

**Greater Geelong Planning Scheme
Amendment C339ggee Part 2**

**Lower Barwon and Moorabool Rivers and Bellarine Peninsula
coastal hazard flood overlays**

Panel Report

Planning and Environment Act 1987

24 July 2023

How will this report be used?

This is a brief description of how this report will be used for the benefit of people unfamiliar with the planning system. If you have concerns about a specific issue you should seek independent advice.

The planning authority must consider this report before deciding whether or not to adopt the Amendment.
[section 27(1) of the *Planning and Environment Act 1987* (the PE Act)]

For the Amendment to proceed, it must be adopted by the planning authority and then sent to the Minister for Planning for approval.

The planning authority is not obliged to follow the recommendations of the Panel, but it must give its reasons if it does not follow the recommendations. [section 31 (1) of the PE Act, and section 9 of the *Planning and Environment Regulations 2015*]

If approved by the Minister for Planning a formal change will be made to the planning scheme. Notice of approval of the Amendment will be published in the Government Gazette. [section 37 of the PE Act]

Planning Panels Victoria acknowledges the Wurundjeri Woi Wurrung People as the traditional custodians of the land on which our office is located. We pay our respects to their Elders past and present.

Planning and Environment Act 1987

Panel Report pursuant to section 25 of the PE Act

Greater Geelong Planning Scheme
Amendment C339ggee Part 2

Lower Barwon and Moorabool Rivers and Bellarine Peninsula coastal hazard flood overlays

24 July 2023



Lester Townsend, Chair



John Hartigan, Member

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Glossary and abbreviations

AEP	Annual Exceedance Probability
CCMA	Corangamite Catchment Management Authority
Council	Greater Geelong City Council
DEECA	Department of Energy, Environment and Climate Change
DoT	former Department of Transport, now DTP
DTP	Department of Transport and Planning
FO1	Floodway Overlay Schedule 1
LiDAR	Light Detection and Ranging. A method of mapping that allows high levels of detail to be recorded about topography
LSIO1	Land Subject to Inundation Overlay Schedule 1
PE Act	<i>Planning and Environment Act 1987</i>
PPF	Planning Policy Framework
VPP	Victoria Planning Provisions

Overview

Amendment summary

The Amendment	Greater Geelong Planning Scheme Amendment C339ggee Part 2
Common name	Lower Barwon and Moorabool Rivers and Bellarine Peninsula coastal hazard flood overlays
Brief description	The Amendment proposes to revise flood overlays in the Lower Barwon River and Lower Moorabool River and Corio Bay coast
The Proponent	Council
Planning Authority	Council
Authorisation	19 May 2021, with conditions
Exhibition	15 July to 16 August 2021
Submissions	563 submissions (including two late submissions) were received to Amendment C339ggee with 58 relating to what is now C339ggee Part 2: 46 submissions objected and 7 submissions supported, and 5 made comments

Panel process

The Panel	Lester Townsend (Chair) and John Hartigan
Directions Hearing	Video conference, 2 May 2023
Panel Hearing	Video conference, 19 June 2023
Site inspections	Unaccompanied, 23 June 2023 by the Chair
Parties to the Hearing	See Appendix B
Citation	Greater Geelong PSA C339ggee Part 2 [2023] PPV
Date of this report	24 July 2023

Executive summary

Greater Geelong Planning Scheme Amendment C339ggee Part 2 (the Amendment) seeks to revise flood overlays in the Lower Barwon River, Lower Moorabool River and Corio Bay coast.

The Amendment revises the mapping extent of the Floodway Overlay and the Land Subject to Inundation Overlay and amends the schedules of the overlays by including floodway objectives, statement of risk, permit requirements, applications requirements and decision guidelines.

Issues raised in submissions included:

- threshold issues about the flood modelling used to apply the overlays or the effect of the overlays on property values and insurance
- site-specific issues relating to changed circumstances or more complex issues in applying the overlays.

In relation to the threshold issues the Panel concludes:

- There is clear policy support for the Amendment.
- The criteria used to apply the Floodway Overlay is appropriate.
- The methodology of the flood modelling is appropriate and uses Light Detection and Ranging (LiDAR) data that can be relied upon as an accurate measure of topography at the time the flood models were run. The fact that there is no local memory of a flood event effecting a given property is not a sufficient reason to not apply a flood overlay.
- Impacts on property values or insurance premiums are not a reason to remove the proposed overlays from a property.

In relation to site-specific issues the Panel concludes:

- Council's approach to site-specific objections to the overlays is generally appropriate.
- The exhibited flood overlay mapping should be removed from relatively small portions of land on otherwise flood-free lots, at:
 - 8 Merralyn Street, Belmont
 - 12 Balcombe Road, Newtown
 - 10 Camden Road, Newtown.
- The flood overlays on recently developed estates should be reduced to reflect that filling has occurred since the flood modelling was completed, namely:
 - Rowands Street area in the Creek Estate, Armstrong Creek
 - the Heights and Gen Fyansford estates, Fyansford.

At 372-410 Wilsons Road, St Albans Park the Land Subject to Inundation Overlay has been applied to a flood-free portion of land because that part of the land would be surrounded by flood waters in a 1 per cent flood event. The Panel considers that application of risk-based overlays, such as the Land Subject to Inundation Overlay should cover the actual risk (except that it may be removed from relatively small portions of land on otherwise flood-free lots). The inclusion of a large area above the 1 per cent flood event in the Land Subject to Inundation Overlay only serves to confuse the role and application of the overlay. The issue of flood access can still be considered without the application of the overlay. If formal referral to the Catchment Management Authority is required (and the Panel is not convinced that it is) then this should be addressed through Clause 66.04 (Referral of permit applications under local provisions).

Land at 9–27 (odd numbers only) Balcombe Road, Newtown is currently in the Urban Floodway Zone, but most of the land has now been determined to be flood free. It is appropriate to change the zone of this land to the Neighbourhood Residential Zone that applies to the surrounding flood-free residential development.

Recommendations

Based on the reasons set out in this Report, the Panel recommends that Greater Geelong Planning Scheme Amendment C339ggee Part 2 be adopted as exhibited subject to the following:

- 1. Remove the properties identified in Appendix E from the Amendment.**
- 2. Remove the LSIO from the flood-free area of 372–410 Wilsons Road, St Albans Park.**
- 3. Rezone 9–27 (odd numbers only) Balcombe Road, Newtown from the Urban Floodway Zone to the Neighbourhood Residential Zone.**
- 4. Include a name, for example 'Riverine flooding' in the Land Subject to Inundation Overlay Schedule 1 and the Floodway Overlay Schedule 1 and review dot point formatting.**
- 5. Apply the updated schedule text to the existing overlays in Lara.**

1 The Amendment

1.1 The Amendment

Amendment C339 Part 2 (the Amendment) proposes to revise flood overlays in the Lower Barwon River, Lower Moorabool River and Corio Bay coast.

The Amendment revises the mapping extent of the Floodway Overlay and the Land Subject to Inundation Overlay and amends the schedules of the overlays by including floodway objectives, statement of risk, permit requirements, application requirements and decision guidelines.

The Amendment:

- Amends the Schedules to the Flood Overlay (FO) and Land Subject to Inundation Overlay (LSIO) to number the current unnumbered schedules, to create FO1 and LSIO1 and introduce further permit exemptions to accord with industry best practice.
- Revises the mapping extent of the FO1 and LSIO1 ‘riverine flooding’ in the area of *The Flood Risk Management Study – Lower Barwon River and Lower Moorabool River* (March 2019).
- Applies LSIO2 ‘coastal inundation’ to areas identified in the *Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment (Dec 2015)* by applying the LSIO2 for areas around Lake Connewarre and the Barwon River Estuary. Other areas covered by the assessment had LSIO2 applied by Amendment C394ggee.

1.2 Background

Lower Barwon River and Lower Moorabool River Flood Study

The floodplains of the Barwon and Moorabool Rivers have faced significant riverine floods noted in 1852, 1880, 1909, 1951, 1978, 1995, 2001 and 2011. Fortunately given the long and frequent history of flooding along the Barwon and Moorabool Rivers much of the residential development through Geelong and the wider catchment is located outside of the areas known to be subject to flooding. Consequently, much of the floodplain is now occupied for recreational uses with some land still occupied by industrial businesses.

The Lower Barwon River and Lower Moorabool River Flood Study describes previous flooding investigations of the Barwon and Moorabool Rivers, as well as a number of important tributaries including the Leigh River, Waurin Ponds Creek and Armstrong Creek that have occurred over the past 50 years, the most significant of these include:

- *Geelong Flood Plain Management Study*, GHD (1982)
- *Geelong Flood Mitigation Strategy Final Report*, GHD (1997)
- *Moorabool and Barwon River Regional Flood Mapping Project*, GHD (2016).

The study produced flood mapping and improves the flood intelligence for the major waterways in and around the City of Geelong within the study area shown in Figure 1.

Figure 1 Lower Barwon / Lower Moorabool Flood Study Area

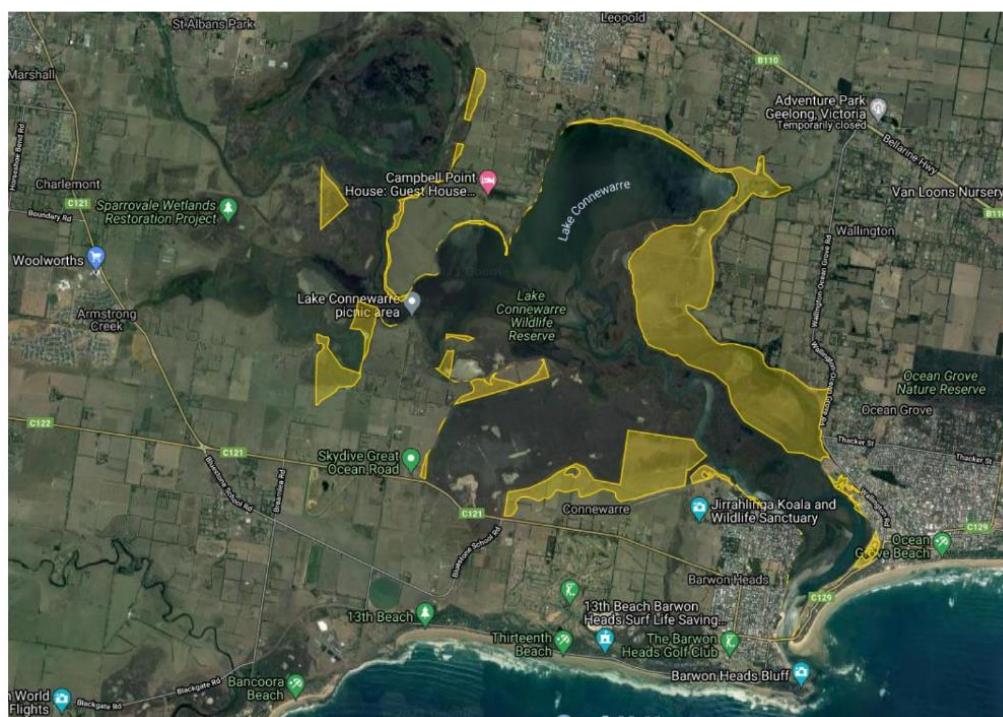
Along the lower Barwon River and lower Moorabool River many properties are already subject to flood overlays. The Amendment changes the extent of the overlays based on new flood investigation which has re-modelled flooding in the catchment. Some properties will be completely removed from a flood overlay and for other properties the area subject to the overlays is increased or decreased depending on the results of the flood modelling.

Bellarine Peninsula - Corio Bay Local Coastal Hazard Assessment Area

The *Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment December 2015* covered the Bellarine Peninsula and Corio Bay coastline from Breamlea to Avalon, however the majority of this study has already been implemented by Amendment C394ggee. The Amendment only implements LSIO2 for some properties on the fringes of Lake Connemara and the Barwon River estuary as shown in The LSIO2 recognises properties that will be subject to inundation as a result of coastal storm surge and future sea level rise. The LSIO2 has already been applied to over 1,600 properties around the Bellarine Peninsula and Corio Bay by Amendment C394ggee.

Figure 2.

The LSIO2 recognises properties that will be subject to inundation as a result of coastal storm surge and future sea level rise. The LSIO2 has already been applied to over 1,600 properties around the Bellarine Peninsula and Corio Bay by Amendment C394ggee.

Figure 2 Area affected by LSIO2 (yellow) as part of the Amendment

Other areas already covered by the FO and LSIO

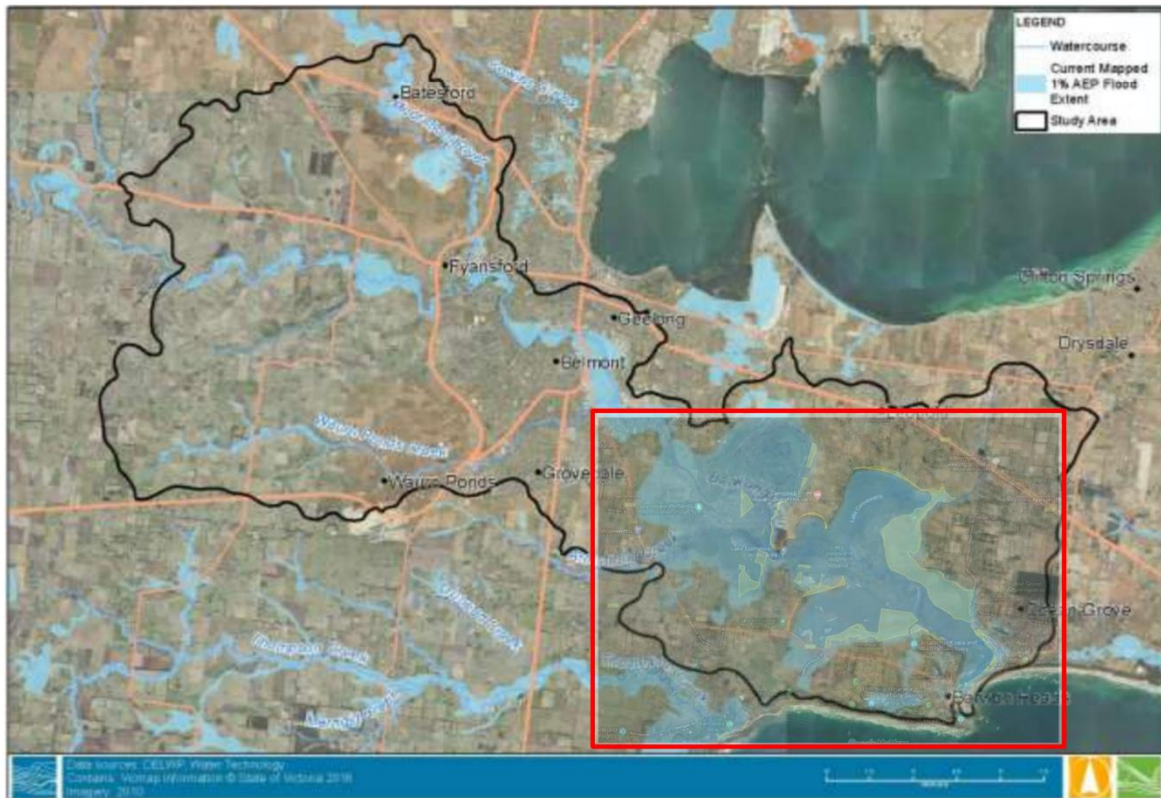
There are a number of properties outside the two flood study areas where the flood overlay mapping will not change. However, they will be affected by changes to the LSIO and FO schedules (the written part of the scheme). The changes to the schedules will greatly reduce the circumstances in which a permit is required for buildings and works.

The existing LSIO and FO areas in the Lara Flood Study area are proposed to remain in the current FO and LSIO as the Lara part of the original Amendment C339ggee was abandoned in Part 1.

Overlap

The Amendment applies two overlays to some land where it is subject to both riverine and coastal flooding. Figure 3 shows the area of overlap. This is so the separate distinct risks that apply to the land can be managed appropriately.

Figure 3 Area of overlap (red rectangle) of LSI01 and LSI02



Source: prepared by the Panel

1.3 Exhibition, submissions and post-Amendment changes

On 28 July 2020 Council resolved to support the preparation and public exhibition of the original Amendment C339ggee which also implemented the Lara Flood Study with several thousand properties being applied with Special Building Overlay (SBO). The Amendment affected 7,744 properties in total.

The key issues raised in submissions were:

- no history of flooding
- need for improved drainage infrastructure
- land not considered flood prone due to typography
- recent development works / new housing estates
- challenges to validity of flood modelling
- impact on insurance
- impact on property values
- complex or site-specific submissions.

On 28 Mar 2023 Council resolved:

That Council, having further considered submissions to Amendment C339ggee Flood Zones and Overlays, resolves to abandon the part of the Amendment which relates to the Lara Flood Study properties and refer remaining submissions to an independent Panel.

Amendment C339ggee was subsequently split into two parts:

- C339ggee Part 1: Implementation of Lara Flood Study which was abandoned

- C339ggee Part 2: Implementation of Flood Studies – Lower Barwon and Moorabool Rivers and Bellarine Peninsula Coastal Hazard which is the subject of this report.

Council also agreed to remove the overlays from some properties. This is discussed in Chapter 4.

Appendix D records the chronology of the key events relating to Amendment C339ggee and subsequent C339ggee Part 2 as presented by Council.

1.4 The Panel’s approach and overall conclusion

The Panel has assessed the Amendment against the principles of net community benefit and sustainable development, as set out in Clause 71.02-3 (Integrated decision making) of the Planning Scheme.

The Panel considered all written submissions made in response to the exhibition of the Amendment, observations from site visits, and submissions, evidence and other material presented to it during the Hearing. It has reviewed a large volume of material, and has had to be selective in referring to the more relevant or determinative material in the Report. All submissions and materials have been considered by the Panel in reaching its conclusions, regardless of whether they are specifically mentioned in the Report.

For the reasons set out in this report, the Panel concludes that the Amendment:

- is supported by, and implements, the relevant sections of the Planning Policy Framework
- is consistent with the relevant Ministerial Directions and Practice Notes
- is well founded and strategically justified
- should proceed subject to addressing the more specific issues raised in submissions as discussed in the following chapters.

This Report deals with the issues under the following headings:

- Strategic justification
- Threshold issues
- Site-specific submissions
- The text of the overlays.

2 Strategic justification

2.1 General

(i) The issue

Is the Amendment strategically justified?

(ii) Relevant policy

Clause 13.03-1S (Floodplain management) sets out the objective:

To assist the protection of:

- Life, property and community infrastructure from flood hazard, including coastal inundation, riverine and overland flows.
- The natural flood carrying capacity of rivers, streams and floodways.
- The flood storage function of floodplains and waterways.
- Floodplain areas of environmental significance or of importance to river, wetland or coastal health.

It includes the strategies:

Identify land affected by flooding, including land inundated by the 1 in 100 year flood event (1 per cent Annual Exceedance Probability) or as determined by the floodplain management authority in planning schemes.

Avoid intensifying the impact of flooding through inappropriately located use and development.

The relevant policy document is:

Victorian Floodplain Management Strategy (Department of Environment, Land, Water and Planning, 2016)

The *Victorian Floodplain Management Strategy 2016* is a State Government strategy that clarifies the roles and responsibilities of government agencies and authorities involved in flood management. In relation to planning, the strategy explains:

Enhanced effort in municipal planning, supported by increased knowledge of flood hazards, will go a long way towards securing resilience to floods. Flood overlays need to be introduced or updated as soon as possible after new flood maps are produced to maximise the returns on investment in flood information and help manage risk. (p.13).

Clause 13.01-2S (Coastal inundation and erosion) sets out the objective:

To plan for and manage coastal hazard risk and climate change impacts.

It includes the strategies:

Plan for sea level rise of not less than 0.8 metres by 2100 and allow for the combined effects of tides, storm surges, coastal processes and local conditions such as topography and geology when assessing risks and coastal impacts associated with climate change.

Ensure that land subject to hazards is identified and appropriately managed to ensure that future use and development is not at risk.

Avoid use and development in areas vulnerable to coastal inundation and erosion.

Respond to marine and coastal processes in the context of the coastal compartment type.

...

Ensure that development or protective works that seek to respond to coastal hazard risks avoid detrimental impacts on coastal processes.

(iii) Discussion and conclusion

There is explicit policy in the Planning Policy Framework to manage riverine flooding and coastal hazards. FO1 and LSIO1 are already in the planning scheme. It is uncontroversial that amendments of this type are strategically justified.

The Panel concludes:

- There is clear policy support for the Amendment.

2.2 Relevant Planning Practice Notes**(i) The issue**

Is the use of the FO appropriate?

(ii) Relevant guidance

Advice on the application of flood overlays is provided in *Planning Practice Note 12 – Applying the Flood Provisions in Planning Schemes – A guide for councils DELWP June 2015* (PPN12).

The decision as to whether the LSIO or FO should be applied is described at page 59 and 60 of the *Lower Barwon River and Lower Moorabool River Flood Risk Management Study* and is summarised as follows:

- The LSIO identifies land liable to inundation by overland flow, in flood storage or in flood fringe areas affected by the 1 per cent AEP flood. Draft LSIO layers have been prepared for the study area based on the 1 per cent AEP flood extent.
- The FO identifies waterways, main flood paths, drainage depressions and high hazard areas. The identification of FO can be based on numerous methods.

The flood study describes three methods for applying the FO:

- Advisory Notes for Delineating Floodways (Edwards, 1998)
- CMA Method 01 (same as Edwards, 1998 but drops 10 per cent AEP and reduces depth threshold)
- CMA Method 02 – Method adopted by City of Ballarat for the Burrumbeet Catchment (C178). This is based on Cox et al (2010) as part of ARR Project 10 update.

The draft extent of the FO recommended for the study area is based on CMA Method 02 which is the most recently developed method. The CMA Method 02 uses the following criteria to apply the FO:

- 1 per cent AEP with depths of 0.5 metres or greater
- 1 per cent AEP and velocity by depth of 0.4 m²/s or greater.

(iii) Discussion and conclusion

The Panel accepts that the criteria used to apply the FO in the areas subject to flooding accord with current practice and guidance.

The Panel concludes:

- The use of the FO is appropriate.

3 Threshold issues

3.1 Challenges to validity of flood modelling

(i) The issue raised in submissions

A number of submitters questioned the flood modelling and flood studies that the overlay maps are based on, for example:

- Submission 147 states:
A 1 per cent flood, using the statistics and map from pages 1 and 2 of the CCMA Flood Information Property Report, would not rise high enough to inundate this land. Our contour map shows that the land is above the 4.02m ADH quoted by CCMA as the maximum flood level in a 1 per cent AEP flood for our property. As previously stated, the land rises to over 10 metres.

(ii) Council response

Council considered that the two studies that support the Amendment are soundly based pieces of work prepared by suitably qualified experts using best practice methods and technology.

While the timing is such that the exhibited flood overlay maps may no longer be accurate for the new residential estates at Fyansford (within the Lower Barwon Lower Moorabool study area) this does not affect or undermine the balance of the studies or associated mapping.

The validity of the flood studies is further supported by the submission from the Corangamite Catchment Management Authority (CCMA) which stated:

... the Authority accept the methodologies, technical aspects and findings on which the Amendment is based.

(iii) Discussion and conclusion

The Panel accepts the validity of the flood modelling. It has been carried out in accordance with accepted methodologies.

The Panel concludes:

- The methodology of the flood modelling is appropriate.

3.2 Land not considered flood prone due to topography

(i) The issue raised in submissions

Several submitters questioned the flood prone designation of their property by reference to topography such as a property being on the side of a hill or in an area well clear of any creeks or rivers, for example:

- Submission 51 states:
I know my block is next to the Waurn Ponds creek (on the north side) which does flood on heavy rain, but there is a large area of flood plain on the south side of the creek which is approximately 2 metres lower than my block which is where the water runs into when the creek over flows.

(ii) Council response

Council responded that the flood maps are based on detailed flood studies which include (among other inputs) detailed Light Detection and Ranging (LiDAR) contour mapping and modelling of flood events. Council relied on the mapping produced but has further reviewed submissions where substantial evidence, site information or alternative modelling is provided.

(iii) Discussion and conclusion

The Panel accepts that the LiDAR data will be the most accurate method for determining topography. Unless there has been a change in topography since the LiDAR data was obtained there is no reason to believe the topology input into the flood models is not accurate.

The Panel concludes:

- The LiDAR data can be relied upon as an accurate measure of topography at the time the flood models were run.

3.3 No history of flooding**(i) The issue raised in submissions**

Several submitters raised the theme of ‘no history of flooding’ in the Lower Barwon Moorabool River Flood Study area, for example:

- Submission 51 states:
My block has never had water on it in the many years I have been living here.
- Submission 64 states:
My property has approximately 1 acre of high ground which has never been flooded (even in the 1995 flood) ...
- Submission 152 states:
The property has no history of flooding.

(ii) Council response

Only a small number of submitters submitted ‘no history of flooding’ in the Lower Barwon Moorabool River Flood Study area. The flood report states:

The floodplains of the Barwon and Moorabool Rivers have faced significant riverine floods noted in 1852, 1880, 1909, 1951, 1978, 1995, 2001 and 2011. Fortunately given the long and frequent history of flooding along the Barwon and Moorabool Rivers much of the residential development through Geelong and the wider catchment is located outside of the areas known to be subject to flooding.

Riverine flooding is generally better understood by the community and its history well documented compared to flooding from the stormwater drainage system that affects Lara (where extensive new areas of SBO were proposed in the abandoned C339ggee Part 1).

Council relied on the flood studies that underpin the proposed overlay and zone maps rather than anecdotal evidence or comments that are difficult to verify and as such no changes to the Amendment are recommended based on this theme in submissions.

Council noted that the overlay maps are based on a 1 per cent Annual Exceedance Probability (AEP) as required by the State Government. AEP is a term which expresses the likelihood of a flood of a given size or larger occurring in a given year. 1 per cent AEP means a flood has a one in

100 likelihood of occurring in any given year, the same as a 1 in 100 year event. Reliable local knowledge of flood extents does not usually extend back 100 years.

(iii) Discussion and conclusion

It is not surprising that many people alive today have not witnessed a 1 in 100 year flood event. The fact that no one remembers a particular event does not mean it did not happen.

The Panel concludes:

- No local memory of a flood event effecting a given property is not a sufficient reason to not apply a flood overlay.

3.4 Need for improved drainage infrastructure

(i) The issue raised in submissions

A common theme in submissions is that Council should invest in new or upgraded drainage infrastructure to prevent the risk of flooding rather than apply planning controls or designate areas as flood prone.

(ii) Council response

Council acknowledged that improvements can be made to the stormwater and drainage infrastructure in older urban flood prone areas. However, this is beyond the scope of the Amendment which is implementing only one aspect being the land use planning aspect of the flood studies. Land use planning is a cost effective way to reduce future impacts of flooding particularly by ensuring floor levels of new or replacement dwellings are above the flood level. By requiring a planning permit, it also allows some consideration of flood issues prior to approving significant buildings and works (such as dwellings). As stated in the Victorian Flood Plain Management Strategy 2016 at p.14:

There is an ongoing role for structural measures, such as levees, retarding basins, culverts and floodways, and the flood-proofing of existing houses. There is a bigger role however for non-structural measures such as land use planning (zones, overlays, freeboard requirements, setbacks), flood insurance, flood warning systems, flood education and flood awareness initiatives (Figure 4).

(iii) Discussion and conclusion

There may well be merit in improving drainage in areas, if this is possible from an engineering perspective, but until those works are completed land will still be subject to inundation and ought to be appropriately managed.

The Panel concludes:

- The fact that engineering works could change flood impacts is not a reason to remove overlays from land ahead of those works.

3.5 Impact on property values and property insurance

(i) The issue raised in submissions

Several submissions identified the potential increase in insurance premiums or difficulty in obtaining insurance coverage because of properties now being either designated as flood prone or within a flooding overlay, for example:

- Submission 138 stated:
I have experienced first-hand the negative impacts to not only property values, but also excessive premiums of properties located in flood zones.
- Submission 187 stated:
We will suffer unfair financial repercussions due to increased insurance premiums.

Many submissions were received regarding the potential reduction in property values because of the overlay. Other submissions were received noting the potential impact on the future value, usability and resale of the property or other financial implications, for example:

- Submission 2 stated:
...the proposed change to the overlay from LSIO to FO1 on Sommers and Frank Street, Belmont is likely to introduce ongoing costs and other issues for the residents that have been listed in the report by consultant Water Technology.
- Submission 60 stated:
Property values will in-turn be significantly reduced as the flood zone overlay will be view as 'high risk', therefore limiting potential buyers if/when we should choose to sell the property.

(ii) Council response

Council responded that insurance premiums are likely to be based upon the latest available flood studies rather than Planning Scheme controls. The insurance industry has its own National Flood database where this information is obtained.¹

Each insurance company has its own process for calculating its premiums, so submitters with concerns should speak directly with their insurance provider. Individual insurers decide what criteria it uses to determine flood risk and calculate premiums. This may include historical flood information, claims history and building type.

Council responded that designation of an area as 'subject to inundation' does not cause or change the likelihood of flooding but recognises the existing condition of land and its potential to be inundated in storm tide events and when sea levels rise. The value of any property is determined by the complex interplay of many different factors such as location, streetscape and amenity, and it is difficult to assign what effect, if any, the identification of land in a planning overlay may have on the value of a property. Properties are not uniformly affected by flooding and the impact may depend upon the frequency or severity of flooding, implications for development or redevelopment and historical flood events.

The Stonnington Amendment C221 Panel Report states:

Previous panels have consistently found that there is no justification for setting aside planning scheme amendments of this type on the basis that property values might be affected, or insurance premiums might increase. (page 26).

¹ For example see <https://insurancecouncil.com.au/resource/flood-insurance-explained/>

(iii) Discussion and conclusion

The fact that designating a property as flood prone in a planning scheme may increase its insurance premium or reduce its value is not a reason to shy away from such designation but it is a reason to ensure that they are the result of a proper investigation. The Panel has concluded that the overlays are justified.

The Panel concludes:

- Impacts on property values or insurance premiums is not a reason to remove the proposed overlays from a property.

3.6 Government agency and traditional landowner submissions**(i) The issue raised in submissions**

Submissions were received to the original Amendment C339ggee from government agencies and the traditional landowners / Registered Aboriginal Party as follows:

- Department of Transport (submitter 123)
- Melbourne Water (submitter 321)
- Wadawurrung Traditional Owners Aboriginal Corporation (submitter 514)
- Corangamite Catchment Management Authority (submitter 561).

The former Department of Transport sought additions to the LSIO1 and FO1 schedules as discussed in Chapter 5.1.

The Wadawurrung Traditional Owners Aboriginal Corporation supported the Amendment and provided comments.

Melbourne Water is the floodplain authority for the part of Greater Geelong west of Avalon and stated it:

... has no concerns with the Amendment as proposed and can now provide our in-principle support to the amendment as drafted. Melbourne Water does not wish to be party to any subsequent panel hearing that may proceed.

The CCMA is supportive of the Amendment saying:

C339ggee which will update the flood overlays in the Barwon River floodplain, Lara (Hovells Creek) floodplain and coastal storm surge floodplains to the most up to date, best available information. As the Floodplain Management Authority for the region, the Authority will continue to respond to referrals and advice using the most up to date, best available information. The amendment proposes to incorporate that information into the scheme.

(ii) Council response

Council welcomed the supportive submissions and comments from the abovementioned organisations particularly those of the Wadawurrung and the two floodplain managers, Melbourne Water and the CCMA, which recognise the importance of this work to better recognise and update flooding information into the planning scheme.

(iii) Discussion

The Panel notes the supportive submissions from agencies.

4 Site-specific submissions

4.1 Council approach to site specific submissions

(i) The issues

A number of submitters provided specific information about their property or raised more complex issues than the more generic themes and objections.

(ii) Evidence and submissions

Council advised that following the Council Meeting held on 14 December 2021, Council officers further reviewed the submissions that raised detailed site-specific issues.

Water Technology, as the original authors of the *Lower Barwon River and Lower Moorabool River Flood Study*, reviewed the submissions regarding flooding and drainage at Fyansford.

(iii) Discussion and recommendation

The Panel has reviewed Council's approach to site-specific issues. The Panel notes that Council has been thorough and diligent in assessing any changed circumstances since the flood studies were completed. The Panel accepts that some property owners do not want the overlays applied to their land but the overlays have been applied in a methodical and rigorous fashion. The Panel does not record the details of Council's response where it does not support a change to the Amendment. This is well documented in Council's Part B submission and in all cases accords with the views of Mr Bishop, who provided expert evidence on behalf of Council. This Chapter addresses those specific sites where Council is proposing a change, or further issues that need to be considered.

The Panel concludes:

- Council's approach to site-specific objections to the overlays is generally appropriate.

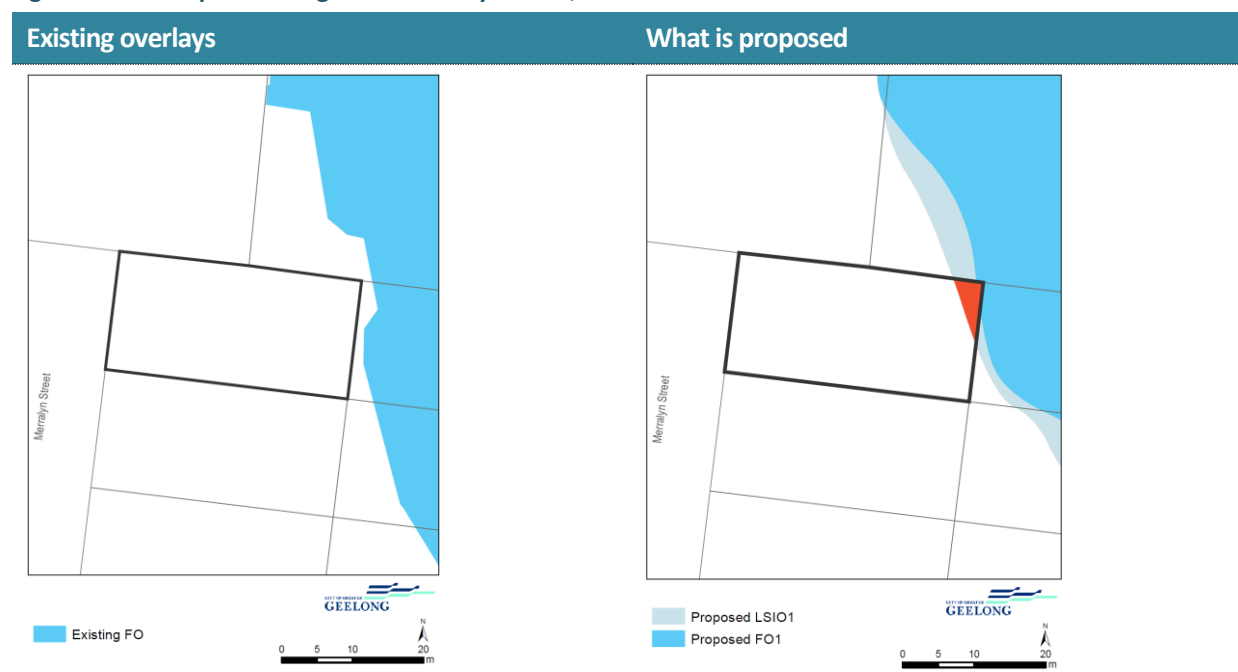
For the reasons set out in this Chapter the Panel recommends:

- 1. Remove the properties identified in Appendix E from the Amendment.**

4.2 8 Merralyn Street, Belmont

(i) The affected land

Figure 4 Proposed changes on 8 Merralyn Street, Belmont



(ii) Evidence and submissions

The landowner submitted that only a small area of the lot is covered by proposed overlays in the NE corner. The area is within existing easements on the land and hence cannot be built over.

Mr Bishop concluded that the flood overlays on the property could be removed without any detrimental impacts to flood risk management and could potentially save on unnecessary planning referrals in the future because this site slopes relatively steeply from east to west and most of the site is between 6 and 8 metres AHD, with well over a metre of freeboard above the flood level. The area and depth of flooding in the rear of the lot is minor and is unlikely to have any impact on future development of the lot.

Council supported removing the overlay from the land.

(iii) Discussion and conclusions

The Panel considers Council's approach appropriately balances the need to manage flood prone land and efficiency in planning controls in a way that is proportionate to the risk.

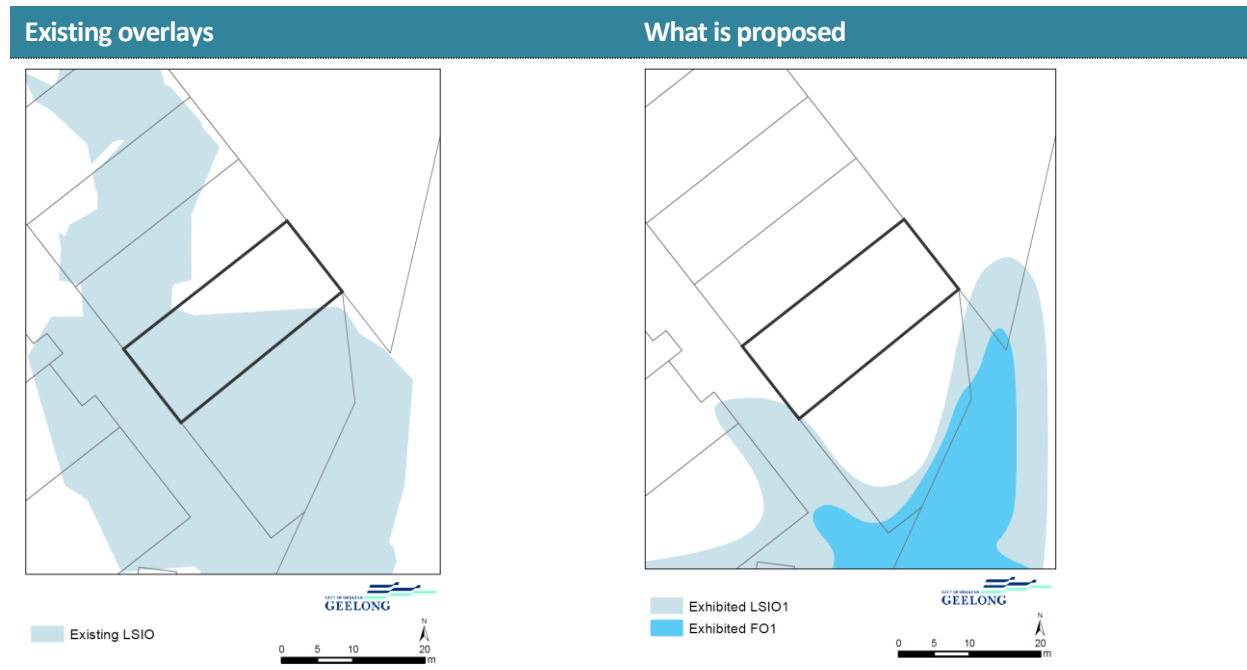
The Panel supports Council's final position and concludes:

- The exhibited flood overlays should be removed from 8 Merralyn Street, Belmont.

4.3 12 Balcombe Road, Newtown

(i) What is proposed

Figure 5 Proposed changes on 12 Balcombe Road, Newtown



(ii) Evidence and submissions

A small portion of LSI01 is proposed to be applied in the southern corner of the subject lot. Upon review, Council considered the small segment of LSI01 on the subject land is considered unnecessary.

Council submitted that the exhibited flood overlay mapping is to be clipped around the subject land.

(iii) Discussion and conclusions

The Panel considers Council's approach appropriately balances the need to manage flood prone land and efficiency in planning controls in a way that is proportionate to the risk.

The Panel supports Council's final position and concludes:

- The exhibited flood overlay should be removed from 12 Balcombe Road, Newtown.

4.4 10 Camden Road, Newtown

(i) What is proposed

Figure 6 Proposed changes on 10 Camden Road, Newtown



(ii) Evidence and submissions

The landowner submitted that they had never seen flooding in 44 years. Only a small portion of the site is covered. The area should be removed from the overlay.

Mr Bishop gave evidence that the site is elevated on high ground above the river. The majority of the site is well above 9 metres AHD in elevation. There is an insubstantial line of land along the western boundary that slopes steeply down and is close to the flood level. The access to the site from the south is also many metres above the flood height.

It would be appropriate to remove this lot entirely from the Floodway Overlay.

(iii) Discussion and conclusion

The Panel considers Council's approach appropriately balances the need to manage flood prone land and efficiency in planning controls in a way that is proportionate to the risk.

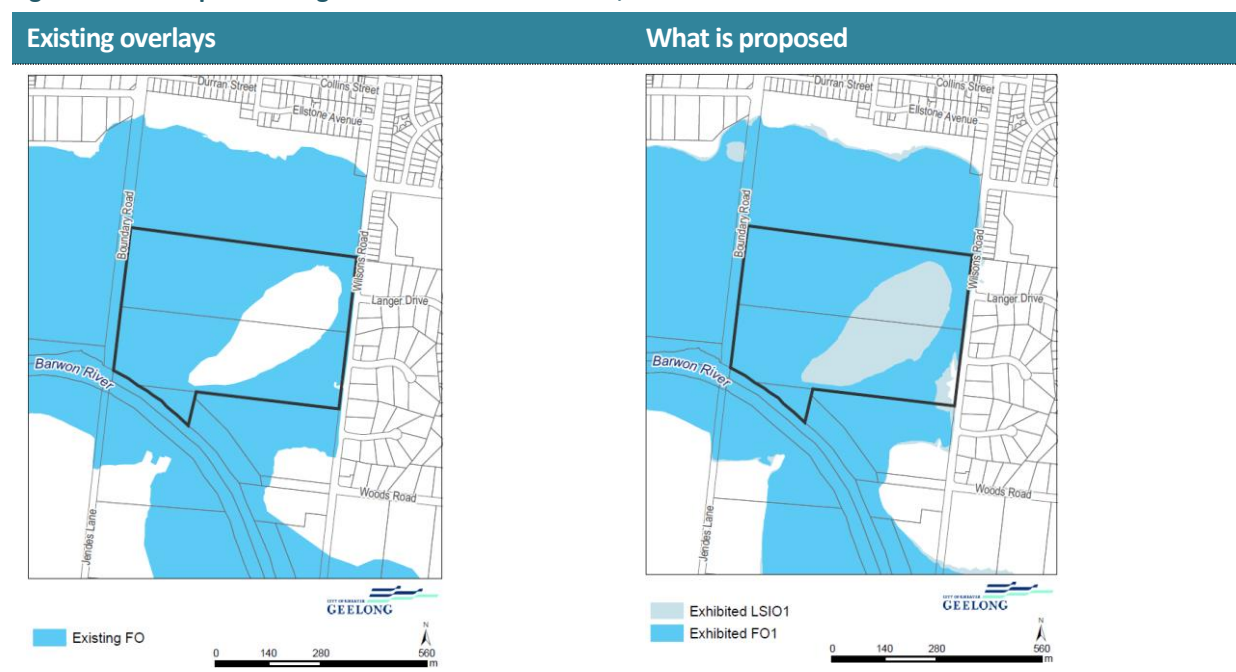
The Panel supports Council's final position and concludes:

- The exhibited flood overlay should be removed from 10 Camden Road, Newtown.

4.5 372-410 Wilsons Road, St Albans Park

(i) The affected land

Figure 7 Proposed changes on 372-410 Wilsons Road, St Albans Park



(ii) Evidence and submissions

The landowner did not agree with the area identified as LSIO1 on the property, submitting that it is elevated compared to the rest of the property and above the flood level.

Mr Bishop confirmed that the area within the relevant lot proposed as LSIO1 on the Amendment mapping is above the floodplain. He noted that while it is not common for land that is not directly impacted by flooding to be included in a flood overlay, there are instances where this can be justified particularly when access to a site that is not flood prone is subject to significant flood hazard.

Mr Bishop opined:

In this instance I consider it is important that any permit application for the site should trigger a referral to the CCMA so that appropriate conditions can be applied that related to safe flood access.

Council's position was:

Council's interim final position is to keep the map as exhibited based on the advice from Mr Bishop and the CCMA's initial inclusion of this higher land within the LSIO. However, we seek a recommendation and commentary from the Panel as to the appropriateness of applying the LSIO to a relatively large area that is above the 1 per cent AEP flood event and hence technically not flood prone.

(iii) Discussion and recommendation

The Panel understands Council's, the CMA's and Mr Bishop's concern that any proposal on the flood-free portion of the land considers access arrangements across the portion that floods. The Panel does not consider, however, that this consideration requires the application of the LSIO to the flood-free portion.

Any permit application assessment on the subject land will discover that the FO applies to part of the land including through a VicPlan 'planning report' VicPlan.

The Panel considers that application of risk-based overlays should as far as possible cover the actual risk, noting that some minor reductions are appropriate to avoid unnecessary impost on land where only a small portion of a site is affected. The inclusion of a large area above the 1 per cent flood event in the LSIO only serves to confuse the role and application of the overlay.

The Panel notes that the Farming Zone which applies to the land contains the following provision:

A permit is required to construct or carry out any of the following: ...

- A building which is within any of the following setbacks: ...
 - 100 metres from a waterway, wetlands or designated flood plain or, the distance specified in the schedule to this zone. Any distance specified must be less than 100 metres.

No setback is specified in the schedule and so the 100 metres setback applies. All the land in the LSIO area is within 100 metres of the FO and so it seems to the Panel that a permit is required for all buildings.

As discussed at the Hearing while the main driveway is subject to an extensive length of flooding there is an alternative access to the property just north of Langer Drive that is about 40 metres in width. Providing flood-free access to the land would require a permit for the relevant works but would not appear to the Panel to be a particularly difficult engineering task.

If Council considers formal referral to the CMA is necessary it could achieve this by way of an appropriate entry in the Schedule to Clause 66.04 (Referral of permit applications under local provisions). The Panel does not think this is necessary but such a change to the Amendment would not be inappropriate given the application of the LSIO to the flood-free area was clearly intended to trigger a referral.

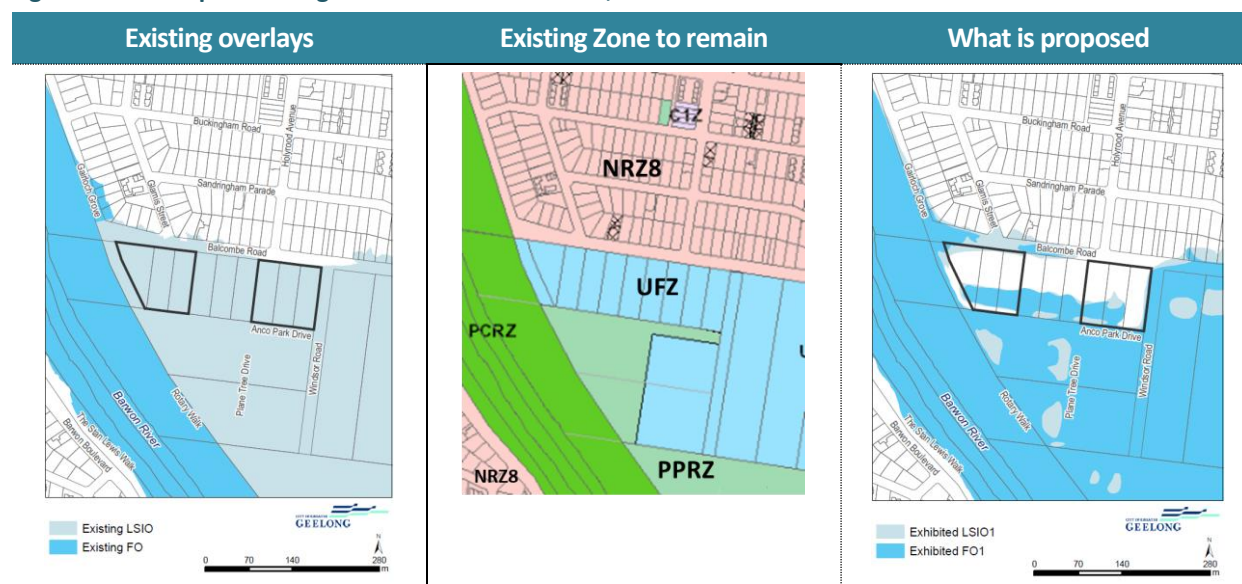
The Panel recommends:

- 2. Remove the LSIO from the flood-free area of 372–410 Wilsons Road, St Albans Park.**

4.6 9–27 Balcombe Road, Newtown

(i) What is proposed

Figure 8 Proposed changes on 9–27 Balcombe Road, Newtown



(ii) Evidence and submissions

The landowner submitted:

Given this proposed change to the overlays, it would seem prudent to also consider the deletion of the Urban Floodway Zone at this time and replacement with a residential zone that better reflects the intent of the original subdivision and the current flood modelling.

Mr Bishop opined:

From a floodplain management perspective I agree that UFZ does not appear to be an appropriate control to apply to the filled land along Balcombe Road.

Council submitted that it would work with the submitter to rezone the properties on the southern side of Balcombe Rd from Urban Floodway Zone to Neighbourhood Residential Zone (potentially with a schedule with a minimum lot size) through a separate amendment.

The submitters tabled letters of support for removal of the UFZ from the owners of the other affected lots.

(iii) Discussion and recommendation

The Panel considers that removing the zone is entirely consistent with the strategic basis of the Amendment which is to update the flood controls. The land has been determined not to be flood prone and so removal of the UFZ from the flood-free area should not really be an issue of debate. Given the application of the overlays the UFZ could be removed from all the land without limiting Council's ability to appropriately manage flood risk on the land.

If the Urban Floodway Zone is not removed, then upon gazettal of the Amendment there will be a clearly inappropriate zone applying to the land.

Panels have a wide remit to make recommendations but are bound by natural justice. There is no impediment to rezoning this land as part of the Amendment provided affected parties have an

opportunity to be heard in relation to changes that might affect them. The surrounding Neighbourhood Residential Zone Schedule 8 applies to the surrounding suburbs, and no other exiting schedule appears appropriate.

The Panel notes Council’s submission about determining an appropriate lots size. The directly affected landowners support the rezoning but have not had an opportunity to comment on any lot size restrictions Council might seek to apply. The Panel notes that any issues about lot size could be determined as part of a future subdivision application, if owners seek to subdivide the land, and such an application would also allow for notice to nearby properties.

It is entirely a matter for Council to decide if it would rezone the land in the future and what lot size it would seek to apply if it did so. Rather than continue applying a clearly inappropriate zone to the land until some undefined future date it is far preferable to rezone the land now, either as Neighbourhood Residential Zone Schedule 8, or an alternative schedule following further consultation with affected parties.

The Panel recommends:

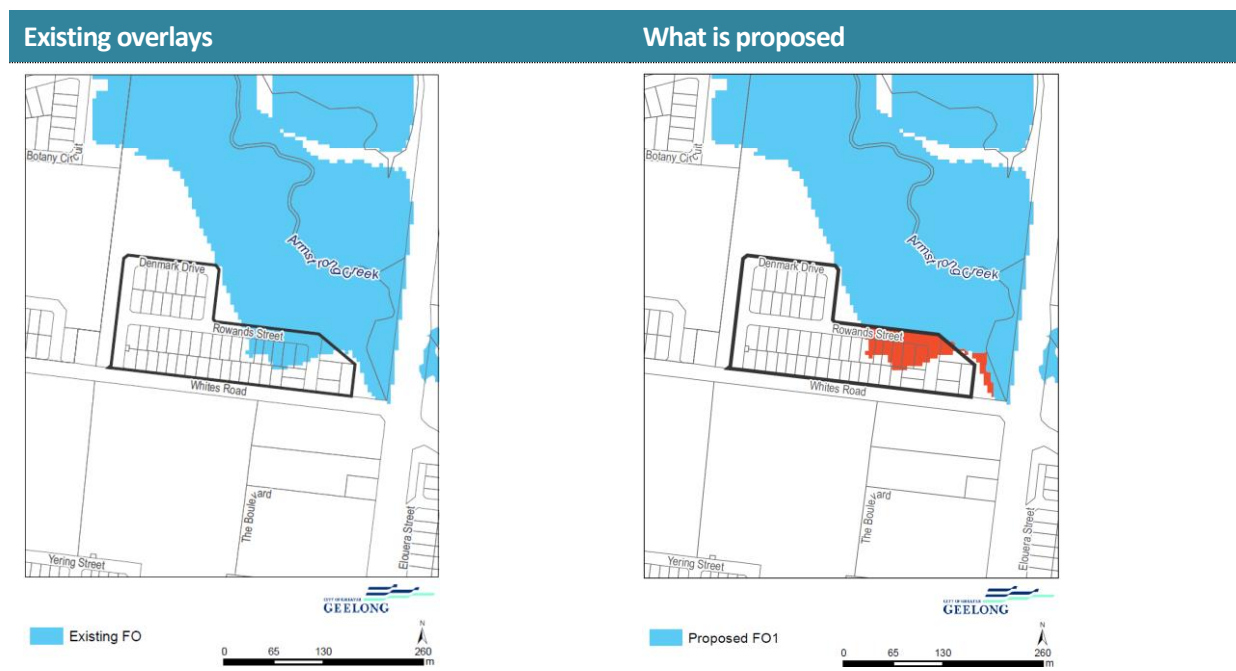
- 3. **Rezone 9–27 (odd numbers only) Balcombe Road, Newtown from the Urban Floodway Zone to the Neighbourhood Residential Zone.**

4.7 Rowands Street area in the Creek Estate, Armstrong Creek

(i) What is proposed

The FO1 covering part of the site is not proposed to be changed from the present overlay in the planning scheme.

Figure 9 Proposed changes on Rowands Street area, Armstrong Creek



(ii) Evidence and submissions

The landowner submitted:

I have just developed the site into a 51 block housing development known as the Creek Estate. This area has been built up significantly and compacted some areas have risen over 2m and have had water retention basins built below alongside the Armstrong Creek. Looking at your proposed map I can easily see that it is now not accurate as the blue area runs across my clocks of land.

Mr Bishop gave evidence that it is clear from VicPlan data and aerial imagery that the subdivision described by the submitter has been constructed (see Figure 10). Pending a check to ensure fill levels are appropriate to ensure this area is protected from flooding, the overlay in this area can be clipped² to remove the new residential lots.

Figure 10 Recent works at Rowands Street area, Armstrong Creek



Council was confident that the fill levels within The Creek Stage 1 subdivision is appropriate, and that the area is protected from a 1 per cent AEP flood event. Council recommended the exhibited flood overlay mapping is clipped, as illustrated in Figure 9 to remove the areas designated in red.

On the 14 June 2023, the CCMA provided written confirmation to Council in support of removing the red areas in Figure 9 from the proposed FO1.

(iii) Discussion and conclusion

The Panel accepts the advice of Council and the opinion of the witness that the land is no longer subject to flooding because of the change in topography.

The Panel supports Council's final position and concludes:

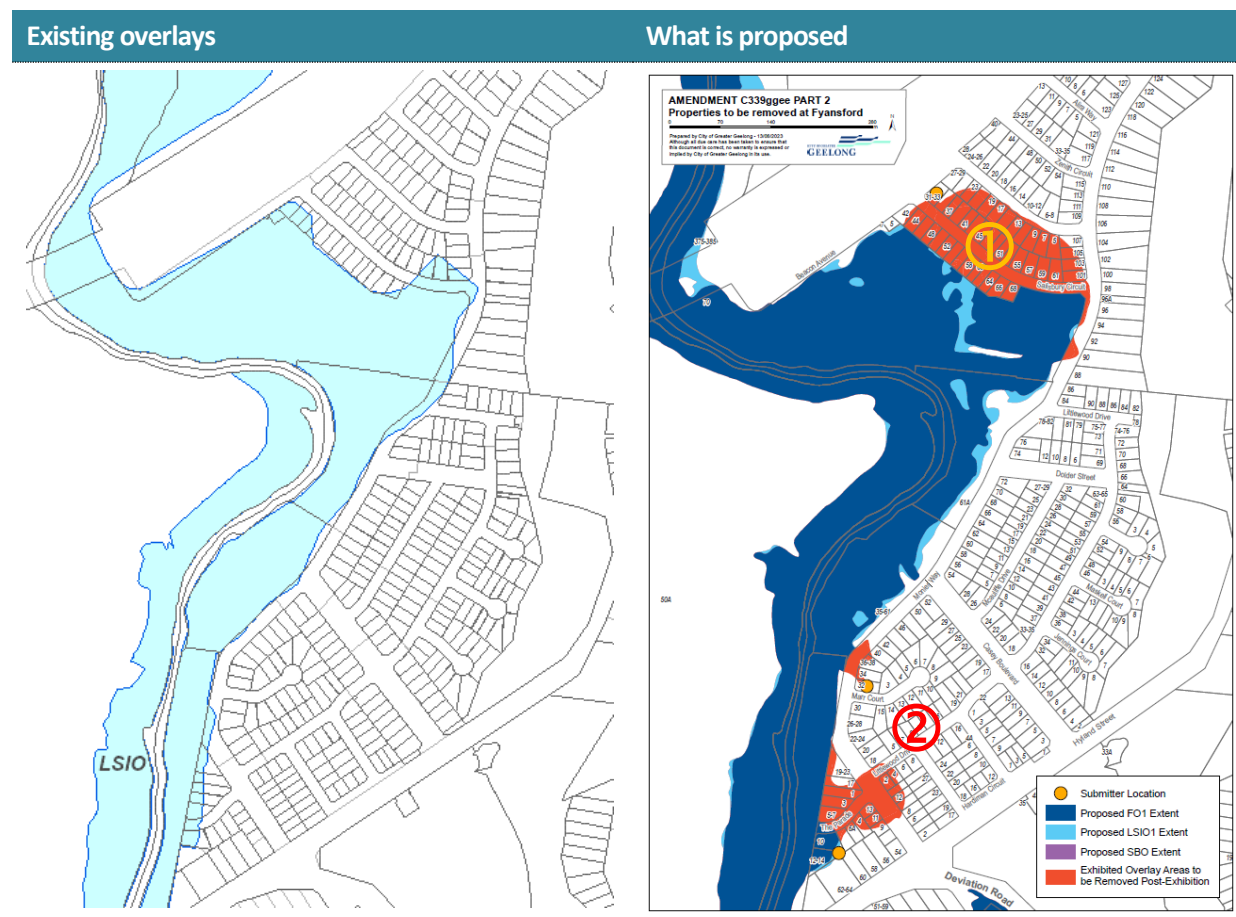
- The exhibited flood overlay mapping for Rowands Street area in the Creek Estate should be reduced by removing the areas shown in red in Figure 9.

² Council and Mr Bishop's term for reducing the extent of a proposed overlay from the extent determined by the flood model.

4.8 The Heights and Gen Fyansford estates, Fyansford

(i) What is proposed

Figure 11 Proposed changes at the Heights and Gen Fyansford estates, Fyansford



(ii) Evidence and submissions

Landowners submitted that the subdivision of land in Herne Hill has occurred in accordance with endorsed plans which includes the area of land now proposed for a flood overlay. The planning permits for the subdivisions of this land determined that the subject land is not flood prone under development conditions.

Submitters were concerned:

Our concern and objection with the submission are the possible insurance implications. A flood overlay of undefined dimension covering somewhat less than 20% of our block could add a considerable cost to our house insurance should our insurance company take a pessimistic view of the ramifications (which they usually do).

And:

I object to the amendment. When we purchased our block of land and subsequently built a house on it we were reassured that it was not in a flood zone area and the developer had carried out all the necessary elevation land surveys etc

Mr Bishop explained that the Lower Barwon and Lower Moorabool Flood Study was based on topographic survey collected in January 2017. At this time:

- “The Heights” estate (area ① on Figure 11) had commenced some earthworks, but filling of this area had not been completed. Hence raised ground levels resulting from the development were not incorporated into the hydraulic modelling. The 1 per cent AEP design flood level in this area is around 8.3 metres AHD. Approved plans provided to Council indicate that ground levels within Salisbury Circuit and the sections shown to be flooded under the exhibited overlay have been raised to at least 9.4 metres
- The “Gen Fyansford” estate (area ② on Figure 11) had commenced earthworks but extensive filling of this area had not been completed. The 1 per cent AEP flood level and corresponding flood extent on which the LSIO is based is around 8.15 m AHD in this area. It is understood that ground levels within the lowest sections of the estate have now been raised. Approved plans provided to Council indicate that ground levels within Monier Way and the sections shown to be flooded in the exhibited C339ggee overlay have been raised to 9.3 – 9.6 metres AHD along Monier Way.

Council submitted that it was appropriate to remove the lots shown in red in Figure 11 from the Amendment.

(iii) Discussion and conclusion

The Panel accepts the advice of Council and the opinion of Mr Bishop that the land is no longer subject to flooding because of the change in topography.

The Panel supports Council’s final position and concludes:

- The exhibited flood overlay mapping should be reduced as shown in red in Figure 11.

5 The text of the overlays

5.1 New schedules for LSIO1 and FO1

(i) The issue

Is the revised text of LSIO1 and FO1 appropriate?

(ii) Background

The Amendment proposes to include a number of permit exemptions in the new schedules to the Land Subject to Inundation Overlay (LSIO1) and Floodway Overlay (FO1).

(iii) Evidence and submissions

One objection was received specifically to the schedule changes from submitter 219 a landowner on Barwon Heads Road, Connewarre who does not support:

... in any way the lifting of the need for planning permits on any of the areas reclassified as Land Subject to Inundation [Overlay] or Floodway Overlay.

The submitter was concerned that the areas identified around her property

... all regularly have water on them and are all areas of examples of unique salt marsh vegetation and they support many species of birdlife, frogs, insects, reptiles and more. They are part of the fringes of Ramsar Wetland and act as a buffer for and are essential to, the health and wellbeing of the Ramsar Wetland. ... Tighter planning rules need to be applied and enforces... C339ggee is in direct opposition to the Distinctive Areas Landscape project and that seems very odd to me..."

The Department of Transport (submitter 123) suggested:

... that the proposed Schedules to the FO and LSIO note within the section on Decision Guidelines that proposed development does not increase the risk of damage to infrastructure managed by the Department of Transport (DoT) and its Agencies and that supporting conditions to this effect also be included within standard Permit conditions.

Council submitted that the new permit exemptions proposed in the LSIO1 and FO2 schedules strike a balance between appropriately controlling buildings and works in the floodplain and not having onerous permit requirements. It advised that the exemptions were prepared in consultation with the CCMA –the floodplain management authority as recommended PPN12.

Council did not support the changes to the LSIO1 and FO1 schedules requested by the Department of Transport (DoT). It submitted that it is not necessary or appropriate to specify that infrastructure managed by DoT and its agencies is protected any more than other infrastructure. Where relevant these issues would be picked up in planning permit assessments without the need for reference in the FO1 and LSIO1 schedules which are to apply across the municipality.

Council advised that Planning applications that have potential to cause detriment to DoT assets will be appropriately referred through the statutory planning referral process.

(iv) Discussion and recommendation

The approach of reducing permit requirements is in line with PPN12 which states:

The principal benefit of 'scheduling out' specific buildings and works is that the planning permit application process will be more streamlined. The effective use of schedules should

reduce the number of planning permit applications the council and the flood plain management authority need to process.

The Panel notes that LSIO1 and FO1 do not have a name whereas LSIO2 is called 'Coastal inundation and hazard'. The Panel considers that the scheme would be easier to use if LSIO1 and FO1 were also named.

The Panel also notes that some dot point lists do not follow drafting conventions for planning schemes.

The Panel concludes:

- The updated text in the overlays is generally appropriate.

The Panel recommends:

4. **Include a name, for example 'Riverine flooding' in the Land Subject to Inundation Overlay Schedule 1 and the Floodway Overlay Schedule 1 and review dot point formatting.**

5.2 Updating the Lara overlays

(i) The issue

Should the flood overlay schedules in Lara be updated?

(ii) Background

In splitting the original Amendment C339ggee Council officers did not include any properties from the Lara Flood Study area into the new Amendment C399ggee Part 2. This was due to Council abandoning the Lara Flood Study part of the Amendment (which became Part 1).

On the last day of the Hearing there was discussion between Council and the Panel about whether the new LSIO1 and FO1 schedules could or should be applied to existing LSIO and FO properties within the Lara Flood Study Area to match what was proposed across the municipality.

(iii) Evidence and submissions

Council electronically searched through the submissions and found no relevant submissions from Lara on the text of the revised overlays.

(iv) Discussion and recommendation

The Panel understands that the overlays in Lara were abandoned by Council on the basis of the extent of the overlays, and not because of the revised text in the schedules. Council's review of submissions indicates there were no submissions that specifically opposed the new permit exemptions. The Panel considers that it would be appropriate to apply the new exemptions proposed in LSIO1 and FO1 to the Lara area.

The Panel recommends:

5. **Apply the updated schedule text to the existing overlays in Lara.**

Appendix A Submitters to the Amendment

No	Submitter
2	Amber Adams
51	Brett Bliss
59	Aaron Bradley
60	Justine Bradley
64	Conrad Brandt
78	Chris Marshall
86	Gary Causon
104	Ian Colles
123	Department of Transport
124	Linda Devlin
138	William Edge
139	Ann Edge
147	Robin and Patricia Evans
152	Belinda Fear
187	Marcus Greville
189	Josh Griffiths
190	Meg Griffiths
202	Emma Harris
214	Ivan Herceg
219	Peta Hocking
227	Frank Hollingsworth
251	Malcolm Johns
252	Merryl Johnson
265	Catherine Knight
266	Vasilios and Tasia Konstadinopoulos
269	Kane and Denise Airey
277	Wei Lin
303	Gregor McCann
321	Melbourne Water

No	Submitter
332	Laurence Moore
345	Nazargul Nazar
350	Henry Nguyen
355	Helen Nikolovski
358	EP Robinson Pty Ltd
364	Judy Ollis
368	Alistair Palmer
369	Niresh and Angela Parag
386	Pivot Homes
418	Rachel Ropotar
434	David Sawyer
440	Colin and Lorraine Schulz
442	Don Seach
452	David Shuttle
455	Paul and Russell Malishev
469	Howard (Garry) Spry
483	Jo Taylor
488	Cam Than-Trong
492	Graeme Thoms
514	Wadawurrung Traditional Owners Aboriginal Corporation
515	Jinfeng Wang
537	Ricky Wilson
538	Angela Wilson
544	Ian Wishart
549	Stuart Wong
561	Corangamite Catchment Management Authority
372	Jennifer Parrot

Appendix B Parties to the Panel Hearing

Submitter	Represented by
City of Greater Geelong	Peter Smith, calling the following expert evidence: - Drainage and flooding from Warwick Bishop of Water Technology
Robin and Patricia Evans	
Belinda Fear	
ID Reserve Road 2 Pty Ltd and ID Harriot Road Pty Ltd	Tammara Brezzi of Norton Rose Fulbright
Corangamite Catchment Management Authority	Penny Reed
Paul and Russell Malishev	David King of Kings Lawyers

Appendix C Document list

No.	Date	Description	Provided by
1	12 May 23	Panel Directions and Hearing Timetable (version 1)	Planning Panels Victoria (PPV)
2	15 May 23	Council Part A submission	Greater Geelong City Council (Council)
3	23 May 23	Expert Evidence Statement of Mr Warwick Bishop	Council
4	30 May 23	Notice of withdrawal from Anseed Pty Ltd, the owner of the land at 40-70 Windsor Road, Newtown	Tract
5	16 Jun 23	Council Part B	Council
6	16 Jun 23	Submission	Corangamite CMA
7	19 Jun 23	Panel Hearing Timetable (version 2)	PPV
8	19 Jun 23	ID Reserve Pty Ltd and ID Harriott Road Pty Ltd submissions	Norton Rose
9	19 Jun 23	Survey plan	Norton Rose
10	19 Jun 23	Malishev submissions	Kings Lawyers
11	19 Jun 23	Balcombe Road landowners' letters of endorsement	Kings Lawyers
12	19 Jun 23	Further written submission on behalf of EP Robinson	Novo Planning
13	28 Jun 23	Council advice about submissions relating to the new schedules from Lara submitters	Council

Appendix D Chronology of events

Because the original Amendment has been split the Panel records the chronology of the key events relating to Amendment C339ggee and subsequent C339ggee Part 2 as presented by Council.

DATE	EVENT/DESCRIPTION
Dec 2015	Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment completed.
1 Mar 2019	Flood Risk Management Study – Lower Barwon River and Lower Moorabool River completed.
28 Jul 2020	<p>Council Meeting to support exhibition</p> <p><u>Resolution:</u> That Council:</p> <ol style="list-style-type: none"> 1. Support the preparation and exhibition of Amendment C339 to the Greater Geelong Planning Scheme to: <ol style="list-style-type: none"> a. Revise the extent of application of the Urban Flood Zone (UFZ), Public Conservation Zone (PCRZ), Public Park and Recreation Zone (PPRZ), Floodway Overlay (FO), Land Subject to Inundation Overlay (LSIO), Schedules 1 and 2 (LSIO1 and LSIO2) and Special Building Overlay (SBO) in the areas of the respective studies identified in attachments 3,4 and 5; and b. Amend the Schedules to the Floodway Overlay (FO), Land Subject to Inundation Overlay (LSIO) and the Special Building Overlay (SBO) consistent with the recommendations of the Lower Barwon and Lower Moorabool Flood Investigation and the Lara Flood Study. 2. <i>Request the Minister for Planning to authorise the preparation and exhibition of Amendment C339.</i>
19 May 2021	Amendment C339ggee Authorised by the Minister for Planning’s delegate.
15 Jul 2021 to 16 Aug 2021	<p>Public Exhibition</p> <p><u>Outcome:</u> A total of 561 submissions were received. Of these, 535 submissions objected and 26 submissions either supported, did not object or provided comments only. The majority of submissions were from the Lara Flood Study area with 505 submissions.</p>
14 Dec 2021	<p>Council Meeting to consider submissions</p> <p><u>Resolution:</u> That Council:</p> <p>Having considered all submissions to Amendment C339ggee - Flood Overlays and Zones (Lara Flood Study, Lower Barwon and Moorabool Rivers, Bellarine Peninsula Coastal Hazard) resolves to:</p> <ol style="list-style-type: none"> 1. Request the Minister for Planning to appoint an Independent Panel under Part 5 of the Planning and Environment Act 1987 to consider all submissions to Amendment C339ggee except those relating to the Lara Flood Study; 2. Defer a decision on the Lara Flood Study submissions to allow Council officers to investigate and prepare a further report on the site specific and more complex submissions and report back to Council in early 2022; 3. Refer all submissions except the Lara Flood Study submissions to the Panel; 4. Submit to the Panel its response to the submissions (except the Lara Flood Study submissions) generally as outlined in this report; and

DATE	EVENT/DESCRIPTION
	5. Note that Council officers will liaise with Planning Panels Victoria to delay appointment of a Panel and a Panel Hearing pending the outcome of Council's future consideration of the Lara Flood Study submissions.
Jan – July 2022	<i>Review of Complex Submissions – Lara, Avalon and Fyansford July 2022</i> prepared with input from City planners and engineers, CCMA and Water Technology. Recommends removal of a total of 2203 properties from the proposed overlays - almost entirely new housing estates and growth areas which have developed since the flood mapping was undertaken.
27 Sep 2022	<p>Council Meeting to further consider submissions (including the report on complex submissions) and an officer recommendation to refer them to a Panel</p> <p><u>Resolution:</u> That Council:</p> <ol style="list-style-type: none"> 1. Acknowledge the further work undertaken in the Review of Complex Submissions – Lara, Avalon and Fyansford (Attachment 1); 2. Defer a decision on the Lara Flood Study Submissions in order for Council officers to undertake further work which: <ol style="list-style-type: none"> 2.1 Reviews the previous criteria as detailed in Attachment 1 of this report, page 15, page 3 for consideration of complex submissions; 2.2 Determines any reasonable opportunities for the removal of properties proposed to be applied with a flood overlay control; and 2.3 At the completion of 2.2, prepare a report to Council that considers all the submissions. 3. Request the Chief Executive Officer to allocate appropriate resources to undertake this further work referred in point 2 above; and 4. Note the additional work and costs to facilitate an additional review of submissions as outlined in (2) for the Lara Flood Study is in the order of approximately \$30,000.
Oct 2022 – Feb 2023	Further review of Lara submissions and overlay maps in particular SBO mapping. Officers prepare a report to Council recommending referral to an independent Panel and removal of a further 755 marginally impacted properties from the proposed SBO at Lara (around 20 per cent of the SBO properties) in addition to the 2,203 properties previously recommended in the July 2022 review.
28 Mar 2023	<p>Council Meeting to further consider submissions and an officer recommendation to refer them to a Panel</p> <p><u>Resolution:</u> That Council, having further considered submissions to Amendment C339ggee Flood Zones and Overlays, resolves to abandon the part of the Amendment which relates to the Lara Flood Study properties and refer remaining submissions to an independent Panel.</p>
29 Mar 2023	<p>Amendment C339ggee split into two parts:</p> <ul style="list-style-type: none"> - C339ggee Part 1: Implementation of Lara Flood Study [which is] abandoned - C339ggee Part 2: Implementation of Flood Studies – Lower Barwon and Moorabool Rivers and Bellarine Peninsula Coastal Hazard [which is the subject of this report]
5 Apr 2023	City of Greater Geelong writes to Planning Panels Victoria and requests that a Panel be appointed for C339ggee Part 2.

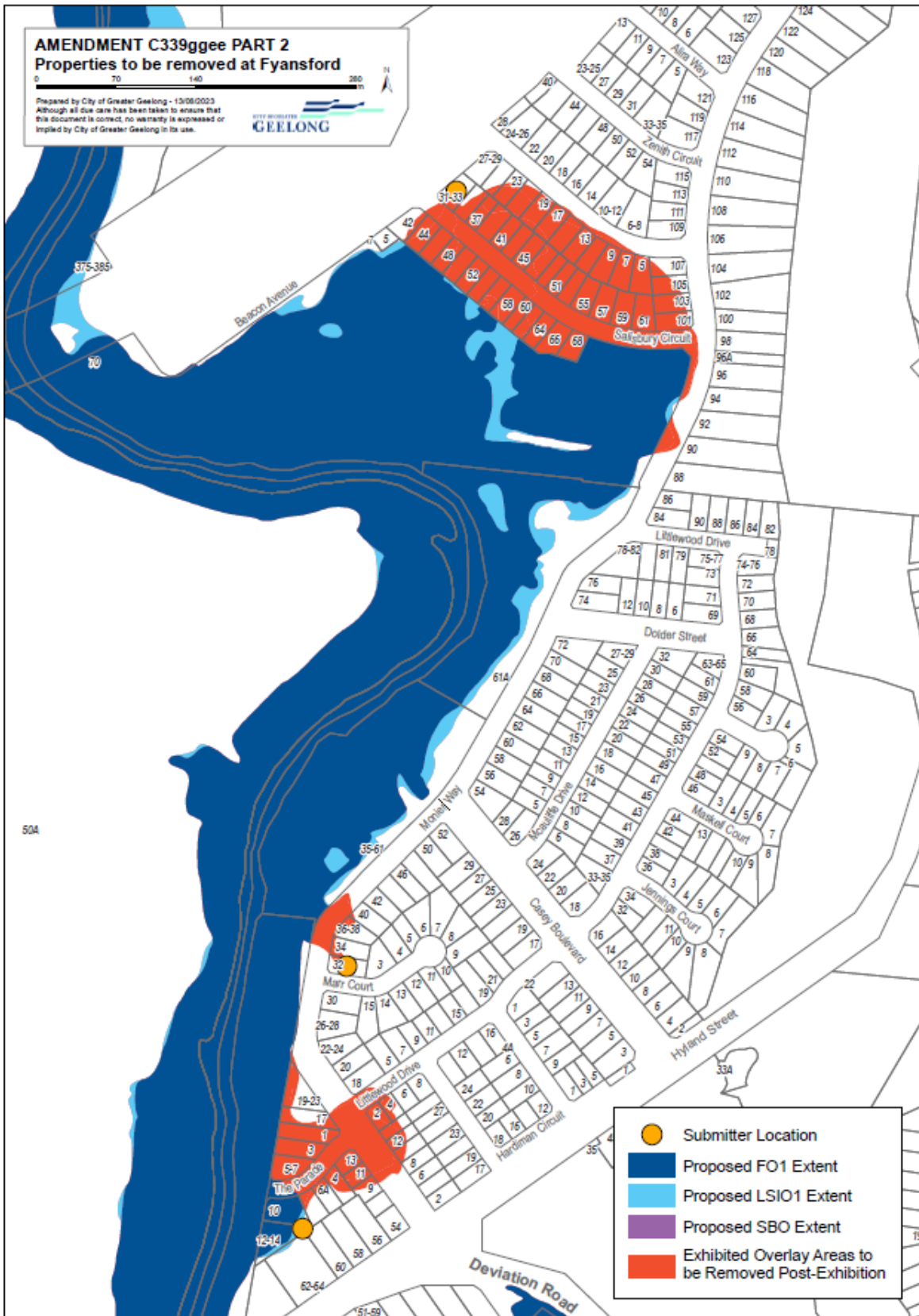
DATE	EVENT/DESCRIPTION
13 Apr 2023	Planning Panels Victoria confirms that a Panel has been appointed for C339ggee Part 2.
2 May 2023	Directions Hearing for C339ggee Part 2.
11 May 2023	C339ggee Part 1 formally abandoned and gazetted.
19 June 2023	Panel Hearing for C339ggee Part 2.

Appendix E Properties to be removed from the exhibited overlay maps

List of properties to be removed from the Amendment:

- | | |
|---|--|
| 1. 32 Monier Way, FYANSFORD VIC 3218 | 33. 57 Salisbury Circuit, FYANSFORD VIC 3218 |
| 2. 34 Monier Way, FYANSFORD VIC 3218 | 34. 4 Littlewood Drive, FYANSFORD VIC 3218 |
| 3. 40 Monier Way, FYANSFORD VIC 3218 | 35. 36-38 Monier Way, FYANSFORD VIC 3218 |
| 4. 23 Salisbury Circuit, FYANSFORD VIC 3218 | 36. 25 Salisbury Circuit, FYANSFORD VIC 3218 |
| 5. 21 Salisbury Circuit, FYANSFORD VIC 3218 | 37. 18 Monier Way, FYANSFORD VIC 3218 |
| 6. 19 Salisbury Circuit, FYANSFORD VIC 3218 | 38. 19-23 Monier Way, FYANSFORD VIC 3218 |
| 7. 11 Salisbury Circuit, FYANSFORD VIC 3218 | 39. 4 The Parade, FYANSFORD VIC 3218 |
| 8. 7 Salisbury Circuit, FYANSFORD VIC 3218 | 40. 11 Monier Way, FYANSFORD VIC 3218 |
| 9. 105 Monier Way, FYANSFORD VIC 3218 | 41. 6A The Parade, FYANSFORD VIC 3218 |
| 10. 31-33 Salisbury Circuit, FYANSFORD VIC 3218 | 42. 9 Monier Way, FYANSFORD VIC 3218 |
| 11. 35 Salisbury Circuit, FYANSFORD VIC 3218 | 43. 6B The Parade, FYANSFORD VIC 3218 |
| 12. 37 Salisbury Circuit, FYANSFORD VIC 3218 | 44. 2 Littlewood Drive, FYANSFORD VIC 3218 |
| 13. 45 Salisbury Circuit, FYANSFORD VIC 3218 | 45. 17 Monier Way, FYANSFORD VIC 3218 |
| 14. 47 Salisbury Circuit, FYANSFORD VIC 3218 | 46. 14 Monier Way, FYANSFORD VIC 3218 |
| 15. 49 Salisbury Circuit, FYANSFORD VIC 3218 | 47. 1 The Parade, FYANSFORD VIC 3218 |
| 16. 51 Salisbury Circuit, FYANSFORD VIC 3218 | 48. 12 Monier Way, FYANSFORD VIC 3218 |
| 17. 55 Salisbury Circuit, FYANSFORD VIC 3218 | 49. 10 Monier Way, FYANSFORD VIC 3218 |
| 18. 59 Salisbury Circuit, FYANSFORD VIC 3218 | 50. 3 The Parade, FYANSFORD VIC 3218 |
| 19. 61 Salisbury Circuit, FYANSFORD VIC 3218 | 51. 101 Monier Way, FYANSFORD VIC 3218 |
| 20. 103 Monier Way, FYANSFORD VIC 3218 | 52. 8 Merralyn Street, BELMONT VIC 3216 |
| 21. 13 Monier Way, FYANSFORD VIC 3218 | 53. 3 Rowands Street, MOUNT DUNEED VIC 3217 |
| 22. 8 Monier Way, FYANSFORD VIC 3218 | 54. 5-9 Rowands Street, MOUNT DUNEED VIC 3217 |
| 23. 17 Salisbury Circuit, FYANSFORD VIC 3218 | 55. 11 Rowands Street, MOUNT DUNEED VIC 3217 |
| 24. 15 Salisbury Circuit, FYANSFORD VIC 3218 | 56. 13 Rowands Street, MOUNT DUNEED VIC 3217 |
| 25. 13 Salisbury Circuit, FYANSFORD VIC 3218 | 57. 15 Rowands Street, MOUNT DUNEED VIC 3217 |
| 26. 9 Salisbury Circuit, FYANSFORD VIC 3218 | 58. 17 Rowands Street, MOUNT DUNEED VIC 3217 |
| 27. 5 Salisbury Circuit, FYANSFORD VIC 3218 | 59. 19 Rowands Street, MOUNT DUNEED VIC 3217 |
| 28. 107 Monier Way, FYANSFORD VIC 3218 | 60. 20 Whites Road, MOUNT DUNEED VIC 3217 |
| 29. 39 Salisbury Circuit, FYANSFORD VIC 3218 | 61. Unit 26/12 Balcombe Road, NEWTOWN VIC 3220 |
| 30. 41 Salisbury Circuit, FYANSFORD VIC 3218 | 62. 110 Camden Road, NEWTOWN VIC 3220 |
| 31. 43 Salisbury Circuit, FYANSFORD VIC 3218 | |
| 32. 53 Salisbury Circuit, FYANSFORD VIC 3218 | |

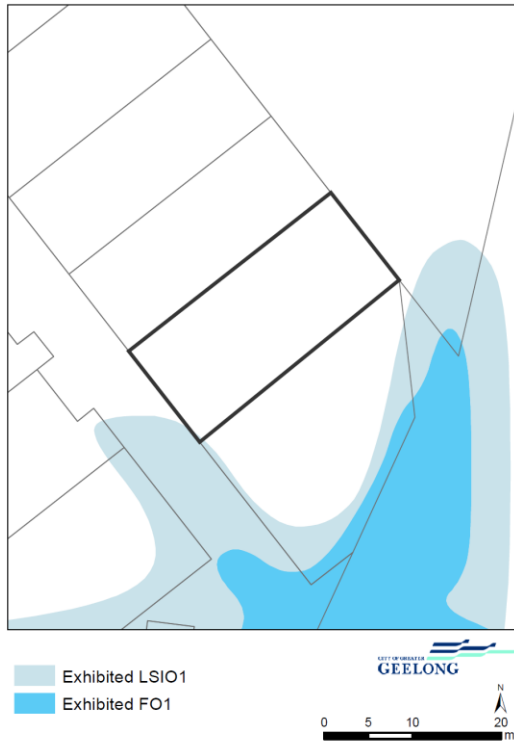
Maps of properties to be removed from the exhibited Amendment
FYANSFORD properties



8 Merralyn Street, BELMONT



Unit 26/12 Balcombe Road, NEWTOWN



Rowlands Street and Whites Road, MOUNT DUNEED properties



110 Camden Road, NEWTOWN



Appendix F Panel preferred version of the Floodway Overlay Schedule 1 and Land Subject to Inundation Schedule 1

SCHEDULE 1 TO CLAUSE 44.03 FLOODWAY OVERLAY

Shown on the planning scheme map as **FO1**.

RIVERINE FLOODING

1.0 Floodway objectives to be achieved

To identify areas of high risk from flooding.

To ensure development is commensurate with flood risk.

2.0 Statement of risk

Flooding carries significant costs for the community and the state. It can severely disrupt communities and in extreme cases, cause extensive damage to public and private property, agricultural losses, personal hardship and loss of life. The Greater Geelong Planning Scheme seeks to protect the community and development from the effects of flooding and control the effects of development on flood processes and behaviour.

3.0 Permit requirement

A permit is not required to carry out the following:

- An extension to an existing dwelling, provided the gross floor area of the extension does not exceed 20 square metres.
- An upper storey extension to an existing building within the existing building footprint.
- A footpath, bicycle path, boardwalk, tennis court or sports ground provided that they are constructed at ground level.
- An in-ground domestic swimming pool or spa and associated mechanical and fencing equipment where the excavated spoil is removed from the 1 per cent AEP floodplain and the perimeter edging of the pool is finished at natural ground level.
- Repairs and routine maintenance of existing fences if the fence design and materials remain the same.
- A radio mast, telecommunications tower, antenna, power pole or light pole.
- An outdoor advertising sign/structure that is fixed to a building or oriented parallel with the direction of floodwater flow.
- Works carried out by any water authority to maintain and replace infrastructure related to sewer and water supply, provided the ground level is not altered.
- A non-habitable building associated with a dwelling with a floor area less than 20m², provided the total footprint of non-habitable buildings on the lot does not exceed 40m².
- Construct open type fencing that complies with the Floodplain Management Authority's Guidelines for Fencing in Flood Prone Areas.
- Construct a verandah or decking area with a floor raised on stumps or piers and with unenclosed foundations.
- Install a domestic rainwater tank provided the rainwater tank is on a stand more than 300 millimetres above the 1 per cent AEP flood level which allows the free passage of floodwater.

- Works associated with roads, roadsides or any other access ways (public or private) carried out by a public authority that have received written consent from the floodplain management authority.
- Carry out earthworks or landscaping that do not raise the natural ground level.
- Conduct repairs and routine maintenance that do not affect the originally designed height, length or location of a levee or embankment.
- Construct any buildings and/or works (other than earthworks) on land that has been filled above the 1 per cent AEP flood level in accordance with the requirements of a planning permit for subdivision, restriction or Section 173 agreement, or other planning permit issued for the land.

4.0 Application requirements

The following application requirements apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.03 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- An application must be accompanied by four sets of plans drawn to scale which show:
 - The boundaries and dimensions of the site (to scale).
 - Relevant ground levels, to Australian Height Datum, taken by or under the direction and to the satisfaction of a licensed surveyor.
 - The layout of all existing and proposed buildings and works, including design finished surface levels.
 - Finished floor levels of any existing and proposed buildings to Australian Height Datum, taken by or under the direction and to the satisfaction of a licensed surveyor.

5.0 Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposal minimises the risk to life, health and wellbeing associated with flooding.
- Whether any development permitted on the floodplain will:
 - ~~I~~increases the risk to the community, infrastructure and buildings (and its occupants) from flooding.
 - ~~M~~aintains to the maximum possible extent the free passage and temporary storage of floodwaters.
 - ~~will~~Cause any significant rise in flood level or flow velocity to the detriment of other members of the community, infrastructure, or buildings.
- Whether the filling of the floodplain can be avoided unless it can be demonstrated that, both:
 - ~~T~~he level for level floodplain storage and conveyance compensation can be achieved consistent with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill, ~~and~~
 - ~~T~~here will be no adverse impacts on neighbouring property as verified by hydraulic modelling approved by the Floodplain Management Authority.
- Whether subdivision of land creates lots where there is an adequate building envelope on each lot, with safe vehicular access to all building envelopes.

SCHEDULE 1 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as **LSIO1**.

RIVERINE FLOODING

1.0 Land subject to inundation objectives to be achieved

To identify areas at risk from flooding.

To ensure development is commensurate with flood risk.

2.0 Statement of risk

Riverine flooding carries significant costs for the community and the state. It can severely disrupt communities and in extreme cases, cause extensive damage to public and private property, agricultural losses, personal hardship and loss of life. The Greater Geelong Planning Scheme seeks to protect the community and development from the effects of flooding and control the effects of development on flood processes and behaviour.

3.0 Permit requirement

A permit is not required to construct a building or carry out works for:

- An extension to an existing dwelling, provided the gross floor area of the extension does not exceed 20 square metres.
- Agricultural and farm buildings less than 100 square metres in gross floor area.
- A building which is open on all sides with a floor level at natural ground level, including a domestic shed, animal enclosure, stockyard or agricultural shed.
- An upper storey extension to an existing building within the existing building footprint.
- A footpath, bicycle path, boardwalk, tennis court or sports ground provided that they are constructed at ground level.
- An in-ground domestic swimming pool or spa and associated mechanical and fencing equipment where the excavated spoil is removed from the 1 per cent AEP floodplain and the perimeter edging of the pool is finished at natural ground level.
- Repairs and routine maintenance of existing fences if the fence design and materials remain the same.
- A radio mast, telecommunications tower, antenna, power pole or light pole.
- An outdoor advertising sign/structure that is fixed to a building or oriented parallel with the direction of floodwater flow.
- Works carried out by any water authority to maintain and replace infrastructure related to sewer and water supply, provided the ground level is not altered.
- A non-habitable building associated with a dwelling with a floor area less than 20m², provided the total footprint of non-habitable buildings on the lot does not exceed 40m².
- A single replacement dwelling, provided that the floor level is at least 300 mm above the 100 year ARI flood level as advised by the floodplain management authority within 12 months of the start of works.
- Construct open type fencing that complies with the Floodplain Management Authority's Guidelines for Fencing in Flood Prone Areas.
- Construct a verandah or decking area with a floor raised on stumps or piers and with unenclosed foundations.
- Install a domestic rainwater tank provided the rainwater tank is on a stand more than 300 millimetres above the 1 per cent AEP flood level which allows the free passage of floodwater.

- Works associated with roads, roadsides or any other access ways (public or private) carried out by a public authority that have received written consent from the floodplain management authority.
- Carry out earthworks or landscaping that do not raise the natural ground level.
- Carry out earthworks, including earthworks that raise the natural ground level, on land that is above the 1 per cent AEP flood level as advised in writing by the floodplain management authority within 12 months.
- Conduct repairs and routine maintenance that do not affect the originally designed height, length or location of a levee or embankment.
- Construct any buildings and/or works (other than earthworks) on land that has been filled above the 1 per cent AEP flood level in accordance with the requirements of a planning permit for subdivision, restriction or Section 173 agreement, or other planning permit issued for the land.

4.0 Application requirements

The following application requirements apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- An application must be accompanied by four sets of plans drawn to scale which show:
 - The boundaries and dimensions of the site.
 - Relevant ground levels, to Australian Height Datum, taken by or under the direction and to the satisfaction of a licensed surveyor.
 - The layout of all existing and proposed buildings and works, including design finished surface levels.
 - Finished floor levels of any existing and proposed buildings to Australian Height Datum, taken by or under the direction and to the satisfaction of a licensed surveyor.

5.0 Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposal has demonstrated that it minimises the risk to life, health and wellbeing associated with flooding.
- Whether any development permitted on the floodplain will:
 - ~~I~~ncreases the risk to the community, infrastructure and buildings (and its occupants) from flooding.
 - ~~M~~maintains to the maximum possible extent the free passage and temporary storage of floodwaters.
 - ~~w~~ill ~~C~~eause any significant rise in flood level or flow velocity to the detriment of other members of the community, infrastructure, or buildings.
- Whether the filling of the floodplain can be avoided unless it can be demonstrated that, both:
 - ~~T~~he level for level floodplain storage and conveyance compensation can be achieved consistent with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill, ~~and~~
 - ~~T~~here ~~must~~will be no adverse impacts on neighbouring property as verified by hydraulic modelling approved by the Floodplain Management Authority.
- Whether subdivision of land creates lots where there is an adequate building envelope on each lot, with safe vehicular access to all building envelopes.