

Planning and Environment Act 1987

City of Ballarat Planning Scheme

Amendment C217ball

Explanatory Report

Overview

The amendment implements the findings of the Ballarat 11 Waterways Flood Study (Water Technology Pty Ltd, July 2025) (the Flood Study) by inserting schedule 2 to Clause 44.03 Floodway Overlay (FO2) and schedule 2 to Clause 44.04 Land Subject to Inundation Overlay (LSIO2) to areas at risk of riverine flooding and introduces Clause 44.05 Special Building Overlay Schedule 1 (SBO1) to the planning scheme to manage urban areas at risk of stormwater flooding.

The updates to these overlays ensure the Ballarat Planning Scheme includes the current flood hazards identified across the municipality by the recent flood investigations.

This amendment proposes to identify new flood hazard locations in the Ballarat Planning Scheme following recommendations from recent flood investigations.

Where you may inspect this amendment

The amendment can be inspected free of charge at the City of Ballarat website at: <https://mysay.ballarat.vic.gov.au/ballarat-11-waterways-flood-modelling>;

The amendment is available for public inspection, free of charge, during office hours at the following places by contacting 03 5330 5500 to arrange a time to view the amendment documentation at:

City of Ballarat Offices, Phoenix Building,
25 Armstrong Street South, Ballarat Central, Vic.

The amendment can also be inspected free of charge at the Department of Transport and Planning website at planning.vic.gov.au/public-inspection or by contacting the office on 1800 789 386 to arrange a time to view the amendment documentation.

Submissions

Any person may make a submission to the planning authority about the amendment. Submissions about the amendment must be received by 29 May 2026.

A submission must be sent to Strategic Planning, City of Ballarat:

By post: PO Box 665, Ballarat VIC 3350

In person: 25 Armstrong Street South
BALLARAT CENTRAL VIC

By email: strategicplanning@ballarat.vic.gov.au

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- Directions hearing: 3 August 2026
- Panel hearing: 31 August 2026

Details of the amendment

Who is the planning authority?

The amendment has been prepared by Ballarat City Council which is the planning authority for this amendment.

The amendment has been made at the request of the Ballarat City Council and Corangamite Catchment Management Authority (Corangamite CMA).

Land affected by the amendment

The amendment applies to land in the Yarrowee River Catchment, as identified in the Flood Study as being at risk of riverine or urban stormwater flooding. The Yarrowee River Catchment is a major sub catchment within the upper Barwon River system and drains a significant portion of the Ballarat urban area. Originating to the north of Ballarat, the Yarrowee River flows south through Ballarat Central, Sebastopol and Delacombe before joining the Leigh River.

A total of 4260 properties are impacted by the amendment of which 1747 within FO2, 2676 within LSIO2 and 1078 within SBO1 (noting that some properties may be affected by more than one overlay), across the following waterway catchments:

- Bonshaw Creek
- Canadian Creek and Tributaries
- Chase Waterway
- Kensington Creek
- Little Bendigo Creek and Hit or Miss Gully
- Redan Creek
- Warrenheip Creek and Ryans Drain
- Yarrowee River and Gnarr Creek

The extent of the overlays will vary where some properties will have a portion of land affected, while others may have the overlay applied to the whole property. The application of the controls can be seen in figures 1 to 7.

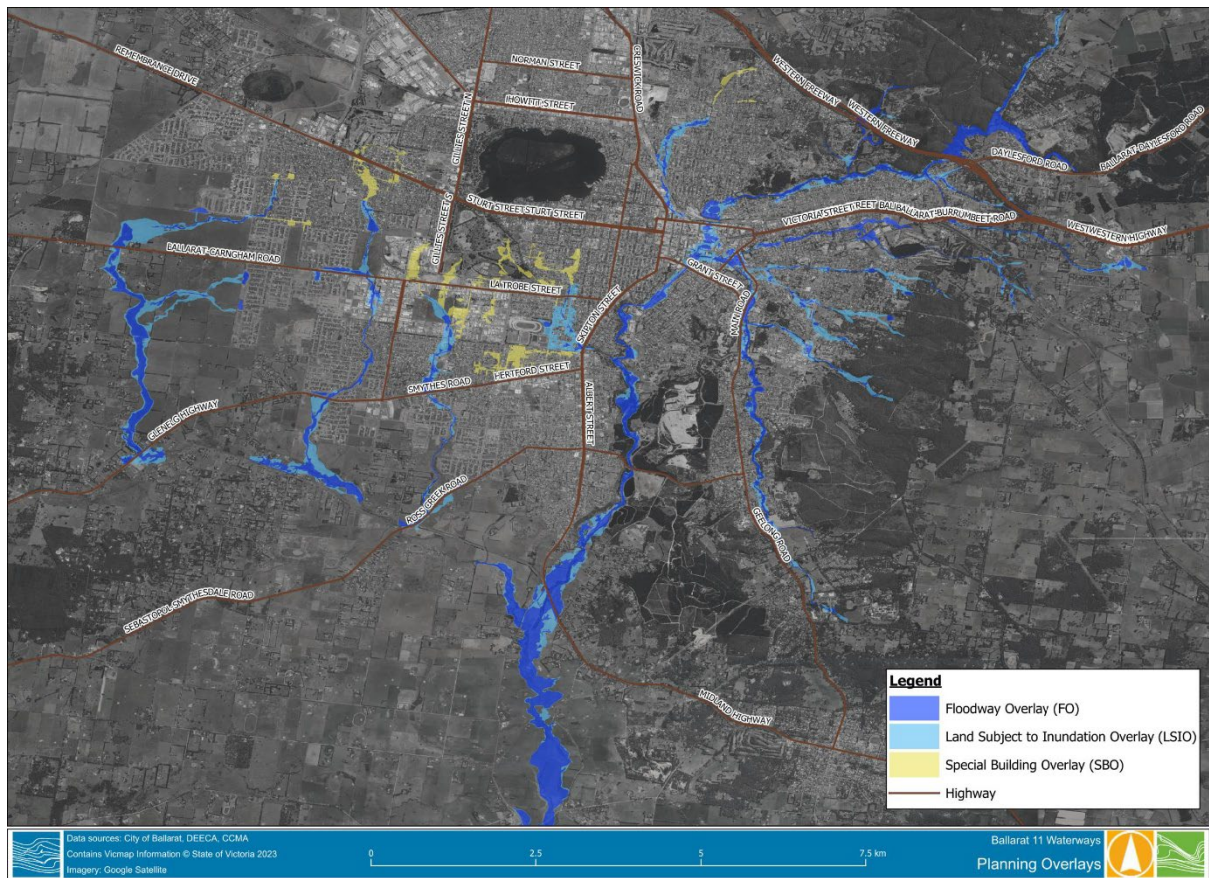


Figure 1- Map of Overlays - FO, LSIO, SBO, Source: Summary Report - Ballarat 11 Waterways Flood Study 2025 (Water Technology).

The Ballarat suburbs specifically affected include:

- Alfredton
- Bakery Hill
- Ballarat Central
- Ballarat East
- Ballarat North
- Black Hill
- Bonshaw
- Brown Hill
- Bunkers Hill
- Cambrian Hill
- Canadian
- Delacombe
- Durham Lead
- Eureka
- Glen Park
- Golden Point
- Gong Gong

- Lucas
- Magpie
- Mount Clear
- Mount Helen
- Mount Pleasant
- Napoleons
- Nerrina
- Redan
- Ross Creek
- Scotchmans Lead
- Sebastopol
- Smythes Creek
- Soldiers Hill
- Warrenheip
- Winter Valley

The suburbs impacted by the proposed LSIO2 and FO2 feature a mix of residential, commercial, industrial, commercial and rural land uses.

Ballarat Central, Bakery Hill and Soldiers Hill are characterised by residential, commercial and heritage precincts, while suburbs such as Alfredton, Lucas and Winter Valley are undergoing significant residential growth.

Sebastopol, Delacombe and Warrenheip include industrial and commercial zones supporting business activity in addition to residential areas. Outer suburbs including Napoleons, Ross Creek and Durham Lead support rural and agricultural uses with some rural residential developments.

Historical areas such as Eureka and Golden Point reflect a meeting point between Ballarat's gold rush heritage and residential areas. Canadian, Black Hill and Mount Clear include residential areas with large areas of natural, open space.

Growth areas, particularly in Ballarat's west are seeing increasing urban expansion, particularly towards Smythes Creek, Bonshaw and Cambrian Hill.

The SBO1 will be applied to urban areas which may be affected by stormwater flooding which occurs when the design capacity of the stormwater system is exceeded by the volume of water entering the system during a flood event.

The Ballarat suburbs specifically affected by the SBO1 include,

- Alfredton
- Ballarat Central
- Ballarat North
- Delacombe
- Invermay Park
- Newington
- Redan
- Sebastopol

The application of the SBO1 is generally within residential areas in the upper reaches of the Bonshaw, Gnarr, Kensington and Redan Creeks and The Chase Waterway, except for the industrial and mixed-use areas in Delacombe and Alfredton affected by overland flows in the upper reaches of the Redan and Bonshaw Creeks.

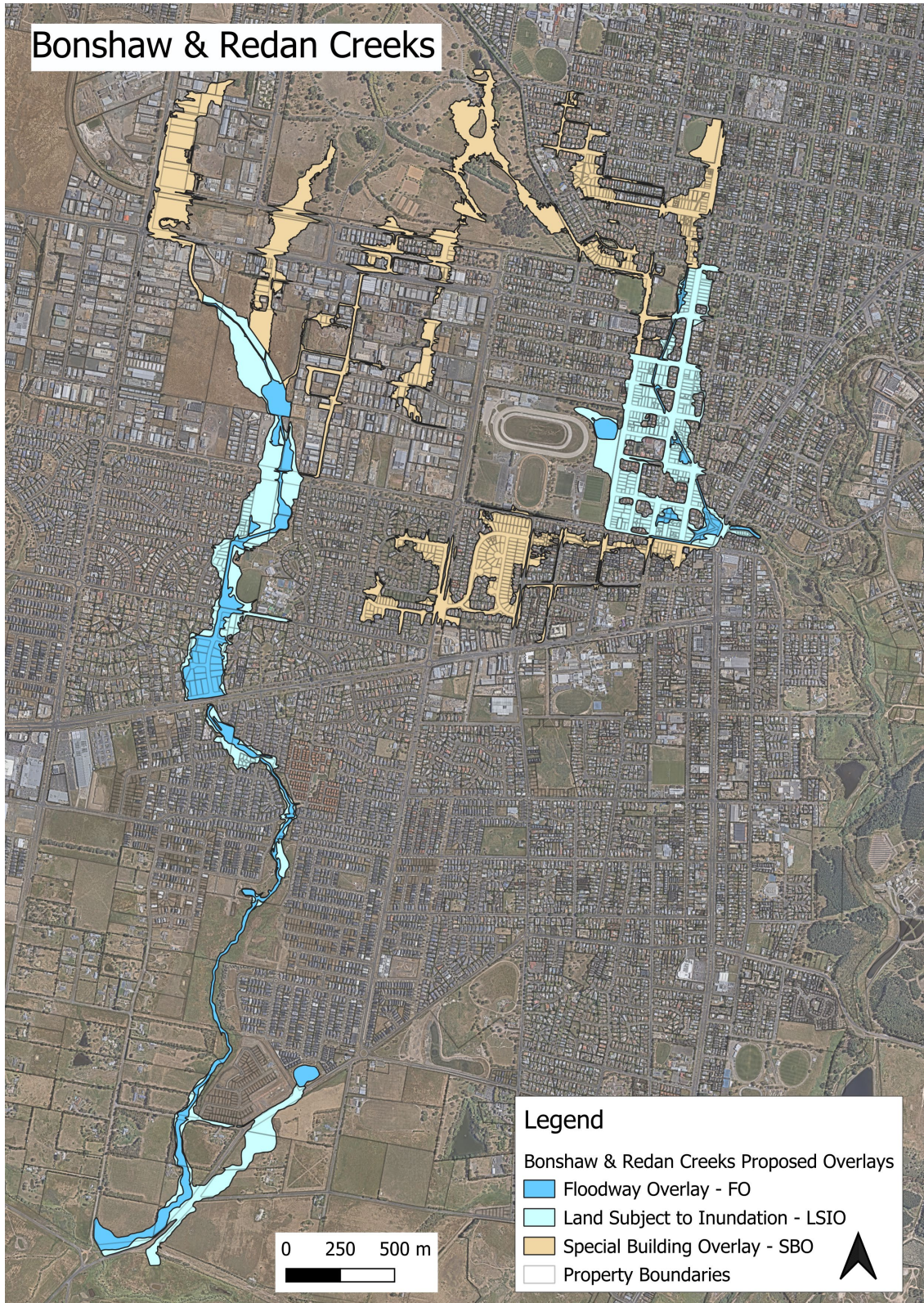


Figure 2 - Bonshaw Creek & Redan Creek Proposed Overlays, Source: City of Ballarat 2026

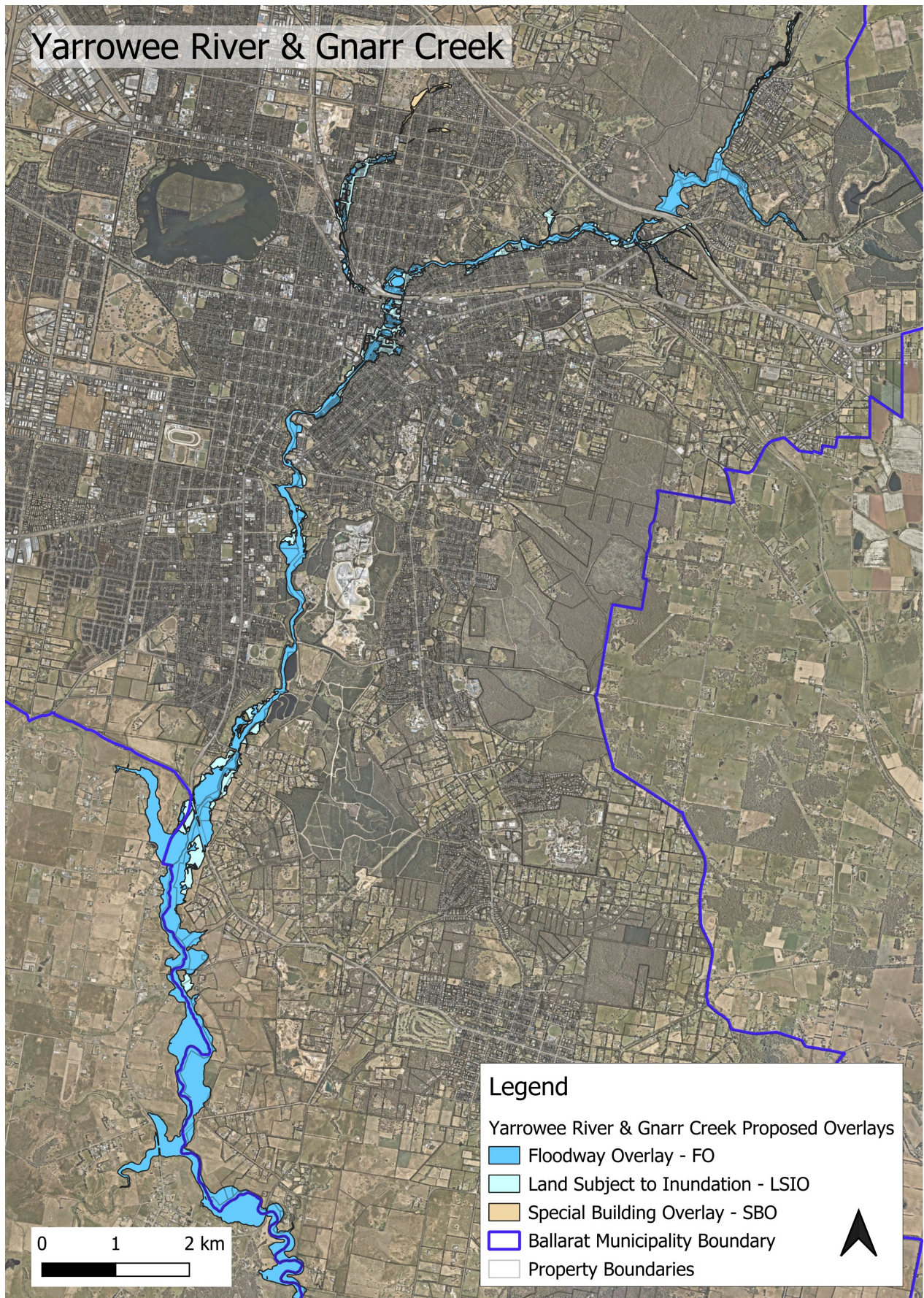


Figure 3 - Yarrowee River and Gnarr Creek Proposed Overlays, Source: City of Ballarat 2026

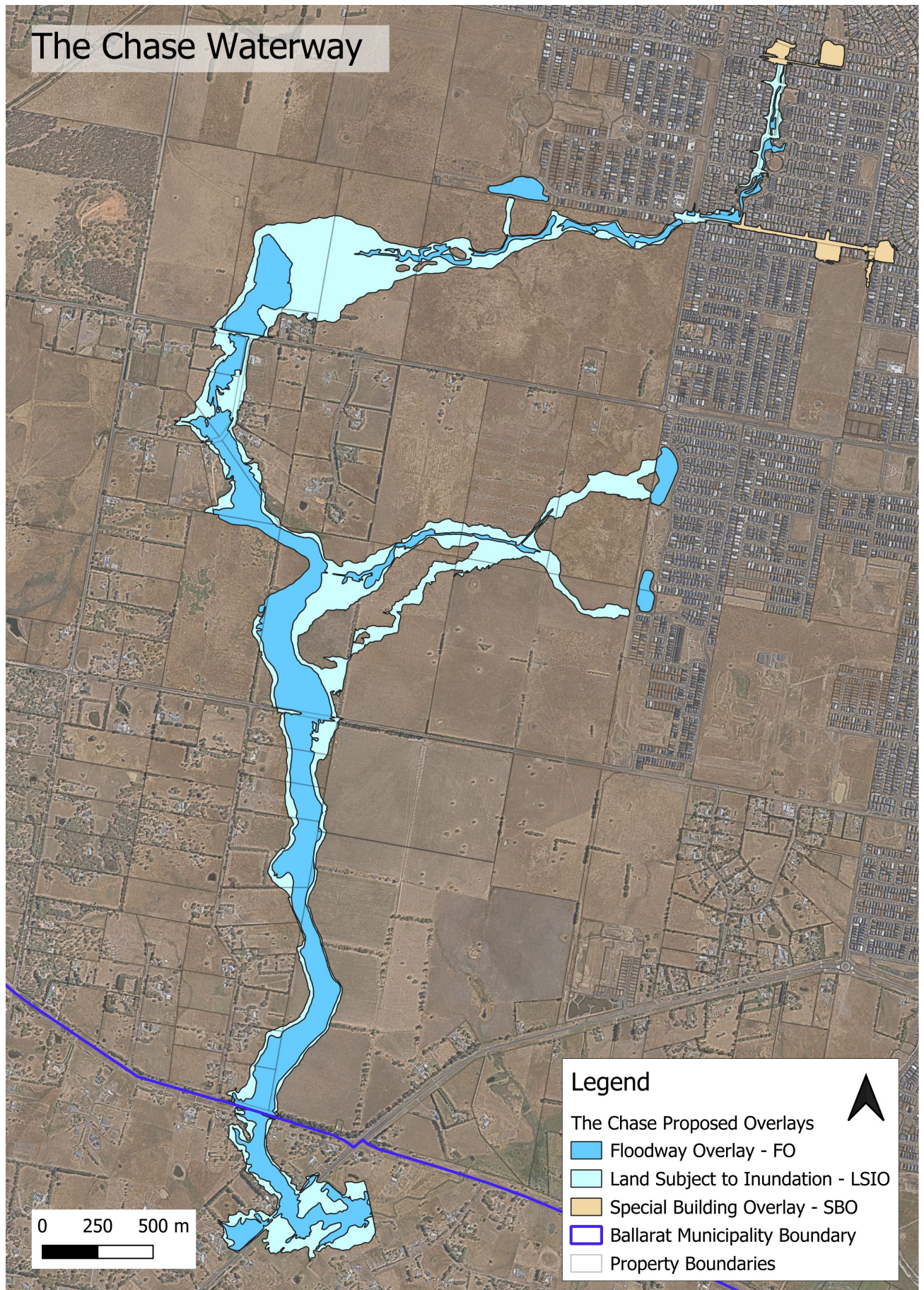


Figure 4 - The Chase Waterway Proposed Overlays, Source: City of Ballarat 2026



Figure 5 - Kensington Creek Proposed Overlays, Source: City of Ballarat 2026

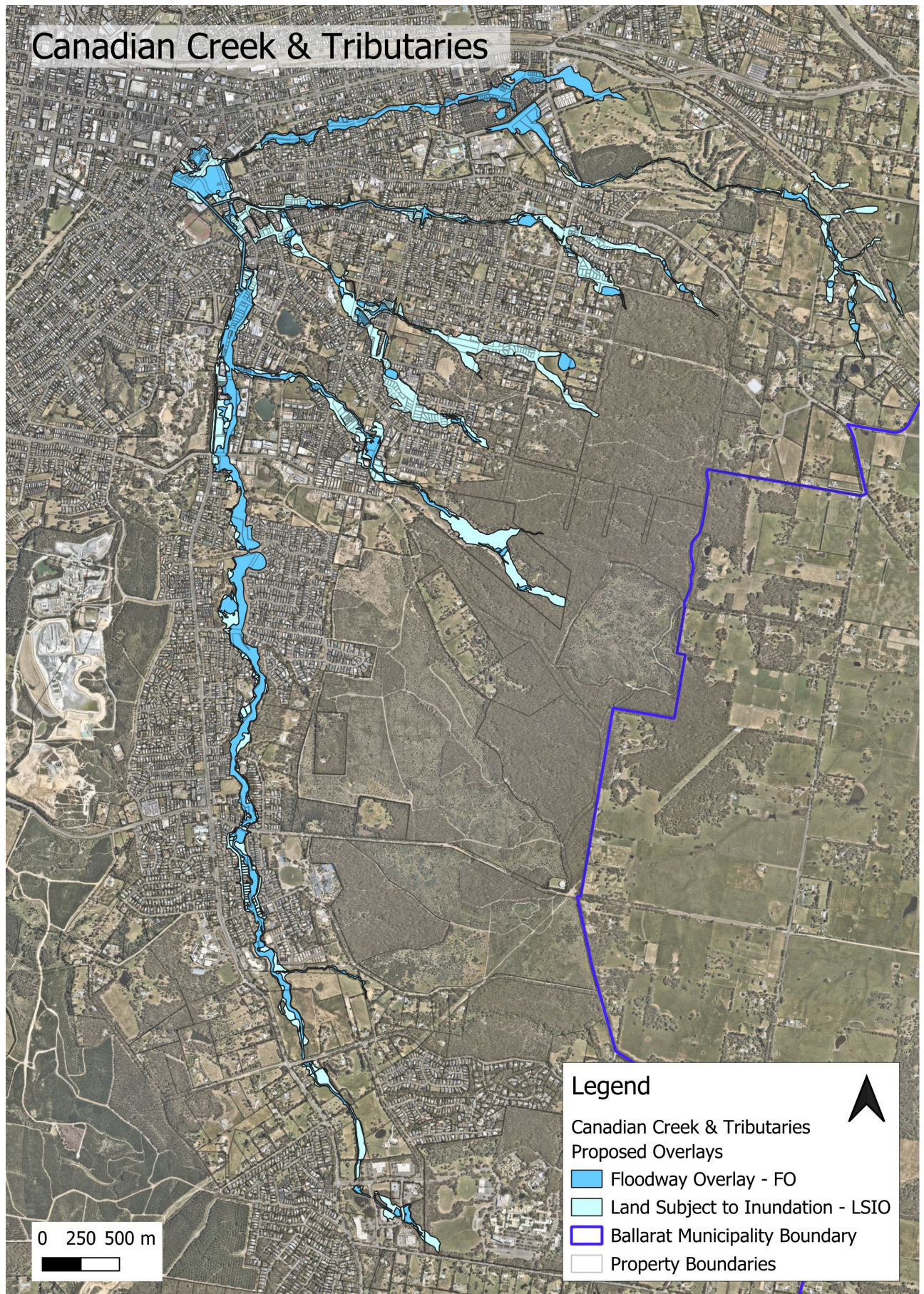


Figure 6 - Canadian Creek & Tributaries Proposed Overlays, Source: City of Ballarat 2026

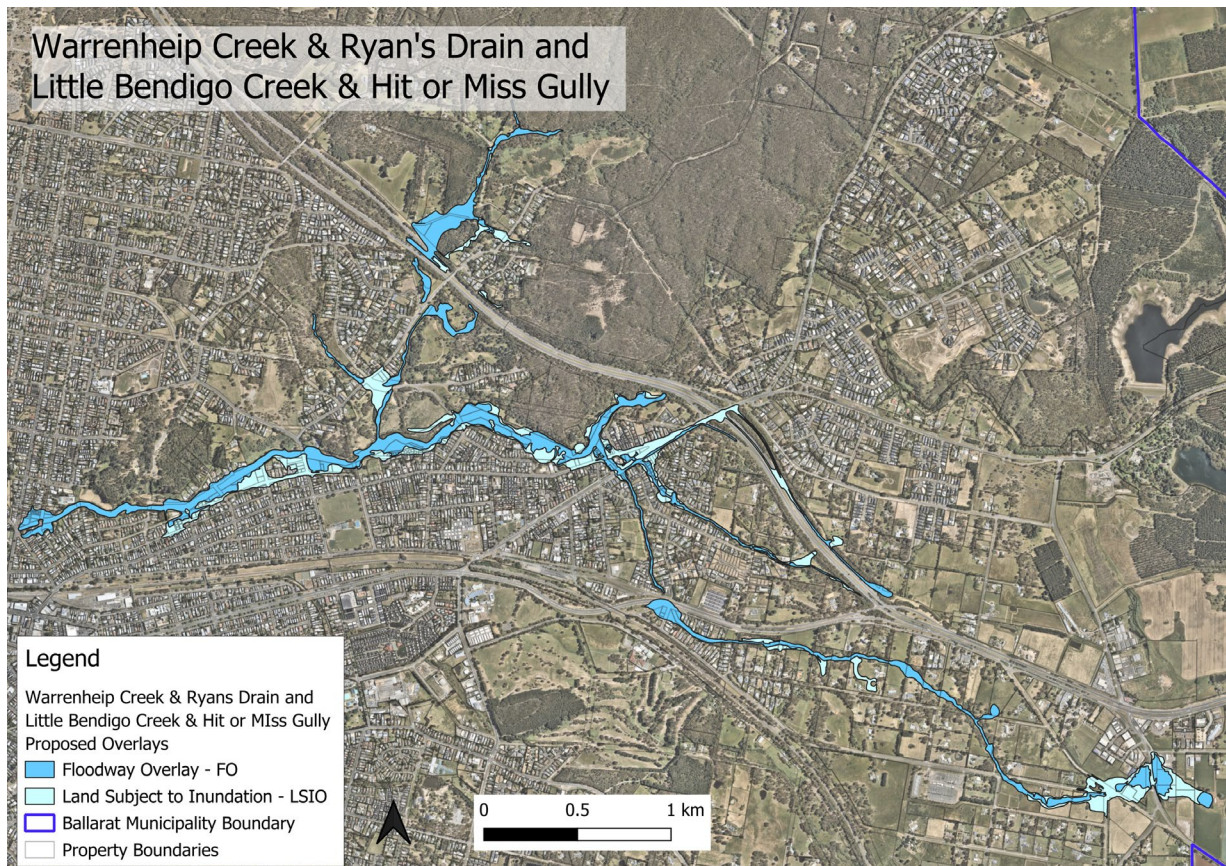


Figure 7 - Warrenheip Creek & Ryan's Drain and Little Bendigo Creek and Hit or Miss Gully Proposed Overlays, Source: City of Ballarat 2026

A mapping reference table can be found at Attachment 1 to this Explanatory Report.

What the amendment does

The amendment implements recommendations from the *Ballarat 11 Waterways Flood Study (Water Technology, July 2025)* for identified areas at risk of riverine flooding in the City of Ballarat by introducing new schedules to the FO and LSIO.

The amendment also introduces the SBO to areas identified at risk of urban stormwater flooding.

The FO2, LSIO2 and SBO1 are based on a design flood event that has a 1 per cent chance of occurring in any given year, known as the 1 per cent Annual Exceedance Probability (AEP). They have been based on climate change projections to 2100 under a RCP8.5 climate change scenario.

Specifically, the amendment:

Overlays maps

- Amends planning scheme maps nos. 04LSIO-FO, 16LSIO-FO, 17LSIO-FO and 18LSIO-FO.
- Inserts new planning scheme maps nos. 19LSIO-FO, 20LSIO-FO, 21LSIO-FO, 23LSIO-FO, 24LSIO-FO, 25LSIO-FO, 26LSIO-FO, 27LSIO-

FO, 28LSIO-FO, 29LSIO-FO, 30LSIO-FO, 31LSIO-FO, 32LSIO-FO, 33LSIO-FO, 34LSIO-FO, 35LSIO-FO, 36LSIO-FO, 38LSIO-FO, 39LSIO-FO and 40LSIO-FO.

- Inserts new planning scheme maps nos.14SBO, 16SBO, 17 SBO, 20SBO, 21SBO, 22SBO, 26SBO and 27SBO.

Planning scheme ordinance

- Inserts a new Schedule 2, '*Flooding from 'Yaluk' (Waterways – Wadawurrung Language) 'Yarrowee River Catchment'*' to Clause 44.03 Floodway Overlay (FO2).
- Inserts a new Schedule 2, '*Flooding from 'Yaluk' (Waterways – Wadawurrung Language) 'Yarrowee River Catchment'*' to Clause 44.04 Land Subject to Inundation Overlay (LSIO2).
- Inserts Clause 44.05 Special Building Overlay and a new Schedule 1 (SBO1) into the planning scheme.
- Amends the Schedule to Clause 72.03, What Does this Planning Scheme Consist Of, to update the list of maps in the Ballarat Planning Scheme.
- Amends the Schedule to Clause 72.08, Background Documents, to introduce a new background document *Ballarat 11 Waterways Flood Study (Water Technology, July 2025)*

Strategic assessment of the amendment

Why is the amendment required?

Victoria's Planning Policy Framework requires relevant planning authorities, usually councils, to identify any land affected by flooding and to account for the effects of climate change. In flood prone areas councils have a responsibility to manage flood risk to their communities and may use planning scheme mapping and controls to ensure that land use and development decisions appropriately consider flood risk.

Consistent with policy and legislation, the study has followed the latest best practice methodology and guidance to prepare the flood mapping for the amendment.

The amendment is required to implement recommendations from the findings of the *Ballarat 11 Waterways Flood Study (Water Technology, July 2025)*. The amendment will ensure that planning controls reflect the flood hazard identified in the Flood Study which identified riverine and stormwater flood hazards for 11 waterways in Ballarat.

The amendment provides a community benefit by formalising the best available flood hazard data into the planning scheme and applying it to future land use and development. The City of Ballarat, with the support of Corangamite CMA, commissioned flood investigations for 11 waterways in Ballarat to understand, and respond to, flood hazard across the City of Ballarat.

Ballarat 11 Waterways Flood Study – Methodology and Review

The Ballarat 11 Waterways Flood Study was prepared by Water Technology Pty Ltd on behalf of the City of Ballarat, in partnership with the Corangamite CMA. The study provides updated flood mapping and hazard information for eleven waterways across the municipality and forms the technical basis for the proposed planning controls.

Flood modelling methodology

The flood modelling for the study was prepared in accordance with current industry best practice and relevant national and state guidelines, including *Australian Rainfall and Runoff (ARR 2019)* and Victorian floodplain management guidance. The modelling process involved the development of integrated hydrologic and hydraulic models to simulate rainfall runoff processes and flood behaviour across each waterway catchment.

Hydrologic modelling was used to estimate catchment responses to rainfall events of varying magnitudes, taking into account factors such as catchment size, land use, soil characteristics and drainage infrastructure. These outputs were then applied to detailed hydraulic models that simulate flood behaviour, including flood extents, depths, velocities and flow paths across floodplains and urban areas.

The models were calibrated and validated where possible using available historical flood data, surveyed levels, flood marks and anecdotal information to ensure realistic representation of flood behaviour.

Explanation of the 1% Annual Exceedance Probability (AEP) event

The planning controls proposed by this amendment are based on the 1 per cent Annual Exceedance Probability (AEP) flood event, which represents a flood with a one in one hundred chance of being equalled or exceeded in any given year. This event is commonly referred to as the ‘1 in 100 year flood’; however, it is important to note that such an event can occur more than once within a relatively short period and does not imply a flood will only occur once every 100 years.

The 1% AEP event is the standard design flood used in Victorian planning schemes for identifying land subject to flooding and informing floodplain management and land use planning decisions. It provides a consistent benchmark for assessing flood risk to life, property and infrastructure.

Climate change and Representative Concentration Pathways (RCPs)

The flood modelling incorporates future climate change considerations using a Representative Concentration Pathway (RCP) scenario. RCPs describe possible future greenhouse gas concentration trajectories and are used internationally to assess potential climate change impacts.

The study adopted a high emissions scenario (RCP 8.5) with a time horizon to the year 2100, consistent with Victorian Government guidance at the time of preparation.

This scenario reflects projected increases in rainfall intensity associated with climate change and provides a conservative basis for identifying future flood risk. The application of climate change allowances ensures that the proposed planning controls account for anticipated increases in flood magnitude and frequency over time.

Peer review and technical review

The Ballarat 11 Waterways Flood Study underwent a comprehensive peer review and quality assurance process. This included independent technical review by the Department of Energy, Environment and Climate Action (DEECA), as well as review by external flood and drainage specialists.

In addition, the modelling and mapping were reviewed in consultation with the Corangamite Catchment Management Authority, as the nominated floodplain management authority and referral authority for flood related matters. Feedback received through these review processes informed refinements to the modelling and final flood mapping used to support the amendment.

The study therefore represents the best available and most up to date flood risk information for the City of Ballarat and provides a sound technical basis for the proposed planning controls.

The Flood Study provides recommendations for making changes to the Ballarat Planning Scheme for areas identified as being at risk of riverine and stormwater flooding. A key implementation task from the Flood Study is to update flood controls and mapping within the Ballarat Planning Scheme.

The planning scheme amendment is necessary to establish regulatory controls that address and mitigate flood hazards within Ballarat. Given the increasing frequency and intensity of flood events due to climate change, along with the ongoing development pressures within urban areas, it is essential to proactively manage flood-prone locations. By implementing specific controls, the amendment will help reduce potential harm to people, properties, and infrastructure, ensuring the city's resilience to flood events.

How does the amendment implement the objectives of planning in Victoria?

The amendment is consistent with the objectives of planning in Victoria included in section 4(1) of the Act that state:

- a. *to provide for the fair, orderly, economic and sustainable use, and development of land;*
- b. *to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;*

- c. *to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria;*
- d. *to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;*
- e. *to protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community;*
- f. *to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e)*

The amendment will assist landowners and occupiers to understand the potential flood hazard and guide development on their land. It will assist the City of Ballarat to make more informed decisions on development of land that may be affected by flooding.

The amendment will ensure development is managed safely in and around the floodplains which will assist in creating localities where communities can live, work and play safely and provide for a more efficient recovery from future flooding events.

How does the amendment address any environmental, social and economic effects?

Environmental effects

The amendment identifies flood-prone areas. Locations of environmental significance, such as swamps, billabongs and wetlands have an important role to play in supporting biodiversity, recycling nutrients and maintaining water quality – all of which can be impacted by inappropriate development in flood prone areas. The identification of these flood-prone areas will ensure that development is compatible with local environmental conditions including flood hazard and drainage conditions.

The amendment will ensure that new development is appropriately designed and located for flood hazard in a manner that maintains the free passage and temporary storage of floodwaters to minimise compromising natural systems.

Social effects

This amendment will ensure that development is undertaken in an orderly and safe manner. Flooding can have significant consequences for individuals and for local communities. The impacts can include loss of life, loss of property and temporary or permanent displacement. Flooding may affect people and communities differently. Health, mental health and social vulnerability may be exacerbated for people living in exposed communities and can make normally resilient people vulnerable.

Specific groups within communities exposed to flooding may be further disadvantaged. For example, people with disability may be more disadvantaged than people without disability in responding to a flood event. This may be because people with disability may face barriers to receiving or understanding emergency warnings. Ensuring appropriate development occurs reduces the chance of socially vulnerable people living in flood prone areas. Over the long term, applying appropriate planning controls will reduce the compounding impacts of social vulnerability.

Economic effects

The amendment is expected to have positive economic effects for the municipality. Flooding carries significant costs for the community, individual landowners and occupiers, and the government. The identification of flood hazard through planning scheme mapping will provide increased certainty to the community and local businesses and reduce future economic loss from flooding.

Flood damage can disrupt communities and in extreme cases, cause extensive and costly damage to public and private assets, causing agricultural and industry losses, personal hardship and loss of life. By careful planning of new development, having regard to flood hazard, future economic impacts of flooding can be reduced.

The publicly available flood hazard information will assist current and future landowners make informed choices prior to purchasing and developing land. This information will assist in establishing future industries, tourism and community facilities in appropriate locations. Additionally, minor buildings and works are exempt under the proposed schedules to avoid unnecessary planning regulation.

Does the amendment address climate change?

This amendment considers climate change, however the amendment does not:

- rezone land,
- enable a change or intensification of use of urban land,
- enable a new use and development of the land that may be exposed to a natural hazard that arises from climate change,

therefore, Ministerial Direction No. 22 – Climate Change Consideration under section 12A of the *Planning and Environment Act 1987* is not applicable to the amendment.

The amendment is supported by the Flood Study, which functions as a suitable climate change consideration report for the purposes of this amendment. The Study assesses existing and future flood hazards across 11 waterways and associated urban drainage systems within the City of Ballarat and explicitly incorporates climate change projections.

Flood extents and hazard mapping underpinning the proposed FO2 LSIO2, and SBO1 are based on a 1% AEP flood event incorporating climate change projections to the year 2100. The Flood Study applies a future climate scenario consistent with best-available modelling at the time of preparation and reflects projected increases in rainfall intensity and flood risk associated with climate change.

The amendment therefore has regard to the best available scientific information in relation to increased climate-related flood hazards in Victoria and applies this information through statutory planning controls.

Minimising greenhouse gas emissions

The primary purpose of the amendment is to introduce flood-related planning controls rather than to facilitate new development or land use change. As such, the amendment is not expected to directly influence greenhouse gas emissions.

However, by clearly identifying areas subject to riverine and stormwater flood hazard, the amendment supports the efficient and orderly use of land and assists in guiding development away from high-risk locations. This provides greater certainty for land use decisions and supports sustainable settlement patterns within established urban areas and designated growth locations, thereby avoiding inefficient development outcomes that may lead to increased infrastructure demand and associated emissions over time.

Increasing resilience to climate change risks

The amendment directly addresses the impacts of climate change on natural hazards, specifically riverine flooding and stormwater flooding, and increases resilience to these risks in accordance with section 12(2A) of the Act.

Climate change projections indicate an increased frequency and intensity of extreme rainfall events, which in turn elevate flood risk. The amendment responds to this by:

- Identifying land at risk of flooding under future climate conditions rather than relying solely on historical flood information.
- Applying the Floodway Overlay and Land Subject to Inundation Overlay to manage development in areas subject to riverine flooding, with controls proportionate to the level of flood hazard.
- Applying the Special Building Overlay to areas subject to stormwater flooding resulting from the exceedance of drainage system capacity during intense rainfall events.
- Requiring development within affected areas to demonstrate appropriate design responses, including finished floor levels, hazard mitigation measures,

and consideration of flood behaviour, to reduce risks to life and property.

The amendment does not facilitate new development in flood-prone areas. Instead, it ensures that any future use and development is risk-aware and resilient, with planning controls designed to avoid intensification of flood exposure and to minimise the potential consequences of flooding.

Agency consultation and risk management

The amendment has been prepared in consultation with the Corangamite CMA the nominated floodplain management authority and referral authority for flood-related matters. The Corangamite CMA supports the application of the proposed flood overlays and the underlying flood modelling used to inform the amendment.

The Department of Transport and Planning (DTP) has also been consulted in the preparation of the amendment.

This collaboration ensures that flood hazard is managed in a manner consistent with catchment-based floodplain management principles and contemporary approaches to climate change adaptation.

Overall, the amendment gives effect to climate change considerations by:

- Being informed by climate-adjusted flood modelling to 2100;
- Addressing increased flood risk associated with climate change through risk-based planning controls;
- Protecting life, property, and community infrastructure from future flood hazards; and
- Supporting a more resilient urban environment capable of adapting to climate change impacts over time.

Does the amendment address relevant bushfire risk?

The amendment will not increase the risk to life, property, community infrastructure or the natural environment from bushfire, as it identifies flood hazard. The amendment does not make any recommendations in regard to the intensification of development.

The amendment meets bushfire policy in Clause 13.02 of the Ballarat Planning Scheme. Much of the land affected by this amendment is unlikely to be intensified for urban purposes without subsequent planning approval. This will require consideration and assessment against the purpose and decision guidelines of the Bushfire Management Overlay, where applicable.

Does the amendment comply with the requirements of any other Minister's Direction applicable to the amendment?

The amendment complies with the form and content requirements of the Ministerial Direction *the Form and Content of Plannings Schemes*, section 7(5) of the Act.

Ministerial Direction No. 11: Strategic Assessment of Amendments

The amendment complies with Minister Direction No. 11, *Strategic Assessment of Amendments*, under section 12 of the *Planning and Environment Act 1987*. The amendment is consistent with this direction which ensures a comprehensive strategic evaluation of a planning scheme amendment and the outcomes it produces.

Ministerial Direction No. 15 – The Planning Scheme Amendment Process

This amendment has been prepared in accordance with Ministerial Direction No. 15. Community engagement was undertaken during the preparation of the supporting flood study, enabling affected landowners and stakeholders to contribute to the development and validation of the flood information that informs the amendment.

This Explanatory Report is released as part of the exhibition of the amendment and documents how the amendment has been prepared and how relevant authority advice has been considered. The amendment is exhibited in accordance with statutory requirements to provide further opportunity for public review and submissions.

How does the amendment support or implement the Planning Policy Framework and any adopted State policy?

The amendment is consistent with the following clauses of the Planning Policy Framework and will assist in achieving their objectives, as follows:

Clause 11 – Settlement

The amendment is consistent with identifying that planning for settlements must have regard to “*health, wellbeing and safety*” and supports “...*anticipate and respond to the needs of existing and future communities...*”.

The amendment supports this principle by documenting the extent of flooding now and into the future.

Clause 11.01-1S – Settlement

The amendment is consistent with the objective “*to facilitate the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements*” by ensuring that development within flood prone areas is regulated to minimise impacts to human life and property.

It is consistent with “*minimising exposure to natural hazards, including increased risks due to climate change*” and “*support metropolitan and regional climate change adaption and mitigation measures*” by identifying flood prone land that takes into regard climate change.

Clause 12.03-1S – River and riparian corridors, waterways, lakes, wetlands and billabongs

The amendment is consistent with the objective “*to protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands and billabongs*”. It implements the following strategies: “*address the impacts of use and development on drought and flooding events at a catchment and site scale to protect the health and natural function of waterway systems and their surrounding landscape and environment*”; and “*design and site development to maintain and enhance the natural environment of waterway systems by avoiding impeding the natural flow of waterways and future flood events*”.

Clause 13 – Environmental risks and amenity

The amendment is consistent with strengthening the resilience and safety of communities by assisting in identifying, preventing and minimising the risk of harm to the environment, human health and amenity. It achieves this through ensuring that development and risk mitigation measures do not detrimentally interfere with important natural processes. The amendment prepares for and responds to the impacts of climate change.

Clause 13.01-1S – Natural hazards and climate change

The amendment is consistent with the objective “*to minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning*” by implementing the following strategies: “*identify at risk areas using the best available data and climate change science*”; “*direct population growth and development to low risk locations*”; “*site and design development to minimise risk to life, health, property, the natural environment and community infrastructure from natural hazards*”.

It assists with climate change adaptation responses through implementing planning controls based on climate change which will guide decision making processes such as where the intensification of development is appropriate.

Clause 13.03-1S – Floodplain Management and Clause 13.03-1L Floodplains – City of Ballarat

The amendment is consistent with the objective in assisting with the protection of the following:

- “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”.

Clause 19.03-3S – Integrated water management

The amendment is consistent with the strategies: *“Take into account the catchment context; Protect downstream environments, waterways and bays; Minimise flood risks; Provide urban environments that are more resilient to the effects of climate change.”*

The amendment assists with integrated water management responses through implementing overlays which will guide planning decision making and help inform a holistic approach to water management. The protection of life and property from flood impacts will ensure that the natural flood storage capacity of waterways remain relatively unencumbered.

Is the amendment consistent with the delivery of the relevant housing target set out in the Planning Policy Framework?

The amendment has been assessed against the housing objectives and strategies of the Planning Policy Framework, including Clause 11.02 (Managing Growth) and Clause 16.01-1S (Housing Supply).

The purpose of the amendment is to introduce updated flood-related planning controls based on the Flood Study. The amendment does not rezone land, change residential density controls, or alter settlement boundaries. Accordingly, the amendment does not reduce the supply of land available for housing or compromise the City of Ballarat ability to meet its housing targets.

Impact on land available for housing

The amendment applies flood overlays to land identified as being affected by riverine or stormwater flooding. Flood overlays do not prohibit housing development; rather, they require development to be designed and sited in a manner that appropriately responds to flood risk.

Importantly, the Ballarat Housing Strategy 2041 was informed by the flood extents identified through the Flood Study during its preparation. As a result, the location, capacity and distribution of future housing growth identified in the Housing Strategy already accounts for current and projected flood risk across the municipality.

The amendment therefore implements statutory controls that are consistent with, and give effect to, the spatial and strategic directions of the Housing Strategy, rather than introducing new or unforeseen constraints on housing land.

Contribution to sufficient realisable housing capacity

The amendment supports the provision of sufficient and realisable housing capacity by:

- Translating strategic flood risk information already embedded in the Housing Strategy into the planning scheme through appropriate overlays;
- Providing certainty regarding flood hazard to support informed investment and development decisions; and
- Ensuring that future housing is resilient to flood risk, reducing the likelihood of long-term constraints on housing occupation, insurability and use.

By aligning statutory controls with strategic planning assumptions already made about flood risk, the amendment reinforces the deliverability of housing identified in the Housing Strategy rather than diminishing overall capacity.

Alignment with Clause 11.02 (Managing Growth) and Clause 16.01-1S (Housing Supply)

The amendment implements Clause 11.02 (Managing Growth) by supporting development in planned and appropriate locations while managing exposure to natural hazards, including increased risks associated with climate change.

The amendment is consistent with Clause 16.01-1S (Housing Supply) by ensuring housing is supported in locations that are safe, suitable for long-term occupation, and capable of being serviced and protected over time. Flood-prone land is managed through hazard-based planning controls rather than being removed from housing consideration altogether.

The amendment therefore complements Ballarat's established growth framework and supports sustainable housing outcomes in accordance with both clauses.

Greenfield housing targets

The amendment does not affect designated greenfield areas identified for housing supply. As flood risk was already considered in the Ballarat Housing Strategy 2041, including in identifying suitable growth locations, the amendment does not alter the municipality's capacity to meet any applicable greenfield housing targets identified in Clause 16.01-1S.

Housing diversity and density

The amendment supports the delivery of a mix of housing types and densities by allowing housing development to continue across a range of locations, subject to appropriate flood risk management.

Higher-density housing in established areas close to jobs, services and public transport remains supported, provided development responds appropriately to identified flood hazards. This includes the use of design responses and mitigation

measures rather than avoiding development altogether.

By promoting safe and resilient housing outcomes, the amendment supports long-term housing diversity and affordability objectives.

The amendment is consistent with the delivery of the relevant housing targets set out in the Planning Policy Framework. It does not reduce housing supply or undermine strategic growth directions identified in the Ballarat Housing Strategy 2041.

Instead, the amendment gives statutory effect to flood risk considerations already reflected in Ballarat's housing strategy, ensuring that housing growth is resilient, sustainable and aligned with long-term planning objectives.

How does the amendment support or implement the Municipal Planning Strategy?

The amendment is consistent with the following clauses of the Municipal Planning Strategy and will assist in achieving their objectives, as follows:

MPS Clause 02.02 – Vision

The amendment is consistent with the vision *“Be a leader in sustainable living with ecologically-sound neighbourhoods where people can meet their daily needs within a short walk, ride or bus trip”*.

The amendment supports this vision by reducing impacts on the local environment and local neighbourhoods. It will provide more certainty to the community and local businesses on flood hazards to inform their decision making.

Clause 02.03-3 – Environmental risks and amenity

The amendment is consistent with the following strategic directions:

“Council seeks to:

- *Preserve the natural functions and values of floodplain environments.*
- *Discourage development within flood prone areas that presents an unacceptable risk to life or property”.*

The amendment addresses this local policy which identified a gap in responding to flood risk through introducing planning controls.

Does the amendment make proper use of the Victoria Planning Provisions?

The amendment utilises the most effective controls available from the Victoria Planning Provisions. Consideration was given to the level of flood hazard in terms of the frequency, depth and velocity of flood waters in choosing planning scheme tools. The amendment is consistent with *Planning Practice Note 12: Applying the Flood*

Provisions in Planning Schemes.

In applying the flood overlays, the amendment follows the risk-based framework set out in Planning Practice Note 12: Applying the Flood Provisions in Planning (PPN12) Schemes, which requires planning controls to be selected based on the nature, behaviour and hazard of flooding. Consistent with PPN12, the amendment differentiates between areas that primarily convey floodwaters, areas that provide flood storage or are subject to lower-hazard inundation, and areas affected by localised overland stormwater flows. The application of the FO, LSIO and SBO reflects this graduated approach and ensures that the level of planning control is proportionate to the identified flood risk, protects flood conveyance and storage functions, avoids intensification of development in high-hazard areas, and supports safe and resilient land use and development outcomes.

The Corangamite CMA endorses the application of the FO, LSIO and SBO.

The FO is applied to waterways, main flood paths, drainage depressions and high hazard areas, at high depths ≥ 0.3 m and velocities ≥ 2.0 m/s for which the impacts of flooding are moderate to high with a depth x velocity of ≥ 0.3 m²/s.

The LSIO is applied to land liable to inundation by overland flow, in flood storage or in flood fringe areas from flooding in both rural and urban areas. These areas are of lesser depth and velocity than the FO being less than 0.3 m in depth and less than 0.2 m/s in velocity.

The application of the FO and LSIO will also support sustainable urban growth by clearly guiding development towards safer areas, protecting vital environmental assets, and enhancing public safety while minimising future recovery costs.

The SBO applies to areas that are subject to overland stormwater flooding. This overlay is used to manage development in areas where stormwater drainage systems may be overwhelmed during heavy rainfall events, leading to surface water flooding. Refinements to the extent of the proposed SBO were undertaken by assessing velocity vectors from the hydraulic model to determine where flows change from overland/stormwater flooding to riverine flooding. Shallow overland flows of less than or equal to 5cm were also filtered out along with areas of less than 5 square metres within individual properties.

The planning permit exemptions set out in the overlay schedules correspond to the level of flooding hazard for the local conditions.

Applying an SBO to land with identified flood hazard is essential for safeguarding both current and future developments. This overlay provides a targeted planning tool that requires additional assessment of building design, location, and floor levels in areas vulnerable to flooding. By setting these standards, an SBO helps to prevent damage to properties and ensures that new buildings are constructed with resilience to potential flood impacts. It also assists in managing the city's broader flood mitigation efforts, reducing the risk to human life, and thus ensuring that emergency

services can operate effectively during flood events. The SBO thereby contributes to a safer and more sustainable urban environment by promoting development practices that acknowledge and respond to the flood hazards specific to these areas.

How does the amendment address the views of any relevant agency?

The amendment has been prepared in conjunction with the Corangamite CMA which is the relevant floodplain management authority and recommending referral authority under Clause 66.03 of the planning scheme. DTP also supported the preparation of the planning scheme amendment.

Water Technology the consultants who prepared the Flood Study were involved with the preparation of the mapping for the planning controls.

The Wadawurrung Traditional Owners Aboriginal Corporation were briefed and provided updates on the flood modelling and proposed planning scheme amendment. Specifically, the Wurru (language) team guided the City of Ballarat in the use of Language in the ordinance and formally authorised the use of the word Yaluk (waterway in language) within the relevant ordinance.

Does the amendment address relevant requirements of the Transport Integration Act 2010?

The amendment is consistent with the objectives and decision-making principles in the *Transport Integration Act 2010*.

Specifically, the amendment supports social inclusion and economic prosperity with respect to “*minimising barriers to access so that so far as is possible the transport system is available to as many persons as wish to use it*” and “*enabling efficient and effective access for persons and goods to places of employment, markets and services*”. It achieves this through providing information on flood hazard which can be used to assist in future management and design of the transport system.

This amendment is unlikely to have a significant impact on the transport system.

How does the amendment have regard to the principles set out in the *Yarra River Protection (Wilip-gin Birrarung murrn) Act 2017* in relation to Yarra River land and other land, the use or development of which may affect Yarra River land?

The amendment does not affect Yarra River land under Part 3 of the Yarra River Protection (Wilip-gin Birrarung murrn) Act 2017.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

The amendment will improve the application and administration of the Ballarat Planning Scheme, by providing greater certainty for the Council, the Corangamite CMA, landowners, occupiers, local businesses and the community.

The introduction of new controls will result in a minor increase in the number of planning applications received by council and referred to the Corangamite CMA. It is unlikely that the new planning provisions will have a significant financial burden on Council. Into the future it will reduce demands on the Council's emergency management response and recovery resources from flooding events.

ATTACHMENT 1 - Mapping reference table

Location	Planning Scheme Mapping Reference	Proposed Overlay changes
City of Ballarat (various localities in the Yarrowee Catchment)	As shown by the proposed SBO1 map series: 4SBO, 16SBO, 17 SBO, 20SBO, 21SBO, 22SBO, 26SBO, 27SBO	New SBO1
City of Ballarat (various localities in the Yarrowee Catchment)	As shown by the proposed LSIO2-FO2 map series: 19LSIO-FO, 20LSIO-FO, 21LSIO-FO, 23LSIO-FO, 24LSIO-FO, 25LSIO-FO, 26LSIO-FO, 27LSIO-FO, 28LSIO-FO, 29LSIO-FO, 30LSIO-FO, 31LSIO-FO, 32LSIO-FO, 33LSIO-FO, 34LSIO-FO, 35LISO-FO, 36LSIO-FO, 38LSIO-FO, 39LSIO-FO, 40LSIO-FO	New LSIO2 – FO2

Location	Planning Scheme Mapping Reference	Proposed Overlay changes
City of Ballarat (northern portion of the Yarrowee Catchment)	As shown by the proposed LSIO2-FO2 map series: 04LSIO-FO, 16LSIO-FO, 17LSIO-FO, 18LSIO-FO	The mapped extents of the FO1 and LSIO1 of the Burrumbeet Catchment will remain unchanged. The LSIO-FO maps will be amendment to include the extents of the new FO2 and LSIO2 Yarrowee Catchment overlays.