the amendment proposal. However, Council would still have a comprehensive communications plan that informs and supports landowners of the issue and amendment subsequent to changes being approved and introduced in the Yarra Ranges Planning Scheme.

Through the PAC funding, Council's officers have prepared a community booklet (factsheet) titled *Managing landslide risk - good practice for development in Yarra Ranges* (refer to Attachment 3). The purpose of this booklet is to provide information to residents about landslips, what causes them and what can be done to manage landslide risk. This community booklet will be made available on Council's website. A local joint agency approach to communicating emergency risks related to landslips will be an additional step in fostering a shared understanding of the potential impact on the community.

COLLABORATION, INNOVATION AND CONTINUOUS IMPROVEMENT

Discussions were undertaken with the DTP throughout the duration of the initial Amendment C217, and they are aware of this subsequent Amendment C225 for updating the EMO mapping in the Yarra Ranges Planning Scheme.

Communication has commenced with officers from DTP in relation to whether a ministerial amendment could be supported. In addition, a letter to the Minister for Planning seeking support for a ministerial amendment will be prepared.

Amendments to the EMO planning scheme controls will contribute towards continuous improvement of the Yarra Ranges Planning Scheme by accurately reflecting landslip and debris flow hazards in order to appropriately guide land use and development.

An internal group at Council was formed in response to the *Preparing Australian Communities (PAC) Program – Local* funding. The teams within Council that received PAC Program funding met every month to discuss projects and their progress.

RISK ASSESSMENT

Some areas in Yarra Ranges are known to be susceptible to landslide and debris flow currently lack planning controls and there is potential for inappropriate development to occur in those areas that could increase the risk to life and property from landslides. The purpose of implementing updated EMO mapping is to identify land that is susceptible to landslip and debris flow and to reduce the associated risk to property and human life as a direct consequence.

The purpose of the Schedule 2 to the EMO would minimise the risk of debris flow areas not being correctly identified by a geotechnical practitioner when completing a geotechnical assessment.

Given the new EMO mapping has already been prepared, but not yet introduced into the planning scheme, there is a risk to Council if a landslide occurs within one of these areas, similar to the landslide at McCrae. The recent Board of Inquiry hearing identified that the McCrae landslide location is not covered by an EMO, however a 2012 report concluded this area had high susceptibility to landslide.

It is documented that landslide frequency is expected to increase in response to the predicted climate trends of extreme weather. Therefore, the new EMO mapping needs to be efficiently implemented into the Yarra Ranges Planning Scheme.

Amendment authorisation and approval of Council-led amendments is currently taking a significant amount of time. Therefore, the EMO mapping amendment could potentially take up to 12-24 months to be included in the Planning Scheme.

Should a Ministerial Amendment be supported by the DTP, there is a risk that DTP may only support the EMO mapping updates and not the introduction of Schedule 2 to the EMO. In this scenario, it is recommended that a Council led amendment is undertaken to implement Schedule 2 subsequent to an EMO mapping amendment and interim controls for these areas be sought from the Minister to apply to these areas while an amendment is considered through a public exhibition process.

CONFLICTS OF INTEREST

No officers and/or delegates acting on behalf of the Council through the Instrument of Delegation and involved in the preparation and/or authorisation of this report have any general or material conflict of interest as defined within the *Local Government Act 2020*.

ATTACHMENTS TO THE REPORT

1. Background Technical Report
 - Yarra Ranges Erosion Management Overlay: Basis for Mapping Amendment, WSP, April 2025
2. Planning Scheme Amendment Documents
 - Explanatory Report
 - Instruction Sheet
 - Current Clause 44.01 Erosion Management Overlay
 - Current Schedule to Clause 44.01 Erosion Management Overlay
 - Proposed Schedule 1 to Clause 44.01 Erosion Management Overlay
 - Proposed Schedule 2 to Clause 44.01 Erosion Management Overlay
 - Proposed Schedule to Clause 72.03
 - Proposed Schedule to Clause 72.04
 - Proposed Schedule to Clause 72.08
 - Proposed updates to the Incorporated Document
 - Strategic Assessment Guidelines
3. Community Information and Engagement Material
 - Community Factsheet for Managing Landslide Risk
4. Proposed Mapping
 - EMO – Proposed map